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REPORT TO THE CONGRESS 095895



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U.S. Actions Needed To  
Cope With Commodity Shortages

B-114824

Multiagency

BY THE COMPTROLLER GENERAL  
OF THE UNITED STATES

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APRIL 29, 1974



COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

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To the President of Senate and the  
Speaker of the House of Representatives

This is our report on the U.S. actions needed to cope with commodity shortages. Responsibility for the matters discussed are centered in various executive branch agencies and the Executive Office of the President.

Our review was made pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

Copies of the report are being sent to the Director, Office of Management and Budget; Secretaries of State, Commerce, Agriculture, the Treasury, and the Interior; Chairman, Council of Economic Advisers; Special Representative for Trade Negotiations; Director, Cost of Living Council; and Executive Directors of the Council on International Economic Policy, Domestic Council, and Council on Economic Policy.

A handwritten signature in black ink that reads "Thomas B. Staats".

Comptroller General  
of the United States

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ABBREVIATIONS

CEA	Council of Economic Advisers
CIEP	Council on International Economic Policy
CLC	Cost of Living Council
ERS	Economic Research Service
GAO	General Accounting Office
GSA	General Services Administration
OBRA	Office of Business Research and Analysis
OMB	Office of Management and Budget

D I G E S T

WHY THE REVIEW WAS MADE

Many agricultural, industrial, mineral and raw material commodities have been plagued by shortage problems in the United States and worldwide during 1973 and early 1974.

Commodity shortages in the United States have been accompanied by the highest rate of inflation in more than 20 years, booming agricultural exports, rising mineral and fuel imports, and restrictions on the export of certain U.S. commodities. (See pp. 7 and 11.)

Top-level Federal officials have recently expressed growing concern about future commodity and resource problems. (See p. 13.)

GAO examined the Government's system for coping with these problems because of their implications for America's future.

FINDINGS AND CONCLUSIONS

The world has entered a period in which shortages of basic commodities are causing serious economic, social, and political problems for the United States and other countries. (See p. 166.)

The ability of the existing Federal commodity policy process to respond to commodity problems is limited by difficulties encountered in (1) decisionmaking, (2) the use of export

controls, (3) analysis and forecasting, (4) long-range policy planning, and (5) developing policy for specific commodities.

Commodity decisionmaking process

The Government's decisionmaking process for commodities that are in short supply is essentially ad hoc and crisis-oriented. There is no clear, coordinated decisionmaking mechanism for formulating policies to alleviate commodity shortages. (See p. 42.)

Commodity policy formulation involves more than 20 Government departments, agencies, offices, administrations, and policy councils as well as additional international program agencies, energy agencies, advisory councils, and regulatory agencies. (See p. 54.)

The market supply and demand information needed for decisionmaking from multiple private and Government sources has, in a number of cases, been unavailable, incomplete, or disputed. (See p. 44.)

Many alternative programs are used in applying commodity policy, including export controls, import quotas, investment tax credits, accelerated depreciation allowances, stockpile disposal programs, antitrust laws, government-to-government agreements, export promotion programs, concessional financing, and tariffs. (See p. 50.)

The fragmentation of policy groups, market information, and alternative programs and the ad hoc approach to commodity shortage problems have complicated decisionmaking. They have also limited opportunities for interest groups to express their views and hampered the development of adequate internal and external reporting procedures. (See p. 61.)

#### Use of export controls

While the use of controls to restrict U.S. exports can be a necessary policy tool to temporarily relieve domestic commodity shortages, during 1973 such use caused:

- Strong negative foreign reaction. (See p. 64.)
- Legal problems because of broken contracts. (See p. 69.)
- Concern over whether the controls met international trade rules and whether those rules should be re-examined. (See pp. 71 and 88.)
- Uncertainty as to domestic economic benefits. (See p. 75.)
- Possible windfall profits. (See p. 80.)
- Debate over the adequacy of the criteria for imposing controls. (See p. 86.)
- Continuing debate over the value and limitations of export control use. (See pp. 98 and 100.)

Commerce's Office of Export Administration, in implementing export controls of commodities that were in short supply, has been hampered by (1) inadequate funding, (2) limited staff and expertise,

(3) lack of management procedures, and (4) problems of gathering commodity data and administering and enforcing the controls. (See p. 90.)

Despite these problems and uncertainties, no overall evaluation was made of the impact of the controls. The Office of Export Administration has not been reorganized to meet future short-supply control demands. Commerce reports under the Export Administration Act have not informed the Congress of the impact of the controls. (See pp. 84 and 101.)

#### Commodity information-gathering and forecasting

Agriculture's Economic Research Service has recently attempted to improve its organization and performance. However, the Commerce, Interior, and State major commodity monitoring, analysis, and forecasting groups have not developed their potential and need to be reevaluated. (See p. 122.)

- Organizational structures are inadequate and unresponsive to analysis and forecasting requirements, and administrative procedures and priorities are not defined. (See p. 105.)
- Several agencies are understaffed, and their personnel lack needed research skills. (See p. 113.)
- The data base needed for statistically reliable commodity forecasts has been neglected. (See p. 115.)
- Market information needed to monitor commodity developments for key industrial and mineral products is unavailable to Government except as industry is willing to provide it. (See pp. 115 and 116.)

--Modern statistical methods and research techniques have not been used to make commodity forecasts. (See p. 116.)

--Agency analysts having relevant information are frequently not consulted by decisionmakers, and interagency coordination is lacking. (See p. 121.)

#### Long-range commodity policy planning

To establish effective policies for dealing with potential and actual commodity shortages, the Government must have the ability to project future trends and a willingness to guide these trends in directions compatible with long-term national objectives. Despite recent studies and institutional changes intended to improve long-term planning capabilities, the present decision-making is still crisis-oriented. (See p. 160.)

There are numerous gaps in the data base for (1) agricultural supply and demand factors and (2) energy and other mineral resources, reserves, private research and development activities, and technological capabilities. (See pp. 133 and 146.)

Agencies responsible for agricultural and energy and other minerals policies have not adequately developed their analytic resources. This has limited the ability to discern broad trends from raw data, integrate data from diverse sources into accurate projections and isolate projection implications for public policy goals. (See pp. 134 and 149.)

There are no well-developed organizations with specific authority to assimilate inputs from various

agencies on broad agricultural and energy and nonenergy mineral issues, nor do institutions exist which are devoted to maintaining long-term perspectives. (See pp. 136 and 151.)

These deficiencies have compromised efforts to achieve coherent, coordinated national policies for confronting probable future economic issues. This is evident in policy planning efforts for multilateral trade negotiations, the Public Law 480 (Food for Peace) program, an agricultural reserve stocks policy, and the energy research and development program. (See pp. 140 and 156.)

#### Commodity studies

GAO studies of six major U.S. commodities which have recently been in tight or short supply in the United States--soybeans, wheat, cotton, fertilizer, cattlehides, and ferrous scrap--show the dimensions of the problem for specific commodities.

--Growing interdependencies of domestic and worldwide supply and demand factors.

--Interrelationships and dependencies among commodities which increase the severity and complexity of shortage situations.

--Limited information on key supply and demand elements.

--Continuing debate among producers, users, and Government officials as to what the national economic policy actions for these commodities should be.

--Continuing uncertainty about the future economic situation for these commodities. (See app. I.)

Overall considerations

The U.S. Government does not have an effective planning, policy analysis, and policy formulation system for basic commodities. (See p. 166.)

Shortages of basic commodities have had major domestic and international impacts during 1973 and early 1974. Many interpretations and suggested solutions to the problems exist. At present, however, future commodity and resource problems have not even been adequately defined, let alone agreed upon. (See p. 166.)

Federal agencies have taken a number of steps and begun or proposed others to improve commodity policy. They have

- utilized an interagency food export control group during 1973,
- reassessed and restructured agricultural forecasting,
- begun Government monitoring of export sales of key commodities,
- proposed a world food conference for late 1974,
- begun a reassessment of U.S. export promotion programs,
- advocated greater State Department involvement in future export control decisions,
- established interagency agricultural and minerals and materials policy working groups, and
- provided added funds for fiscal year 1975 for improved agricultural forecasting and meat and soybean production research.

Although these are all positive steps, GAO believes that in view of the basic problems of the existing commodity policy process, they should be only the initial steps in an ongoing improvement effort. (See p. 167.)

Several basic considerations are important in further assessing the Government commodity policy process.

- Establishing the importance, flexibility, and future role of Government commodity policy.
- Acknowledging the complexity and interrelationships of commodities and commodity policy.
- Evaluating international interdependence on commodity matters.
- Assessing the costs and benefits of increased Government commodity data gathering.
- Determining future domestic and international needs and requirements in terms of commodity policy. (See p. 168.)

The challenges the commodity policy process faces and the implications of recent commodity situations are substantial. GAO is recommending measures to improve the policy process.

Also, continuing debate and discussion among executive branch officials, the Congress, and public groups is necessary to (1) establish national policy goals that will guide the commodity policy process and (2) make that process into a system fully responsive to emerging commodity policy needs. (See p. 172.)

RECOMMENDATIONS

GAO is making a series of recommendations to the executive branch departments, agencies, and policy councils concerned with the commodity policy process, to improve the:

- Coordination and responsiveness of the commodity decisionmaking process. (See p. 62.)
- Implementation, reporting, and evaluation of the impact of short-supply export controls. (See pp. 84 and 102.)
- Capabilities, procedures, and report products of agency commodity monitoring, analysis, and forecasting groups. (See p. 124.)
- Data gathering, analytical capabilities, and policy coordination for long-range economic policy planning efforts. (See p. 162.)

AGENCY COMMENTS AND OUR EVALUATION

The agencies generally agreed with GAO's findings but expressed varying opinions about the conclusions drawn. They stated that a number of policy system improvements are being taken or considered.

Several agencies were concerned that

the report implied a need for large bureaucracies and increased Government intervention in the market system. GAO's report and recommendations, however, are directed toward improving the extensive Government economic policy responsibilities, activities, and programs already being used to support the effective operation of the market system.

GAO believes that, in general, the agency comments indicate an acknowledgement of commodity problems and a responsiveness to the need to further improve the existing commodity policy system. (See p. 173.)

MATTERS FOR CONSIDERATION  
BY THE CONGRESS

This report should be helpful to the Congress in analyzing the more than 100 legislative bills that have been introduced on commodity policy matters.

The Congress should consider in its deliberations the actions that executive branch agencies are taking and GAO's recommendations for improving these agencies capabilities to cope with commodity problems. It should also consider the need for legislation to establish a centralized mechanism for developing and coordinating long-term policy planning. (See p. 177.)

## CHAPTER 1

### COMMODITY SHORTAGE PROBLEMS

#### THE SHORTAGE SITUATION

During 1973 and continuing into 1974, the U.S. economy has been troubled by the most serious shortages or tight supplies of basic economic commodities since the Korean War.

Major concern is currently focused on the energy shortage, but shortage problems have also occurred in such commodities as meat, lumber, plywood, zinc, soybeans, edible oils, scrap metal, cattlehides, cotton, wheat, corn, steel, wool, chemicals, fertilizer, and aluminum, which in turn have created or threaten to create shortages of other products.

- Tight future food supplies could occur if too little fertilizer is available to permit crop expansion.
- Tight supply and high price of soybeans, the main source of feed for American livestock, helped cause 1973 cutbacks in meat and poultry.
- Tight supplies of cotton affect textile products.
- Lumber shortages limit new housing construction.
- Lack of scrap metal affects steel production.
- The current oil shortage threatens not only shortages of such petrochemical products as plastics but also, if severe enough, all basic American industrial and agricultural production.

Current commodity shortages have been attributed to a variety of factors. Domestically, analysts have pointed to a strong demand fueled by rising consumption standards, lack of productive capacity, inadequate industrial planning, the disincentive of domestic price controls, incorrect Government fiscal and monetary policies, inadequate transportation resources, and weather disturbances.

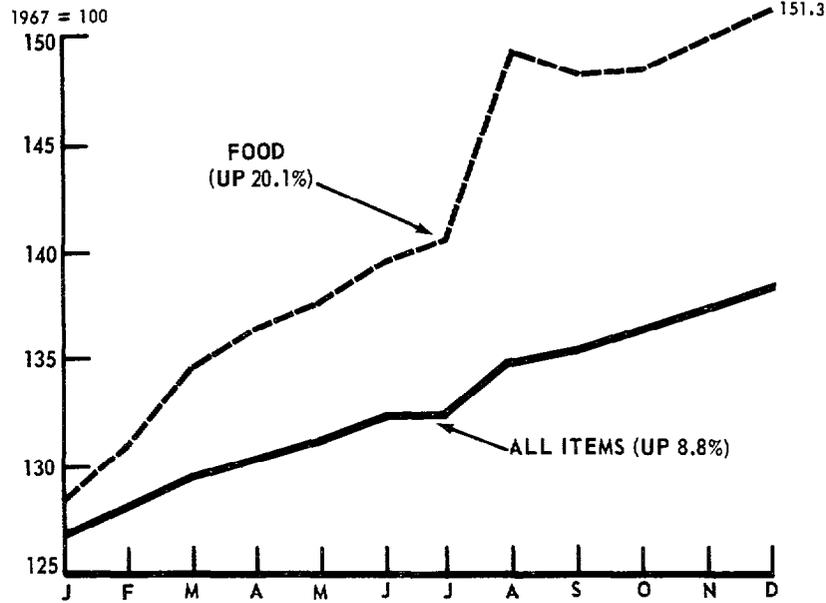
One new and significant factor in tight supplies of major U.S. commodities during 1973 was the great increase in demand for them by overseas customers, particularly Japan and Western Europe. One of the strongest worldwide economic booms since the 1950s placed considerable pressure on existing world supplies of certain basic commodities and available capacities for turning those materials into finished goods.

The recent devaluations of the dollar made American goods cheaper and more attractive to foreign buyers, especially since inflation was raising prices even faster in other countries than in the United States. Large dollar reserves held overseas were applied to the purchase of U.S. goods. Bad weather conditions and other disturbances reduced various commodity supplies. Perhaps most importantly, however, the citizens of many industrialized countries have become more affluent and have been increasingly competing with Americans for food products, industrial goods, and the raw materials which produce them.

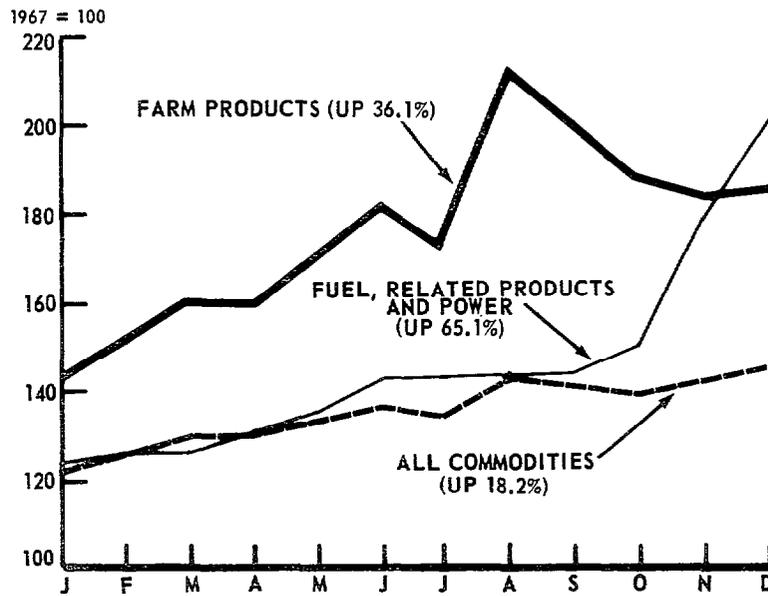
The tight supply of commodities and the booming worldwide demand has had major impact domestically and internationally for the United States. Domestically, despite mandatory price controls on large parts of the economy, 1973 brought the worst U.S. inflationary increases in more than two decades. Although food and fuel price rises were responsible for much of the increase, the prices for consumer items, wholesale commodities, and many individual commodities rose significantly during 1973, as shown in graphs 1 and 2.

Internationally, the tight-supply situation and accompanying demand pressure strengthened the dollar during 1973 and sharply increased the level of U.S. exports. Balance-of-trade estimates for 1973 show a move from the heavy deficits of recent years to a surplus condition. It is estimated that U.S. agricultural exports almost doubled, more than offsetting, at least for 1973, a sharp increase in U.S. imports of minerals and fuels, as shown in graphs 3, 4, and 5.

GRAPH 1  
1973 CONSUMER PRICE INDEX



GRAPH 2  
1973 WHOLESALE PRICE INDEX

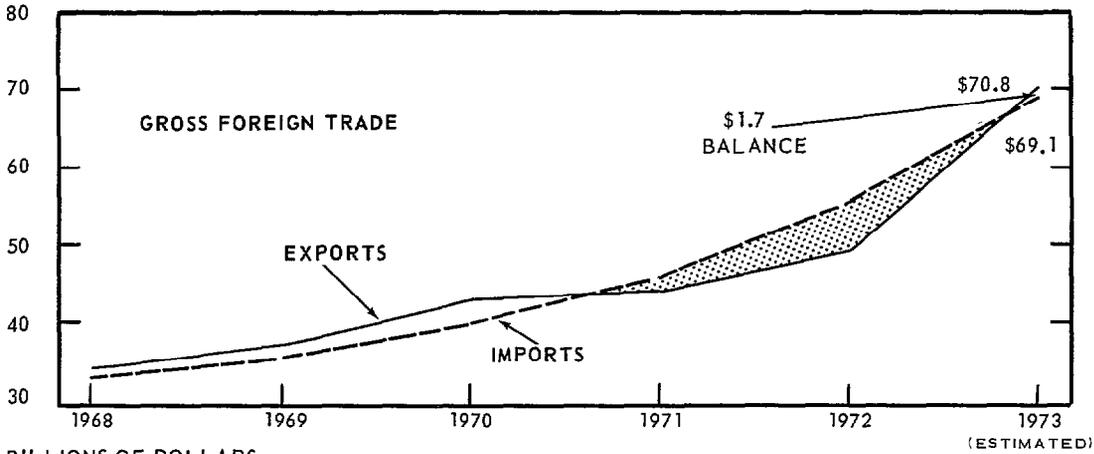


CRUDE VEGETABLE OILS	134.4
WASTEPAPER	128.2
REFINED PETROLEUM PRODUCTS	125.0
INEDIBLE FATS AND OILS	123.1
ANIMAL FATS AND OILS	115.5
PLANT AND ANIMAL FIBERS	114.5
GRAINS	80.7
FLUID MILK	43.5
WOODPULP	33.9
CEREAL AND BAKERY PRODUCTS	33.3
EGGS	32.5
NONFERROUS METALS	32.5
COTTON PRODUCTS	32.4
LUMBER	27.9
PLYWOOD	25.5
CRUDE RUBBER	24.3

## U.S. BALANCE OF TRADE TRENDS, 1968 - 1973

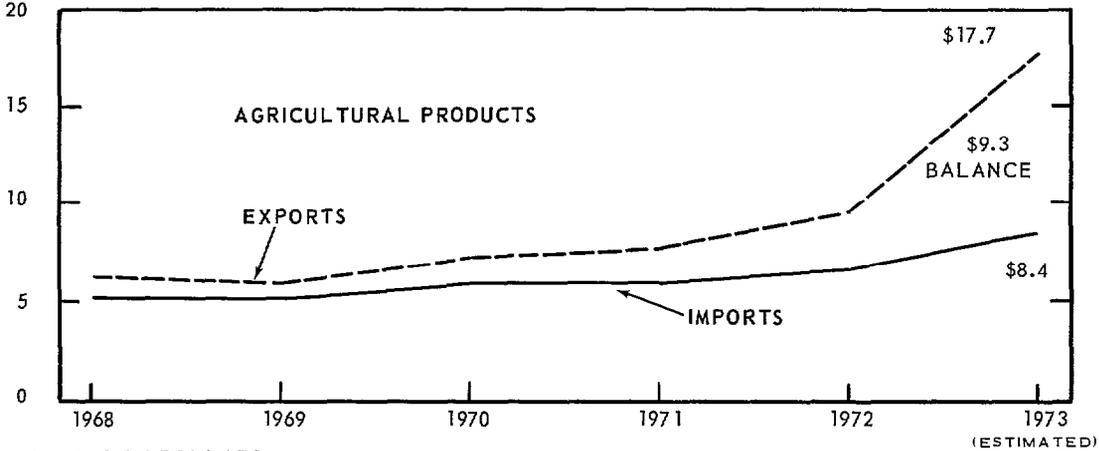
BILLIONS OF DOLLARS

GRAPH 3



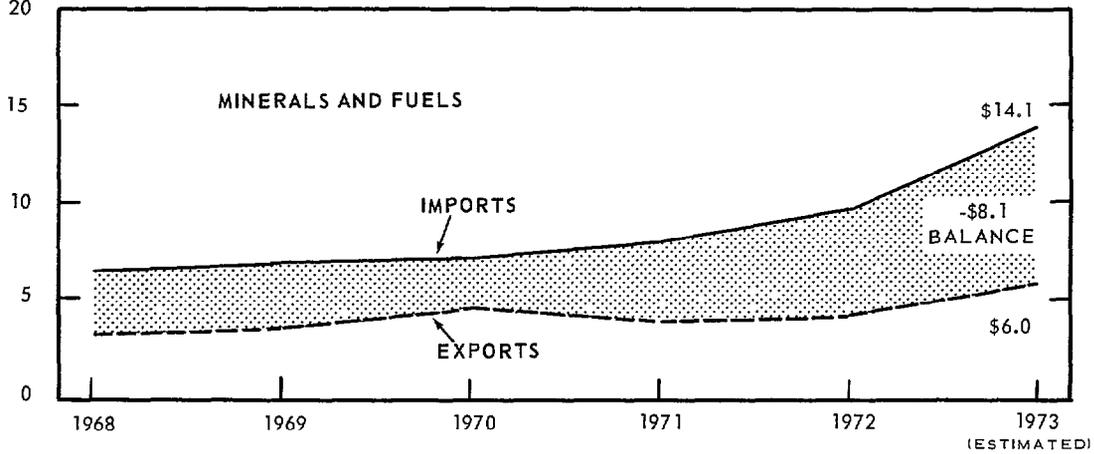
BILLIONS OF DOLLARS

GRAPH 4



BILLIONS OF DOLLARS

GRAPH 5



A number of experts--citing studies which point to increasing population pressures on resources; growing hunger problems; rising mineral, energy, and raw material requirements; and land and water resource limitations--feel that current commodity shortages have serious, long-run, worldwide implications. Some of these observers argue that the world resource and commodity situation has changed fundamentally and has entered an age of scarcity, marked by a continuing battle for access to limited commodities that all nations need. Other observers feel that the current tight-supply situation is temporary, reflecting a rare concurrence of unusual and unfortunate circumstances. A third group of observers, taking a middle ground between these two positions, believes that future commodity problems will exist but will be manageable if certain corrective actions are taken now, and have advocated a variety of national policies and programs to deal with the commodity situation.

#### USE OF EXPORT CONTROLS

A major U.S. Government action to deal with the short-supply situation in 1973 was to impose export controls under the Export Administration Act of 1969, as amended. This act authorizes the President to control exports of U.S. commodities and technical data to all foreign destinations for (1) national security, such as strategic commodities for Communist countries, (2) foreign policy, such as restricting exports to Southern Rhodesia in accord with United Nations resolutions, and (3) conditions of short supply. Export control authority has been delegated by the President to the Secretary of Commerce and is administered by Commerce's Office of Export Administration.

Short-supply export controls have seldom been used since the Korean War, but the Export Administration Act authorizes their use when three criteria have been met: (1) need to protect the domestic economy from the excessive drain of a scarce material, (2) controls will reduce a serious inflationary impact, which is caused by (3) abnormal foreign demand. In addition, for agricultural commodities, the Secretary of Agriculture must determine that the available supply is inadequate to meet domestic needs before controls can be imposed.

In May and June 1973, Commerce established systems requiring exporters to report to the Government actual and anticipated exports of ferrous scrap and a variety of agricultural commodities. Because of very high export commitments, a total embargo on exporting of soybeans and cottonseeds and their various meal and oil products was announced on June 27. On July 2 the embargo was replaced by an export control licensing system for existing export contracts for soybeans and cottonseeds, their meal products, and ferrous scrap. On July 5 the export licensing system was extended to existing contracts for 41 other agricultural commodities, because foreign soybean and cottonseed buyers were shifting to these substitute commodities from U.S. suppliers. Short-supply controls on agricultural product exports were removed on October 1, but ferrous scrap export controls have been extended through the second quarter of 1974. On December 13, 1973, an export licensing system was begun for a variety of petroleum products.

The use of short-supply controls on U.S. exports has been as controversial as the debate over the significance of the 1973 commodity shortages. The administration firmly opposes establishing a permanent system of export controls but defends using controls when absolutely necessary to maintain adequate supplies of food and other commodities essential to all Americans at reasonable prices.

While some observers support export controls as a necessary evil in emergency and temporary situations, others inside and outside Government have criticized export controls as "a disastrous mistake," "a short-run aberration," and a "last-minute reaction" and have urged other long-range actions that do not have export controls' disruptive overseas effects.

The commodity shortage situation has also generated considerable concern and activity in the Congress. Several committees held hearings during 1973 on short-supply and export control situations and more than 50 bills were introduced calling for export controls on such commodities as timber, grain, meat, feed grains, copper, zinc, fertilizer, petroleum products, ferrous scrap, and petrochemicals.

Bills have also been introduced in the Congress dealing with long-range alternative solutions to the short-supply problem. When the Arab oil embargo began in October,

a number of retaliatory export control bills were introduced. In addition, the Congress considered an administration-backed bill which would amend the Export Administration Act to allow the President to impose export controls to curtail serious domestic inflation, rather than waiting to meet simultaneously the criteria of short-supply, inflationary impact, and abnormal foreign demand.

#### CONCERN FOR THE FUTURE

Predictive evaluations of future situations are always speculative and subject to disagreement; one strongly stated prediction may well be followed by opposing positions.

In addition, however, to the many books written in the past few years about future world resource problems, such as Limits to Growth,<sup>1</sup> World Dynamics,<sup>2</sup> and The Closing Circle,<sup>3</sup> U.S. Government officials have recently expressed growing concern about future commodity and resource problems.

--May 1973

A U.S. Geological Survey report concluded that it was by no means too early to become concerned about future mineral supplies and to start planning, since the real extent of our dependence on mineral resources jeopardizes not merely modern American affluence but also world civilization.

--June 1973

The final report of the National Commission on Materials Policy observed that, even if the United States decided on minimal reliance on

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<sup>1</sup>Donella H. Meadows and others, "The Limits to Growth" (New York, Universe Books for Potomac Associates, 1972).

<sup>2</sup>Jay W. Forester, "World Dynamics" (Cambridge, Mass., Wright-Allen Press, 1971).

<sup>3</sup>Barry Commoner, "The Closing Circle" (New York, Alfred A. Knopf, 1971).

material imports, the country still could not isolate itself from the repercussions of economic and political conflict that would accompany shortages elsewhere, so that, inescapably, the United States was concerned with the adequacy of foreign materials supplies.

--September 1973

The Secretary of State said "The perception of ourselves in this nation must change now. We are no longer self-sufficient. One-half of our energy will soon be coming from abroad. All of our exports soon will pay only for the raw materials we must import. Our agriculture products now have to be thoughtfully allocated. Take the wheat deal, for which we have been criticized. Our intelligence was faulty. But there was not a thought by anyone that we would not have enough wheat. Our whole orientation -- by Congress, by farm experts, by businessmen -- has been to sell it when we could. We must re-think where we are."

--December 1973

An Agriculture study observed that the world is nearing the point at which countries will have to agree to limit fish catches to avoid destroying the ocean's basic food-producing stocks.

The Secretary of the Interior stated, in assessing the U.S. minerals situation in terms of domestic production and dependence on foreign minerals, that the current energy crisis could be followed shortly by a minerals crisis and a materials crisis, unless a hard look at the situation and some rather dramatic actions were taken.

The Secretary of Agriculture stated that in the past 18 months U.S. concern has shifted from too much farm production to the question of potential food and fiber shortages at home and abroad and that American agriculture in the years ahead faces perhaps its greatest challenge.

The Federal Energy Office Administrator stated , that even without the Arab oil boycott the United States still has short-term and long-term problems, since at present trends U.S. energy needs by 1990 will double.

A Council of Economic Advisers member stated that a basic question is whether the U.S. economy is entering a several-year period in which forestry, agriculture, mineral, metal and energy products will become increasingly scarce economically, or whether the situation is a one-time adjustment caused by a variety of events.

The Chairman of the Council on Environmental Quality said that the American way of life has become severely dependent upon the continued availability of raw materials in ever-increasing quantities and that it will be increasingly difficult to meet these U.S. material needs in the face of a growing world population and standard of living.

--January 1974

The Chairman of the Council of Economic Advisers stated in an interview that while he hoped the Government could get out of managing the economy and go back to a simple life, there is not enough forward evaluation of such things as materials prospects, population prospects, and many other future factors.

--April 1974

The Secretary of Commerce said that while the present phase of widespread tight supplies and record price levels of internationally traded basic raw materials and foodstuffs will surely abate, short supplies and rising prices of some commodities can be expected intermittently in the future and the impact such trends can have on a free market economy must be recognized.

Evaluations prepared by the Cost of Living Council and by Commerce late in 1973 suggested that many commodities, particularly metals, chemicals, wood products, and petroleum

could be in domestic and worldwide shortage or tight supply during 1974 and beyond.

EXECUTIVE BRANCH  
COMMODITY PROGRAM INVOLVEMENT

To get a broad overview of the Government's capability for dealing with commodity shortages, we reviewed existing programs and policy actions used within the executive branch to cope with supply and demand problems of agricultural, industrial, mineral, and raw material commodities. Because of rapid developments in the energy area and extensive legislative and executive actions being taken, we studied energy programs and policy actions only as a basis for comparison with long-range actions being taken in other major commodity and resource areas.

Decisions on short-supply commodities are made by many executive branch groups including:

- The Departments of Agriculture, Commerce, Interior, State, and Treasury.
- The Council of Economic Advisers (CEA), Cost of Living Council (CLC), Council on Economic Policy, Council on International Economic Policy (CIEP), the Domestic Council, and National Security Council.
- The General Services Administration (GSA), Office of Management and Budget (OMB), and Office of the Special Trade Representative.

Export controls are administered by Commerce and its Office of Export Administration, but Agriculture has certain responsibilities for agricultural commodities. Agriculture, Commerce, Interior, and State have the major commodity monitoring and forecasting groups.

Long-range executive branch commodity and resource policy planning for agriculture and energy and nonenergy minerals involve almost all the above groups and also include the:

Agency for International Development  
Council on Environmental Quality  
Atomic Energy Commission  
Environmental Protection Agency  
National Science Foundation  
Federal Energy Office.

## CHAPTER 2

### EXECUTIVE BRANCH SHORT-SUPPLY

#### DECISIONMAKING PROCESS

When impacts have been as sharp and sudden as those of the recent commodity shortages, the quality of the Government's commodity policy and decisionmaking process is of prime concern. We found the existing executive branch short-supply decisionmaking process both fragmented and crisis-oriented. The Government's traditional reliance on the market system has restricted its ability to act promptly and effectively on an increasing number of short-supply situations. The present process has no clear, coordinated, and continuing decisionmaking mechanism; market information system; or focused analytical capability for dealing systematically with short-supply problems.

The use of "crisis management" without effective communication, coordination, and planning has resulted in decisions that have been fragmented in terms of decisionmaking responsibility, application of alternative policy actions, sources and flows of policy analysis, and informational input and have led to continuing conflict over policy priorities, options, and short-supply policy alternatives.

This chapter discusses past Government short-supply control policies; recent short-supply decisionmaking, with emphasis on the participants, options, strategies, and problems involved; and the problems of communication, coordination, planning, and fragmentation in the current decisionmaking process. Export control impacts, problems and limitations of export controls, structures and operations of major agency commodity monitoring and forecasting groups, and long-range policy planning for agricultural, energy and mineral commodities are discussed in chapters 3 through 6.

#### PAST GOVERNMENT SHORT-SUPPLY CONTROL POLICY

The American people have always relied primarily on the free market system to allocate economic resources efficiently and effectively. With its abundant natural resources, temperate climate, and fertile land, the United States has traditionally produced great quantities of economic commodities to satisfy its own continuous needs and those of an

increasingly strong worldwide demand. However, because of accelerating inflation and commodity shortages during the last several years, the Government has become involved in commodity allocation at an unprecedented peacetime level.

Some proponents of a free market system view this development with alarm, while others support it as a rational response to a deteriorating economic environment. As the controversy intensifies, the need for assessing the Government's short-supply decisionmaking process becomes imperative.

Because the United States has traditionally produced surpluses of agricultural and nonagricultural commodities, the Government has had little need to concern itself with the adequacy of commodity supplies. Only in wartime and during the depression has it exercised any substantive decisionmaking authority in reserving items in short supply for domestic needs. For example, during the Korean War, all critical materials were placed under domestic allocation and the Government controlled production and distribution. Commerce cooperated by placing short-supply export controls on over 200 items. Domestic controls were removed with the cessation of hostilities and export controls were removed soon after.

From the end of the Korean War through 1970, the Government intervened in the economy to temporarily control exports of short-supply commodities on the following occasions.

#### Gamma Globulin, 1953-55:

In 1953 Gamma Globulin emerged as a treatment for people living in areas affected by poliomyelitis. Until sufficient supplies became available in 1955, the Public Health Service administered domestic controls and Commerce administered export controls.

#### Mercury, 1954-55:

In 1954 the United States imported 75 percent of its mercury and exported a minimal amount. World consumption of mercury increased faster than availability, and prices soared. Commerce introduced short-supply export controls and permitted only small-value export shipments. World production of mercury increased in 1955, prices declined, and controls were removed in the third quarter of 1955.

#### Copper, 1954-57:

By October 1954 world copper supplies had become critical, because world demand had been increasing for several years. Widespread strikes in certain copper-producing areas, including Africa and Chile, increased the shortage. Commerce introduced short-supply controls in October 1954. In February 1955 quotas were reduced, and the Office of Defense Mobilization released Government-owned copper to relieve the distressed domestic industry.

#### Aluminum, 1955-57:

Aluminum scrap and primary aluminum were placed under short-supply quota controls in the first quarter of 1955 because of increasing demand and rising prices. The controls were removed in the fourth quarter of 1957 when world supply increased.

#### Salk Vaccine, 1955-58:

Salk Vaccine was placed under short-supply quota controls in April 1955 immediately after publication of the Francis report triggered increased demand. Quotas were gradually increased with new production until November 1958, when controls were removed.

#### Rerolling and relaying rails, 1956-58:

Supplies of these materials are directly related to quantities of new rails being laid by the railroads. Demand and exports were increasing, so quota controls were imposed in September 1956 and retained for about 2 years, when foreign demand slackened.

#### Beet and cane sugar, 1963-64:

A sharp drop in Cuban production following the Castro takeover and two poor European beet harvests caused soaring world prices and increased competition for available supplies. For the first time in history, the world price went above the U.S. price. Although supplies imported under the Sugar Act were adequate for domestic consumption, quota export controls were imposed, at the urging of Agriculture, as a

precautionary measure to prevent the reexport of sugar to take advantage of higher foreign prices. A good sugar crop in 1964 restored the situation to normal.

Walnut (logs, bolts, and hewn timber), 1964-65:

Postwar reconstruction and increasing prosperity under the Marshall Plan caused mounting demand in Europe for American black walnut for furniture construction. Exports and prices rose as total domestic and export consumption reached twice the normal growth rate. To conserve remaining supplies, quota export controls were adopted but were abandoned when other elements of the conservation program proved disappointing.

Copper, 1965-70:

This was the Government's longest short-supply control since the Korean War. By 1965 the difference between U.S. price and the London Metal Exchange price had reached a point where U.S. producers were rationing their customers for "low price" copper and it was highly profitable to export to Europe and Japan. From 1965 to 1970 a two-price market existed for copper--the producers' price and the open-market price. By 1970 the two prices came together and the controls were removed.

Cattlehides, 1966:

Following a sharp reduction in Argentine exports of cattlehides, Commerce concluded that there would be a substantial shortage of U.S. cattlehides for domestic consumption because of increased exports, and imposed quota restrictions. Subsequently, there was a public hearing and quotas were increased so that exports in 1966 were higher than in 1965. Cattle producers, meat packers, and exporters vigorously campaigned against controls, and in October the Congress passed a Commerce appropriation bill with a rider that no money could be spent on the hide short-supply control program. Controls were terminated and the President signed the appropriation measure after criticizing congressional action.

Nickel, 1969-70:

In the mid-1960s improved business demand outstripped world nickel supply, and pressure was exerted to impose short-supply controls. The Government resisted imposing controls until a strike occurred at a company which supplied almost half U.S. requirements. Then the Government immediately suspended export licensing of nickel. A year later conditions improved and controls were terminated.

The Government's authority to impose short-supply export controls and to intervene in the marketplace on these occasions was embodied in the Export Control Act of 1949. It allowed export controls to protect the domestic economy from inflation stemming from short-supply conditions following World War II and to prevent, on national security grounds, the export of strategic industrial commodities to Communist bloc countries.

The Export Administration Act of 1969 embodied most of the features of the Export Control Act of 1949 and gave the Secretary of Commerce, acting for the President, authority to impose short-supply export controls "to the extent necessary to protect the domestic economy from the excessive drain of scarce materials and to reduce the serious inflationary impact of abnormal foreign demand." The act was amended in August 1972 to require that the Secretary of Agriculture make a declaration that domestic needs exceeded the supply before export controls could be imposed on any agricultural commodity.

Since the act defines short-supply export control criteria broadly, the Secretaries of Commerce and Agriculture possess significant discretionary powers. As a consequence, decisions to impose export controls have resulted from various interpretations of the short-supply criteria stemming from consultation between affected producers and users, Commerce, and other Government officials.

Commerce's Office of Export Administration (formerly Office of Export Control) implements export restrictions. Most of its work has involved export controls of strategic materials, while short-supply materials and related decisions have received minimal attention. (See ch. 4.)

The adequacy of existing short-supply export control organizational resources has not been seriously questioned, because, until recently, U.S. productive capacity has exceeded both domestic and foreign demand. Historically, the U.S. Government has imposed short-supply export controls as a last resort and on a temporary basis until market equilibrium has been established. Consequently, over the past two decades an institutional aversion to export controls has developed among cognizant Government agencies and officials, who regard them as unnecessary and undesirable under most tight-supply conditions.

Generally, the Government has tried to stimulate production in the private sector through direct and indirect assistance and incentives, such as export subsidies, market development programs, and concessional sales. This type of Government involvement in the free market has been touted by prominent forces in and out of Government as being necessary and desirable.

In the summer of 1972, amid optimistic projections of American economic activity, signs of agricultural commodity shortages began to appear. The unprecedented sale of 726 million bushels of wheat, soybeans, and feed grains to the Soviet Union induced other large-scale foreign purchases of U.S. agricultural commodities which rapidly depleted Government and private grain stocks. Successive currency devaluations in 1972 and early 1973 and vigorous export promotion efforts intensified foreign demand for U.S. commodities. These events, combined with global grain shortfalls in 1972 and 1973 and a variety of domestic and international factors, have caused rising economic uncertainty, particularly in the agricultural sector. The Arab oil boycott and the international energy crisis it has helped to precipitate have added a new dimension to an increasingly unsettled international commodity environment.

Initially, U.S. economic decisionmakers were jubilant over the rapid increase in exports and the resulting balance-of-payments benefits. However, their failure to anticipate the adverse domestic consequences of commodity shortages and increased consumer prices forced the Government to control soybeans and ferrous scrap exports in 1973 and to consider similar action on several other commodities. An export reporting system was instituted for a variety of commodities and an export licensing system arranged for petroleum exports. (See app. II.)

The many control actions over the past year have placed extraordinary demands on the meager staff and resources of Commerce's Office of Export Administration, the Government's principal implementing agency for matters of this type. The ability of the present structure, which has existed for nearly two decades, to deal effectively with the current and prospective shortage situations is seriously questioned.

## COMMODITY POLICY AND DECISIONMAKING PROCESS

The Secretary of Commerce, supported by the Office of Export Administration and the Office of Business Research and Analysis (OBRA), has traditionally been the primary export control decisionmaker. However, as tight-supply situations have multiplied in number and size, such decisions have become more complex. Consequently, decisions on short-supply matters now involve numerous other departments and high-level policy groups and increasingly reflect the complexity of national and international economies.

In the past, an incrementalist export policy favoring an improved balance-of-payments position, with little attention to short-run adverse domestic consequences, was tolerable. However, as surpluses have been sold into export markets, executive branch decisionmakers have been increasingly occupied with the resulting shortages and inflationary prices.

One eminent observer of Federal economic decisionmaking has cautioned: "The cause of a problem is not always knowledge or technique, it may be failure to place a problem in proper context." Resource allocation decisions have been described by one contemporary analyst as "copesmanship" and by another as "the science of muddling through."

Some Agriculture officials contend that past commodity shortages and distortions in market activity have been caused by prior Government intervention in commodity production, marketing, and pricing which impaired the effectiveness and efficiency of a free market economy. Nevertheless, except for the relatively few cases already discussed, the Government has vigorously resisted involvement in commodity allocation.

### Meeting domestic needs

In consequence, the United States does not have comprehensive commodity reserves for critical agricultural commodities or an economic stockpile of industrial materials, which might allow it to insure adequate domestic supplies and stable prices while providing an element of reliability to foreign buyers.

The Government has, however, maintained strategic reserves of certain critical commodities for national security purposes for many years. As tight-supply situations for certain critical commodities have escalated, GSA, under policies set forth by its Office of Preparedness, has disposed of excess stockpile materials held in strategic reserve.

In the summer of 1973, the administration made a policy review of stockpiles, which concluded that stocks of several commodities then in tight supply exceeded potential national emergency requirements. Although disposal of excess commodities in the strategic stockpile has recently been used to alleviate tight supplies, the primary purpose of the disposal program over the years has been to minimize stockpile costs to the taxpayer.

Early in June 1973 GSA announced plans to sell, during the remainder of the year, large quantities of aluminum, lead, zinc, rubber, cobalt, manganese ore, and tin to alleviate tight supplies and inflationary prices. Periodic reviews of target disposal rates of stockpiled materials by CLC, GSA, and OMB were scheduled. Legislation is required to sell significant additional excess stockpiled materials. Several supplemental stockpile disposal bills were passed in December 1973 authorizing GSA to release \$947.8 million worth of Government-held materials for sale to the private market. Other supplemental disposal bills are currently being considered by the Congress.

Agriculture's Commodity Credit Corporation has provided the Government with similar leverage to alleviate tight supply conditions through its subsidized supply management commodity programs.

The strategic stockpile disposal program and the Commodity Credit Corporation stabilization programs affect only a limited number of commodities and are not designed to provide comprehensive supply and price stabilization for prolonged periods of time. In essence, they are intended to complement the free market system and serve as the nation's reserve stocks of surplus and critical commodities. Because of the orientation of these programs, Government decision-makers have never relied upon them as primary vehicles of commodity allocation.

## Economic Stabilization Program

The Government, in increasing its decisionmaking activity in an area related to general resource allocation, established the Economic Stabilization Program in August 1971. CLC, the program's chief administrative agency in this regard, is primarily concerned with curbing domestic inflation and increasing national economic expansion. However, during 1973 it was active in policy efforts to slow price increases and to prevent shortages in petroleum, lumber, metals, raw materials, and food.

Most CLC-supported actions involved increasing imports and production, establishing both voluntary restraining agreements with foreign customers and export monitoring and licensing requirements, and trying to decontrol retail product prices. Most of these actions were temporary and designed to augment supply while minimizing Government involvement in the economy.

It is difficult to assess the specific impact of CLC efforts on commodity allocation and short-supply situations. Clearly, prices have continued to increase rapidly, and, although commodity supplies have increased, shortages or potential shortages of the above commodities continue to exist.

CLC has been hampered from its inception by the temporary nature and scope of its authority. Although it was established to stabilize the economy, it has been repeatedly criticized for taking actions which have exacerbated existing economic instability and created new areas of market uncertainty. This was particularly evident in the 1973 soybean crisis. CLC imposed retail price freezes on beef and poultry earlier in the year which prompted farmers to reduce livestock and breeding herds because controls had not been imposed on soybeans--the primary feed ingredient for these animals. As a consequence, an unprecedented volume of soybeans was sold to foreign buyers, who could sell their livestock and chickens at higher prices because they were not subject to U.S. retail price freezes. This lack of equity in control actions has undermined CLC's effectiveness and hastened calls for its dismemberment. The lack of confidence that the executive branch has expressed in controls as an economic stabilizing device has also limited CLC impact.

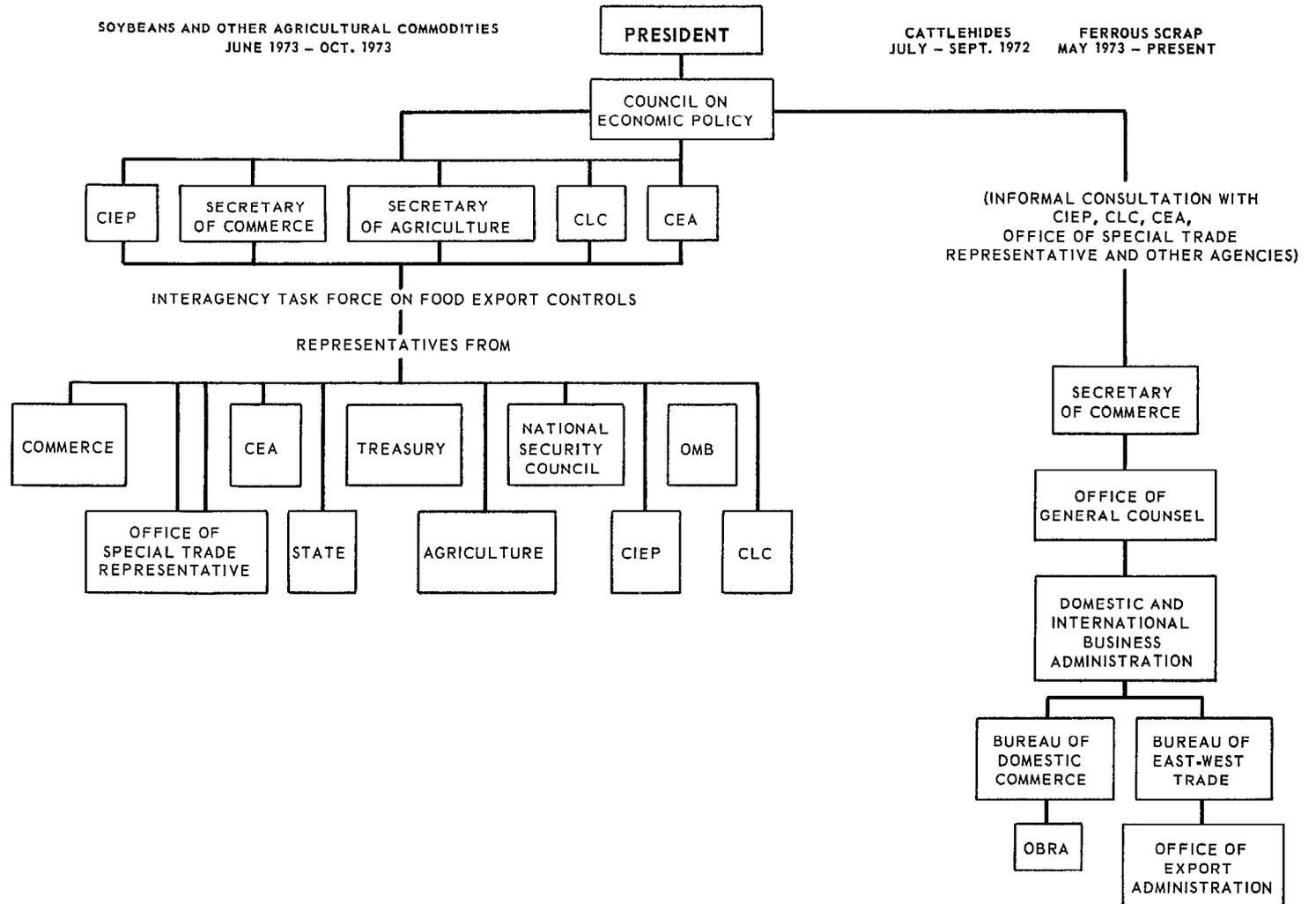
To some extent CLC's limited effectiveness and projected phaseout has been caused by conflicts between its goals and those of various other executive branch agencies. Although economic stabilization is the goal of all agencies, each agency remains essentially concerned with its own particular constituents and their oftentimes narrower interests.

In essence, the executive branch has no firm system for insuring equitable commodity allocation in times of surplus and shortage except the economic stabilization program, which has existed on an uncertain temporary basis. The Government prefers to rely primarily on market prices to ration resources effectively and efficiently.

Pressure on the Government to become more active in allocating commodities has intensified as a result of increasing tight or short-supply situations. The Government's expanding activities are illustrated by examining and contrasting 1972 and 1973 decisions to impose controls on the exports of soybeans and soybean products, cattlehides, and ferrous scrap; a decisionmaking process that many in Government and the private sector describe as being not only complex but chaotic.

The general structure of the decisionmaking process, involving high-level interagency participation in decisions on soybean export controls on the one hand and essentially Commerce-contained decisionmaking for cattlehides and ferrous scrap on the other, is discussed below and shown in the chart on the following page.

MAJOR ELEMENTS OF THE EXECUTIVE BRANCH SHORT-SUPPLY EXPORT CONTROL DECISIONMAKING PROCESS



AGRICULTURAL COMMODITY PROBLEMS AND  
SOYBEAN CONTROLS

The decision to impose export controls on soybeans and related agricultural commodities in June 1973 illustrates the increasing interagency composition of short-supply decisionmaking. (See app. I.)

Early in 1973 Agriculture officials responded to warnings of impending shortages and accelerating inflation by attempting to increase grain and soybean production to meet world supply needs. Encouraged by CLC, OMB, and CEA, Agriculture initiated actions, including:

1. Terminating grain support loans on current maturity dates, thus increasing market supplies by some 330 million bushels of wheat and more than a billion bushels of feed grains.
2. Selling Government-owned grain stocks totaling 278 million bushels of wheat and 200 million bushels of feed grains into the market.
3. Designing 1973 farm programs to increase grain and soybean acreages.
4. Allowing livestock forage to be grazed or harvested from acreage set aside under the wheat and feed grains programs to help producers meet demands for livestock products.
5. Deemphasizing concessional export programs, including reducing government-to-government barter and credit sales.

These actions were designed to increase available domestic supplies; however, they did not appreciably affect the volume of grain and soybean supplies available through the end of the 1972-73 cropyear. Consequently, the soybean-supply situation continued to deteriorate amid widespread demands for more substantive Government involvement in the soybean market. After months of intense pressure exerted on CLC and Agriculture by soybean processors who were warning of imminent short

supplies, CEA<sup>1</sup> began analyzing the feasibility of imposing export controls on agricultural commodities in May 1973.

When CEA's analysis confirmed the 1973 cropyear soybean shortages, CIEP<sup>2</sup> established an ad hoc Interagency Task Force on Food Export Controls late in May to explore options concerning impending shortages in soybeans and other agricultural commodities. However, CIEP conveyed no sense of urgency in its early June directives to Task Force members.

After the President, in a speech on June 13, 1973, imposed a freeze on retail meat prices and a system to monitor exports of certain raw agricultural commodities, the Task Force outlined and discussed potential short-supply export controls, reviewed updated supply and demand data for soybeans and other critical agricultural commodities, and established subcommittees to study:

- Current and new proposals for export control legislation.
- Consultations with foreign countries to minimize foreign policy impacts.
- Relationships between export controls, export promotion, and concessional export programs.

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<sup>1</sup>CEA is responsible for analyzing the national economy, advising the President on economic developments and recommending policies for economic growth and stability, and appraising Government economic programs and policies. It has traditionally been a primary policy advisory group and is currently composed of 3 members, including its chairman, and has a supporting staff of 16 professionals.

<sup>2</sup>CIEP was established in January 1971 and was directed by the President to achieve consistency between domestic and foreign economic policy, provide top-level focus for international economic policy issues, and coordinate international economic policy for all executive branch agencies. It consists of the Secretary of the Treasury, who functions as chairman; an executive director, responsible for all staff functions; top-level agency members; and a professional staff of about 29 drawn from other Government agencies and its own resources.

--Legal and constitutional implications of imposing short-supply export controls.

--Design of alternate export control systems.

While the Task Force was intensively studying these issues, the Office of Export Administration implemented an export reporting system, with technical assistance from Agriculture's Export Marketing Service, to monitor exports and anticipated exports of certain tight-supply grains, oilseeds, and oilseed products. The Office of Export Administration had never monitored massive quantities of oilseed and grain exports. It lacked adequate staffing, organizational resources, and an understanding of and experience in agricultural export activities; by itself, the Office could not perform the control function as directed by the President.

Until this time the Government had no system to determine the amount of agricultural products committed for export. One year earlier Russia had entered the U.S. market with unprecedented large-scale wheat purchases, completely changing the world supply-demand situation. Many months later Agriculture officials were still contending they didn't know how much wheat the Russians had actually bought.

#### Interest group participation

The Office of Export Administration sought and received technical advice from export specialists in Agriculture and also solicited similar information from traditional grain exporters in an effort to provide timely, accurate, and reliable information on export commitments. On June 29, 1973--2 days after a total embargo on soybeans and related products had been announced--the Office began a series of conferences with representatives of the grain trade and Agriculture that continued through the end of the summer. To demonstrate the paucity of hard information within the Government, officials had to ascertain such information as

--crop-growing areas,

--crop availabilities through the year and how they move,

--transportation patterns,

--amounts moving by barge and hopper cars, and

--average amounts going to each destination and storage patterns.

The meetings on soybean and grain exporting were open to the public, but advance notice of the conferences was not disseminated to the public at large. Despite the fact that the issues involved the public interest as well as that of the grain trade, representatives from farm organizations, transportation companies, and consumer interest groups were not invited to attend the meetings to express their views.

The Task Force had agreed in June that public hearings, or at least private industry contacts, before the system was implemented would be useful in determining proposals and would allow industry a sense of participation in the decision-making process. In explaining the quasi-exclusive conferences that were held, Commerce stated that the grain trade was the only group having the specific technical information it sought and that representation from other groups was neither necessary nor desirable and would have served no useful purpose. It added that the crisis environment existing during the early days of soybean controls precluded broad-based involvement in the decisionmaking process.

In addition to the above meetings, members of the Inter-agency Task Force on Food Export Controls met with representatives of two major grain-exporting companies on July 13 to solicit their views on possible export control systems, should they become necessary in the 1974 cropyear.

#### Imposing export controls

An orderly export control program would be a progression of Government measures ranging from least restrictive to most restrictive and would include, in order of ascending severity:

1. Developing an export reporting system.
2. Establishing voluntary restraining agreements.
3. Implementing an export licensing system.

4. Establishing an export quota system (partial restriction of exports).
5. Imposing an embargo (total restriction of exports).

This sequence could only become operative if decision-makers had sufficient time to gather supply and demand information and to carefully assess its market implications in terms of possible Government policy actions. Sufficient decisionmaking time did not exist for resolving the situation, as all steps were compacted into about a 1-month period. An export reporting system was initiated on June 13, 1973. A total embargo was imposed on June 27 and continued until an export quota system became operative on July 2, 1973.

One reason for the hurried decisionmaking was the absence of reliable supply and demand estimates from Agriculture. It's Economic Research Service (ERS) and Interagency Commodity Estimates Committee for Soybeans, Flaxseed, Cottonseed, and Oils projected tight supplies and high prices for soybeans and soybean meal as early as September 1972, but maintained until June 1973 that supplies were adequate to satisfy domestic and foreign demand through the end of the cropyear (Aug. 31, 1973). Agriculture's estimates of the adequacy of domestic supply were challenged by other Government and private sector representatives as being optimistic. The disagreement over soybean and other agricultural commodity estimates prompted Interagency Task Force members to recommend hiring independent consultants to obtain alternate estimates of supply and demand.

On June 27, as a decision on this matter was being considered, the Secretary of Commerce embargoed exports of soybeans and cottonseeds and their meal and oil products. The embargo was based on information from the Office of Export Administration's newly established reporting system which showed soybean and soybean meal exports running 6 and 27 percent, respectively, above previous Agriculture estimates, indicating that export commitments exceeded available domestic supply. Consequently, the Secretary of Agriculture concurred that a short-supply situation existed, paving the way for the export control announcement.

The question of whether to impose export controls on soybeans involved the basic conflict between the pressure to achieve domestic food price stability under Phase IV of

domestic controls versus the pressure to allow booming U.S. agricultural exports to remain uncontrolled.

Although the Secretaries of Commerce and Agriculture shared the responsibility, the decision to restrict exports was actually the result of a last-minute series of informal meetings involving the Interagency Task Force, the Office of Export Administration, and cabinet-level members of the Council on Economic Policy.<sup>1</sup>

On the recommendations of the Office of Export Administration and the Interagency Task Force on Food Export Controls, the Chairman of the Council on Economic Policy, with approval of the President, made the decision to embargo soybean exports in an effort to insure an adequate supply of soybeans, cottonseeds, and related commodities.

Although the primary decisionmakers reviewed some incomplete interagency analyses, they did not have the benefit of well-thought-out, formal decisionmaking options. Most option papers on legal and constitutional implications; consultations with foreign governments; alternative export control systems; and relationships between export controls, export promotion, and concessional export programs were not finalized before it was decided to impose controls. In the wake of the decision, some limited analyses of these subjects were completed and made available to decisionmakers, should a similar short-supply situation recur. These options papers also helped in implementing the controls.

#### Possible alternative considerations

Various possible options existed for implementing the export control system, other than the particular controls that were imposed, including:

- Allocating export quotas by country or region.
- Selling export permits at fixed fees, with no quota on the number of permits to be sold.

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<sup>1</sup>The President created this Council in February 1973 to provide better coordination in the formation and execution of economic policy. It is composed of top-level agency officials and currently has 2 professional staff members.

- Selling export quota licenses to exporters at auction.
- Distributing export licenses to domestic producers on the basis of production histories.
- Distributing export licenses to exporters on the basis of their historical market shares.
- Distributing export licenses to exporters on a first-come, first-served basis.

Each option has its attractions and drawbacks, and, since the options are not mutually exclusive, various combinations are possible.

The Interagency Task Force's subgroup on Export Control Systems noted three major policy questions on agricultural exports in its June work.

First, Russia, the People's Republic of China, and, possibly, Japan have sufficient resources and possible motivation to buy disproportionate shares of U.S. crops on the free market to consume or resell at a profit. These actions could seriously disrupt normal trading patterns, and it would be necessary to have voluntary restraining agreements with these countries to limit purchases or to design the control system to preclude disproportionate purchases.

Second, there was concern that export controls would cause higher world prices and lower domestic prices, and create potential windfall profits for exporters, the U.S. Government, farmers, foreign buyers, or, sometimes, for the distributors between farmers and exporters.

Third, orders for a significant amount of the 1973 crop-year had been placed prior to the President's June 13 speech. The potential success of export controls, especially in the short run, could be seriously diminished if deliveries on those contracts were completed.

The decisionmakers' failure to anticipate the myriad domestic and international consequences of export controls can be partly attributed to the executive branch's continuous opposition to restrictions on the free market system as reflected in one agency's memorandum analyzing the situation.

"The strongest argument against export controls is their damaging effect on the Free Enterprise System. Export controls, in effect, tell producers that they are no longer free to sell their output to the buyer of their choice. Removal of this freedom is counterproductive to goals of our free enterprise system, and it is likely to inhibit the efficient allocation of scarce resources."

Officials involved in the soybean short-supply situation described the decision to impose export controls as a last resort. Many emphasized that the Government's options were restricted by rumors of impending controls, which intensified speculative buying and exacerbated the already uncertain short-supply situation.

Other officials insisted that the shortage situation developed from the price freezes on meat and poultry, which forced an unexpected quantity of soybeans into the higher priced export market. They maintained that the Government price freeze precipitated the temporary imposition of controls and that if freezes had not been imposed, soybean export controls would have been unnecessary.

The domestic and international consequences of imposing export controls on soybeans and other commodities (see ch. 3) resulted in a new consensus on opposing export restrictions among members of the Council on Economic Policy, the Interagency Task Force on Food Export Controls, and Commerce officials. From this consensus, a strategy was developed in July 1973 to prevent the recurrence of conditions that would precipitate export controls. The objectives of the strategy were to:

1. Discourage stockpiling.
2. Make existing supplies available to the market as soon as possible.
3. Convince the market that:
  - (a) the Government was strongly committed not to reimpose controls,
  - (b) sufficient quantities of these agricultural commodities were being produced to meet normal demand, and

(c) the Government intended to act to avert unnecessary stockpiling and to get crops to the market as soon as possible.

Acknowledging the fact that, before the soybean embargo, the United States had no existing comprehensive plan for responding to short-supply situations, the strategy to avoid reimposing export controls provided several methods for achieving that goal.

- Consulting with foreign governments to (1) determine causes of unusual export demand, (2) gain commitments against government stockpiling, (3) encourage producer countries to move crops to market quickly, and (4) arrange for exchanges of information.
- Consulting with major exporters of short-supply agricultural commodities to gain information and insight on market conditions, express the strong commitment of the U.S. Government to avoid reimposing controls, and gain exporters' commitments supporting the determination to avoid controls.
- Bringing U.S. crops to market to relieve price pressures and insure domestic availability by making increased crop supplies available.
- Gathering information to keep up to date on supply and demand factors, understand the meaning of available information, and minimize misinterpretation.

The key to successfully implementing the above strategy according to the Task Force was interagency communication and cooperation, as each part of the plan required substantial interagency involvement.

The Interagency Task Force on Food Export Controls was phased out following the termination of export controls on all agricultural commodities on October 1, 1973. From its inception, the Task Force functioned essentially as an ad hoc group that did not convene until a tight-supply situation reached a critical condition necessitating intensive analysis and administrative action. As such, it tended to be reactive in nature and function and therefore was not continuously involved in critical commodity questions.

With the termination of export controls on agricultural commodities, administration officials decided that informal interagency communication and coordination would be a more effective means of reviewing critical agricultural shortage problems. The assessment of agricultural short-supply situations is currently the responsibility of a cabinet-level group which meets weekly to review national and international economic matters. It is not the primary purpose of this group to discuss short-supply matters, but CIEP officials said that the group considers shortage questions when a critical supply situation appears possible.

One member of the CIEP professional staff has been permanently assigned the responsibility of alerting the cabinet-level group to any real or potential shortages of agricultural commodities. He collects, reviews, and evaluates critical supply and demand information on all agricultural commodities from a wide variety of executive branch agencies. He is also responsible for coordination of agricultural short-supply policy and actions among executive branch agencies. Although he is the only CIEP official assigned the task of monitoring real and potential agricultural shortage situations, he does receive informal assistance from staff members of various agencies involved in the continuous review of agricultural supply and demand information. Because of the extensive number of agricultural commodities he is responsible for reviewing, he is capable of effectively monitoring only a few commodities at any given time.

The permanent assignment of one CIEP staff member as coordinator of all Government agricultural short-supply policies and actions does not appear to have markedly improved the executive branch's ability to avert crisis situations before they occur. The nature and scope of most real or potential agricultural and other commodity shortage situations would seem to require, in our opinion, a higher level of priority.

#### CATTLEHIDES AND FERROUS SCRAP CONTROLS

While the export controls imposed on soybeans, cottonseeds, and related commodities in June 1973 illustrate the changing character of export control decisionmaking, those imposed on cattlehides and ferrous scrap in 1972 and 1973 show a more traditional and restrictive decisionmaking process. (See app. I.)

The decision to impose export controls on cattlehides in July 1972 primarily involved evaluations made by Commerce's OBRA and Office of Export Administration. The Operating Committee on Export Controls<sup>1</sup> was one of the principal advisory groups involved in the decisionmaking process. Traditionally, this committee has been limited almost exclusively to reviewing strategic materials under the national security aspect of the Export Administration Act. It is rarely consulted on matters of short supply, so that its capacity to evaluate short-supply situations and recommend appropriate actions is extremely limited.

Cattlehide export controls partially resulted from the intense pressure exerted by various elements of the cattlehide industry at public conferences convened by the Government. Although the composition and interests of these groups were much broader than those represented at the soybean conferences, there again was a noticeable lack of participation by other affected parties.

The decision to control cattlehide exports was executed by Commerce with minimal involvement of other agencies such as Agriculture and CLC, and only after strong pressure from affected industries. Commerce's actions prompted various meatpacker and cattlemen associations to persuade the Congress to modify short-supply export control authority. In August 1972 the Congress amended the Export Administration Act to give Agriculture the decisionmaking authority for controls on agricultural commodities, including animal hides or skins. By thus widening the scope of export control authority, Congress expanded the Government's decisionmaking process for short-supply situations.

Commerce had almost exclusive responsibility to impose export controls on ferrous scrap in July 1973. (See app. I.) As in the cattlehide situation, pressure to control exports originated from industry nearly a year before the decision was made. Industry concern prompted the Materials Division of OBRA to monitor the ferrous scrap market for signs of domestic scarcity, inflationary impact, and abnormal foreign

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<sup>1</sup>An interagency group that convenes at the request of the Office of Export Administration when it determines an advisory review is necessary.

demand. Amid conflicting Government and industry assessments of the supply and demand situation, involving meetings between Commerce and steel and scrap industry officials, the Office of Export Administration initiated an export reporting system on May 22, 1973. Information provided by the system showed a record volume of exports and an export licensing system was begun on July 2. Commerce supplemented its licensing program with a quota system in September 1973, and quotas have been continued in the first and second quarters of 1974.

The pressures or concerns expressed by interest groups and Members of Congress have been important elements in generating Commerce efforts to identify and assess various export control situations. For instance, Commerce received 2,053 inquiries from congressional and other sources concerning short-supply situations between January 1 and June 1, 1973. Of these inquiries, 713 came from the Congress and 1,340 from the other sources: 639 concerned scrap, 442 concerned lumber, and the remaining 972 concerned other commodities.

Commerce also tabulated letters from congressional sources concerning ferrous scrap export controls from the time controls went into effect in July 1973 through mid-November 1973. The tabulation showed that 28 Senators and 38 Congressmen had sent letters supporting ferrous scrap export controls, while 4 Senators and 6 Congressmen had expressed written disapproval.

The decision to impose export controls involved several informal consultations with CIEP, CLC, CEA, and other Government agencies, but no formal interagency committee was established to assess the situation in detail. As temporary export controls on scrap were extended into 1974, informal inputs from other Government agencies increased in volume and significance.

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In summary, export controls on soybeans, cattlehides, and ferrous scrap illustrate three types of decisionmaking processes, all designed to provide temporary solutions to what were perceived as temporary problems, and each of which involved executive branch agencies to differing degrees.

- Cattlehide controls resulted in Agriculture's being included in the decisionmaking process with Commerce.
- Ferrous scrap controls, in their early stages, had Commerce as the primary decisionmaking entity.
- Soybean controls necessitated expanding interagency involvement to a formal task force level.

Although the decisionmaking processes differed to some extent, all three decisions were similar in the sense that they were conceived and executed in a crisis atmosphere.

## DECISIONMAKING PROCESS DURING CRISES

### Lack of responsiveness

As a consequence of relying on market forces the Government has tended to neglect emerging short-supply situations, thereby limiting its ability to develop solutions to the problems that eventually surface as crises. The present decisionmaking process does not provide for identifying, defining, and analyzing overall short-supply problems. Because the emergence of resource shortages over the past 20 years has been conceived of as an anomaly, the decisionmaking process designed to control such situations has remained essentially ad hoc and crisis-oriented. The executive branch has no firm, coordinated structure to deal with short-supply resource and commodity problems on a continuing basis. In essence, it appears that short-supply decisions made thus far were backed into rather than structured and analyzed.

During early July 1973, when (1) export controls had been established on soybeans, other agricultural commodities, and ferrous scrap, (2) export reporting requirements had been initiated for a variety of commodities, and (3) additional possible control actions were being discussed, the Director of Commerce's Bureau of East-West Trade sent a memorandum to the Secretary of Commerce. The memorandum noted that the cumulative effect of all these commodity actions could lay the administration open to the charge that it had no consistent plan for dealing with the problem, no control of the situation, and was reacting to events on a day-to-day basis, with no real ability, knowledge, or program for dealing with them.

The memo suggested that if controls were placed on any more primary commodities, it would be necessary to control a large number of other commodities. It stated that such action should be taken at one time, on a coordinated basis, rather than piecemeal as the current procedure seemed to be. The memo also suggested a high-level interagency meeting to consider what commodities it might become necessary to control, what ripple effect these commodities would have on other commodities, and where the administration was likely to go.

In the absence of a firm coordinated structure to deal with short-supply problems, an ad hoc executive branch management system has emerged which relies on informal inter-agency coordination and which needs more effective communication, coordination, and planning.

These problems are illustrated by the operations of the Interagency Task Force on Food Export Controls, established in May 1973. The Task Force was developed because of the multiagency nature and scope of most agricultural decisions and because most agricultural short-supply problems could not be resolved satisfactorily at the agency level. Despite its establishment, however, problems of restricted inter-agency communication and conflict continued.

1. The decisionmaking process for soybean and ferrous scrap export controls failed to substantively involve the State Department. State's officials were informed of the controls by other executive branch representatives just before public announcement of the administrative action. Consequently, they could not provide a perspective on the possible foreign impact of the actions being considered.
2. Agriculture, Commerce, and CLC officials disagreed over the accuracy, reliability, and timeliness of Agriculture's commodity supply and demand estimates. The lack of consensus contributed to doubts about the quality of available market information gathered and analyzed by the Government. This prompted Task Force members to solicit alternate estimates from other Government agencies and private consulting firms.
3. Although Agriculture advised Commerce on establishing and administering the export monitoring system, it contended that Commerce reports distorted the extent of export commitments. As a result, a CIEP staff member was assigned the task of reconciling the conflicting interpretations of export commitments.

4. Basic policy conflicts surfaced between agencies, i.e., CLC placed high priorities on economic stabilization, and agencies, such as Agriculture, stressed the importance of pursuing increased exports. Rather than publicly espouse a unified, coherent short-supply position, agency officials expressed conflicting policy positions. Export controls were imposed after public announcements had excluded the possibility of such action. Differences between public pronouncements and actions weakened the Government's credibility abroad.
5. Uncertainty existed among interagency officials concerning the significance and duration of existing and potential commodity shortages. Some officials advocated national and international commodity reserve programs, while others denounced such measures as unnecessary and undesirable.

Other general but equally important obstacles have limited interagency effectiveness in short-supply situations. Although interagency objectives must transcend narrower agency interests, agency officials in providing information to interagency decisionmakers, tend to protect the interests of their particular constituents. Some agency officials contend, however, that interagency involvement tends to distort and diminish the importance of individual agency inputs.

#### Inadequate commodity information

At agency and interagency levels, various groups gather, evaluate, and disseminate supply and demand information. (See ch. 5.) Much pertinent short-supply information may not be funneled to appropriate agency and interagency decisionmakers. Thus, information fragmentation and overlapping have hampered decisionmaking in short-supply situations.

Many agencies often are involved in monitoring supply and demand conditions on similar commodities. Fertilizers and wheat are two examples of commodities drawing the attention of several agencies. Because each agency monitors commodities for its own particular objectives, a general picture

of informational overlapping and fragmentation emerges. Interagency decisionmakers gathering supply and demand estimates from all involved agencies before making export control decisions have often been troubled by the substantial variations in figures developed by each agency. The problem with statistics on the agricultural situation was discussed earlier.

As a consequence of these differences, decisionmakers have at times solicited alternative estimates from private consultants at added cost to the decisionmaking process and the public. The variety of sources, reports, and predictions is illustrated in the information gathering and forecasting sections of the commodity studies in appendix I.

A specific example of the diversity of information required for short-supply commodity decisionmaking is indicated in August 1973 memorandums from the Council on Economic Policy to Agriculture and Commerce, which stated that analyses were necessary to provide

- updated world grain supply and demand analysis;
- current weekly commodity market information on trends, speculation, and hedging;
- weekly analysis of grain shipments;
- results of U.S. agricultural attaches' inquiries on world supply and demand information;
- relationships between grain prices and consumer food levels and assumed price levels on future grain and livestock production;
- projected shipment patterns against historical trends;
- relationships of various possible export levels to domestic commodity prices;
- grain movement actions, such as termination of Commodity Credit Corporation farm loans;
- actions to reduce export reporting lags;

- plans for contract audits;
- contract data on prices, sources, destinations, etc.;
- actual shipments against anticipated exports; and
- a tabulation of outstanding export contract commitments by country.

Commodity specialists in Agriculture, Commerce, and Interior provide supply and demand estimates but lack decisionmaking authority and have traditionally been relegated to advisory roles. Thus, agency and interagency decisionmakers have made short-supply decisions that were not fully responsive to the economic realities of the domestic and international markets. More effective use of these specialists in the decisionmaking process would increase the economic information of decisionmakers and more actively involve commodity specialists in the decisionmaking process.

Reducing the amount of overlapping and fragmentation existing in the forecasting process, improving the process itself, and increasing decisionmaking influence for commodity specialists could improve the responsiveness of the decisionmaking process. Even then, the quality of supply and demand estimates may continue to be a problem, because most production, consumption, reserve, and price information is supplied to the Government on a voluntary basis by the private sector.

For some commodities, supply and demand data is not normally provided to the Government. Traditionally, the private sector and the Government have resisted increased monitoring of business information, because it would (1) be costly and complicated, (2) compromise the competitive position of individual companies, (3) create alarm over growing intervention in the free market system, and (4) exacerbate market speculation by alerting foreign buyers to the threat of impending export controls.

However, such Government monitoring would give executive branch officials the concrete information needed for responsive commodity decisions. It could also expand overall communication and coordination between the Government and industry on all crucial short-supply questions.

In the final analysis, improved Government monitoring of supply and demand information is essential in identifying and responding to commodity policy problems. If the disruptive consequences of export controls or other corrective efforts are to be minimized in short-supply situations, the Government must have access to the most accurate and reliable supply and demand data. Imposing export controls or making other major commodity decisions based on a determination resulting from examining incomplete business information can greatly disrupt the domestic and international economies.

In a 1971 report, the President's Commission on Federal Statistics stated that:

"The typical difficulty faced by policy-makers in defining problems is that a problem usually exists only in a political context. The political system is convulsive; it acts when the electorate perceives that a crisis exists \* \* \*. But the public perception of a crisis often antedates the presentation of statistical evidence that there is indeed a crisis. Hence, when the legislature or the executive is faced with an aroused public, time is not available to design a survey or experiment, gather the requisite data, and perform a careful analysis pointing toward an optimal policy recommendation. In addition, when the public perceives a crisis there may be no general agreement on the nature of the problem, the important variables to be measured, or the way to relate the variables in a study."

\* \* \* \* \*

"Given the confusion about what constitutes the problem, a lack of statistics with which to understand and respond rationally to crisis is probably inevitable. A crisis is a crisis precisely because the problem has not been defined, it was not foreseen, and timely data-gathering efforts were not undertaken. When a crisis arises, some data are used to support action decisions. The data used are often a combination of existing benchmark

data produced by census-type agencies, management data produced by agencies with related responsibilities, data presented by lobbyists who support a particular position and, particularly important, data on public opinion gathered ad hoc by specialized private polling organizations \* \* \*."

The problems of inadequate information and statistics for Government policymakers and their relevance to the current economic situation are further illustrated by two recent analyses. The Director of CLC stated in congressional testimony in February 1974 that:

"In retrospect 1973 was a most unusual year in economic terms \* \* \* price increases were the more disturbing since they were largely unforeseen and unexpected by all analysts regardless of economic or political persuasion \* \* \*. The year has raised the most serious questions as to the adequacy of economic data and methods of analysis and forecasting, particularly with respect to prices. \* \* \* For me the year has reinforced the limitations of aggregate economic tools and has emphasized the validity of the view that detailed data and analysis of separate sectors and markets are essential to understanding and forecasting, and even more vital to economic policymaking, certainly in the peculiar economic environment of 1973-74."

In addition, a prominent agricultural economist observed in congressional testimony in September 1973 that:

"Given this precarious situation [the short-term world grain production outlook] a reliable early warning system needs to be in operation, that will let us know when supplies are moving down to the critical point and there needs to be an allocation plan based upon need that is already on a stand-by basis to be implemented before instead of after the fact. The present policy of letting price be the rationer leads to a situation where those who have the intelligence systems and the financial resources are able to capture more of a short supply commodity than those less equipped."

Several congressional committees began hearings in January 1974 on the Government's forecasting capability for petroleum and the energy crisis and its need to expand its business information monitoring system. In view of reports of shortages or potential shortages of a wide variety of other commodities, it would seem that similar congressional consideration could be given to minerals, materials, and agricultural commodities.

## Competing policy alternatives

As uncertainty about adequate domestic supplies of several agricultural and nonagricultural commodities intensified during the past 10 months, the executive branch, in an effort to prevent the reimposition of export controls:

1. Consulted with the European Economic Community, Japan, and Canada about U.S. export control policy.
2. Consulted with foreign governments to voluntarily limit importing U.S. commodities whose adequate supply was uncertain, such as cattlehides, softwood logs, and ferrous scrap.
3. Decontrolled domestic prices as part of Phase IV of the Economic Stabilization Program in order to stimulate domestic production, permit dollar-for-dollar passthrough of raw material costs, and reduce the number of commodities exported.
4. Participated in international discussions about establishing world grain and food reserves.
5. Suspended U.S. wheat import quotas to increase supplies available to the domestic economy and prevent the imposition of export controls in the immediate future.

These actions were supplemented by various other proposals within the Government designed to (a) stimulate production, (b) provide continuous adequate supplies, and (c) prevent the reimposition of export controls:

- Maintain or increase the investment tax credit.
- Provide accelerated depreciation allowances.
- Encourage industry to increase research and development spending through tax incentives and other devices.
- Promote industry mergers where appropriate, to reduce duplication of facilities and the total investment required.
- Encourage joint ventures.

- Relax antitrust laws or change the laws, if necessary and appropriate, to permit mergers and joint ventures.
- Exempt producers of various commodities from further tariff reductions in the upcoming trade negotiations and from generalized preferences to be granted developing countries (free duty for 9 years).
- Urge other countries to refrain from subsidizing their industries in the negotiations of nontariff trade barriers.
- Negotiate and submit for congressional approval government-to-government agreements limiting exports to the United States for a fixed period of years. This would replace voluntary restraining agreements, which have not been very effective and have been challenged in the courts.
- Exempt various industries from price controls so that prices can rise to levels that will improve profits sufficiently to attract investments needed to increase productive capacity and prevent future shortages.

These alternative actions and proposals constitute a formidable body of options available to the Government to resolve critical short-supply problems, and although some alternatives have been considered by appropriate executive branch officials, few have been implemented. Most of the proposed alternatives are not designed to alleviate current acute short supplies but are directed toward increasing future supplies of commodities and involve considerable time and effort to implement.

The CIEP Interagency Task Force on Food Export Controls made a limited review of the relationship among competing policy alternatives of export promotion, concessional sales programs, and export controls in the summer of 1973 and prepared option papers on the following export promotion and concessional sales programs.

1. Commodity Credit Corporation export credit financing.
2. Export-Import Bank agricultural export financing.

3. Public Law 480 (Food for Peace).
4. Domestic International Sales Corporation.

In July 1973 the Executive Director of the Council on Economic Policy met with the Task Force to discuss the appropriateness of continuing the export expansion programs during tight-supply situations, and it was decided:

- To permit the Commodity Credit Corporation no new credit commitments. Soybeans, wheat, corn, other feed grains, and cotton would no longer be eligible for such credit.
- To establish a review committee to prepare a list of scarce commodities ineligible for Eximbank financing. Presumably this list would disallow credit for soybeans, wheat, corn, other feed grains, and cotton.
- To reduce Public Law 480 shipments to an absolute minimum. Priority status was given to Public Law 480 shipments designed to satisfy national security and humanitarian commitments.
- The Treasury would initiate a study to consider removing tax benefits available through the Domestic International Sales Corporation on commodities subject to export controls. Suspending the Corporation program to reduce the volume of exports, short of imposing export controls, was discussed, and an analysis of the legal complications of removing program eligibility was begun. The Export Administration Act and the Domestic International Sales Corporation have similar short-supply criteria.

These decisions were made to provide additional supplies for the domestic market, but considerable uncertainty exists as to the ultimate destination of diverted supplies. Officials who modify these export programs concede it is possible such supplies will ultimately be exported commercially and, therefore, not benefit the domestic economy. Although admitting such potential diversion, the officials contend that no program exists for insuring that such commodities will be returned to the domestic market to relieve tight-supply situations.

A current review by OMB of U.S. export promotion could be crucial for developing alternative actions and policies for resolving critical short-supply problems. The Government has emphasized export promotion programs since the mid-1960s to improve its balance of trade and payments. Recent changes in the international economic environment have caused substantial increases in U.S. exports and contributed to domestic inflation and tightened the supply of numerous commodities.

The OMB study, initiated in October 1973 and scheduled for completion in June 1974, is attempting to determine whether Government promotion of exports is necessary in an era of inflation and commodity shortages. As part of its analysis, OMB intends to address three basic issues.

1. Given the probable evolution of the international economic system, under what conditions does the Government need to stimulate exports?
2. How effective are existing export promotion programs in expanding exports beyond levels that would have occurred without Government action?
3. What changes in export promotion programs would result in more effective use of Government resources?

This study will analyze existing and potential U.S. export promotion programs, considering their interrelationships, strengths, weaknesses, and sensitivity to outside influence. Each program will be described in terms of its purpose, method of operation, and measures of effectiveness. This approach will result in a relative assessment of each program's contribution to broad U.S. objectives through its contribution to export growth. It will also develop export promotion alternatives based on the priority, importance, and timing of the U.S. objectives served by exports or by variations in key assumptions on international or domestic economic situations.

Although the executive branch has modified some existing export programs and has actively considered alternative proposals to ameliorate short-supply problems resulting from increased exports, the President announced the creation of two new export expansion groups in October 1973.

- The President's Export Council, an organization of leading American businessmen, to advise the President on ways to increase U.S. overseas sales.
- The President's Interagency Committee on Export Expansion, representing 13 Government departments and agencies, to initiate and coordinate Government programs and policies affecting U.S. export performance.

These two export expansion groups were established to accomplish (1) short-term action to achieve material improvement in the U.S. trade account, (2) long-term programs to achieve equilibrium in the U.S. balance of payments, and (3) action to remove domestic impediments to U.S. exports and improve or supplement existing export incentives.

#### Overlapping policy responsibilities

Short-supply decisionmaking involves many executive branch departments, other agencies, and high-level policy groups. A study of the stated responsibilities of these organizations indicates that many of their functions overlap in the commodity area, because the short-supply decision involves not only domestic economic policy and political considerations but also international trade and foreign policy.

CIEP's Interagency Task Force on Food Export Controls consisted of:

1. Agriculture, which is directed by law to acquire and diffuse comprehensive information on agricultural subjects in the areas of research, education, conservation, marketing, regulatory work, agricultural adjustment, surplus disposal, and rural development.
2. Commerce, whose mission is to foster, serve, and promote the Nation's economic development and technological advancement through activities that encourage and assist States, regions, communities, industries, and firms.
3. State, whose Secretary, as the principal foreign policy adviser to the President, is responsible for the overall direction, coordination, and supervision of U.S. foreign relations and for interdepartmental activities of the U.S. Government overseas.

4. Treasury, whose Secretary, as a major policy adviser to the President has, among other things, primary responsibility for formulating and recommending domestic, international financial, and tax policies and for participating in formulating broad fiscal policies of general significance to the economy.
5. CEA, which analyzes the national economy and its various segments, advises the President on economic developments, appraises the economic programs and policies of the Government, recommends to the President policies for economic growth and stability, and assists in preparing the economic reports of the President to the Congress.
6. CLC, which develops and recommends to the President policies, mechanisms, and procedures to achieve and maintain stable prices and costs in a growing economy; keeps prices and wage policies consistent with fiscal, monetary, international, and other economic policies; and informs the public, agriculture, industry, and labor about the need for controlling inflation and encourages and promotes voluntary actions to that end.
7. CIEP, which provides a top-level focus for the full range of international economic policy issues and investigates and recommends policies that will be consistent with domestic economic policy and basic foreign policy objectives.
8. National Security Council, whose function is to advise the President with respect to the integration of domestic, foreign, and military policies relating to national security.
9. OMB, whose functions include helping the President to bring about more efficient and economical conduct of Government service, assisting in developing efficient coordinating mechanisms to implement Government activities and expand interagency cooperation, and supervising and controlling the administration of the budget.

10. Office of the Special Representative for Trade Negotiations, which is responsible for supervising and coordinating the trade agreements program and directing U.S. participation in trade negotiations with other countries.

Other executive branch groups involved in short-supply decisionmaking for commodities, or in commodity analysis, forecasting, and long-range planning include:

1. Interior, whose jurisdiction includes conservation and development of mineral and water resources, promotion of mine safety and efficiency, and conservation, development, and use of fish and wildlife resources.
2. Council on Economic Policy, which helps to coordinate the formation and execution of economic policy and performs such functions relating to economic policy as the President or the Chairman of the Council may from time to time specify.
3. Domestic Council, whose purpose is to formulate and coordinate domestic policy recommendations to the President, assess national needs and coordinate the establishment of national priorities, recommend integrated sets of policy choices, provide a rapid response to Presidential needs for policy advice on pressing domestic issues, and maintain a continuous policy review of ongoing programs.
4. Council on Environmental Quality, which develops and recommends to the President national policies which promote environmental quality, performs a continuing analysis of changes or trends in the national environment, and assists the President in the preparation of the annual environmental quality report to the Congress.
5. GSA, which establishes policy and provides for the Government an economical and efficient system for managing property and records, including stockpiling of strategic materials.
6. Agency for International Development, which, as an agency within the Department of State, is charged

with central direction and responsibility for the U.S. economic assistance program, designed to help the people of the less developed countries develop their human and economic resources, increase productive capacities, and improve the quality of human life.

7. Atomic Energy Commission, established to provide and administer, and encourage private participation in, programs for research and development, international cooperation, production of atomic energy and special nuclear materials, and the dissemination of scientific and technical information.
8. Environmental Protection Agency, which is designed to serve as the public's advocate for a livable environment.
9. National Science Foundation, whose purposes are to increase the Nation's base of scientific knowledge; encourage research for improvements in economic growth, productivity, and environmental quality; promote international cooperation through science; and develop and help implement science education programs that can better prepare the Nation for meeting the challenges of the decades ahead.
10. Central Intelligence Agency, which, among other responsibilities, correlates and evaluates intelligence relating to national security and provides for the appropriate dissemination of such intelligence within the Government using, where appropriate, existing agencies and facilities.

This list is not intended to include all agencies, groups, and programs dealing with commodity and resource matters. It does not include the energy organizations, which are currently in transition through the Federal Energy Office to the proposed Federal Energy Administration. In the energy area during fiscal years 1972 and 1973, 23 Federal departments and independent agencies, comprising 64 offices, bureaus, commissions, and administrations, were involved with energy-related programs and activities. The listing also does not include (1) all the commodity-related programs among the more than 60 agencies or other units of the Federal Government involved in some aspect of foreign economic affairs, (2) advisory groups, such as CLC's

Committee on Food or the Food Industry Advisory Committee, or (3) agencies with regulatory responsibilities in the commodity area, such as Justice, the Commodity Exchange Authority, and the Interstate Commerce, Tariff, and Federal Power Commissions.

As with any statement of various organizational responsibilities, the list does not indicate who actually plays the key role in the short-supply decisions which have been and are being made, the relative degree of influence various agencies have or should have in such decisions, and the particular ways in which they interact. The actual membership, as opposed to the professional staff, of the several Executive Office councils concerned with commodity matters involves a series of interlocking memberships, and a particular department secretary may also serve on several policy councils.

The list does show that a significant number of agencies and councils are involved in commodity policy formulation, that their responsibilities are interrelated and overlapping, and that many types of interests are involved in broad commodity policy decisions.

No focal point exists for commodity policy among all these groups, an important point in terms of providing additional information or policy statements to the commodity policy formulation process. Choosing a proper recipient would be confusing if an official in one agency of the 60 or more agencies dealing with foreign economic affairs or in one of the 64 groups which have dealt with energy activities wanted to transmit relevant information on a situation in his area which effected another commodity to the decision-makers for that commodity. The same problem exists for public or industrial groups who wish to communicate their positions on a commodity policy to the appropriate decisionmaker. Even when these messages are sent through old established channels, as by farm groups to Agriculture, uncertainty exists as to whether they reach the appropriate policymaker who actually makes the short-supply decisions on that commodity.

Coordinating groups that have been established are both fragmented and temporary.

- The Interagency Task Force on Food Export Controls has been phased out.
- An agricultural forum coordinated by OMB has no permanent status.
- A Minerals and Materials Policy Subcommittee, under the aegis of the Domestic Council, has no permanent staff and an uncertain existence.
- The short-supply export control implementation program, in Commerce's Bureau of East-West Trade, has been regarded by Commerce officials as a temporary program.
- The interagency group currently reassessing U.S. export promotion is an ad hoc group under the leadership of OMB.

The broad variety of departments, agencies, policy councils, and interagency groups involved with commodity policy as discussed in this section; the multiple courses of action discussed in the preceding subsection and earlier in the chapter for dealing with commodity short-supply problems; and the diversity and difficulties of information and communication discussed in the prior subsection combine to produce a decisionmaking system which is not only fragmented in each respect, but also produces endless possibilities for further policy complexity through the interaction of the fragmented decisionmaking responsibilities, multiple alternative actions, and diverse information sources and flows involved.

The National Commission on Materials Policy, in its final report of June 1973, stated with regard to U.S. Government materials policy, that:

"Almost every aspect of policy work in this area is handicapped by inadequate, inaccurate, or inaccessible information. Much data that is available is structured in ways that served past needs and policy requirements but do not meet present nor prospective demands. Effective management and rational policymaking require sufficient, reliable, and usable data concerning both the constituent parts of the materials system and

the interactions of the system itself. Such a data base could be employed to advantage by systems analysts in creating models that would help policy-makers to better understand the interactions of the system; for example, between science and technology and economics. The first use to which such a data base should be put is a study of the effects and effectiveness of current materials policies."

\* \* \* \* \*

"The extensive decentralization of policy planning and decisionmaking, both in the Executive Branch and in the Congress, for materials, energy, and environment problems has given rise to an ad hoc, crisis approach that to date has characterized policy development and execution in the materials field. More than 63 executive branch organizations have responsibilities in the energy area alone. The interactions of materials, energy, and the environment are now too numerous, too subtle, and too complex to be managed effectively in such a decentralized manner."

The problems of executive branch decisionmaking for commodity short-supply situations suggest to us that the difficulties of decentralized policy data gathering, analysis, and decisionmaking are not confined to basic materials, as discussed in the above National Commission quotation, or in energy, as acknowledged by the recent efforts to centralize and coordinate energy functions in a Federal Energy Administration, but involve the general area of commodities and resources as a whole.

Further discussion of the problems of U.S. commodity policy and practice are contained in chapter 3, the impact of short-supply export controls; chapter 4, problems and limitations of those controls; chapter 5, agency commodity monitoring and forecasting programs; and chapter 6, long-run executive branch commodity and resource policy-planning efforts.

## CONCLUSIONS

During the 20 years since the Korean War, the United States has had more problems with disposing of commodity surpluses than with commodity shortages. The Government has largely sought to rely on the free market system to effectively distribute commodities.

In the current commodity shortage situation, the executive branch commodity decisionmaking process does not have sufficient organizational or analytical resources to respond effectively to an increasing number of complex short-supply situations.

Decisionmaking responsibilities for policy formulation evolve not only from five major departments but also from a series of high-level economic councils with overlapping economic policy functions. Thus, the system is fragmented among the many policy areas affected by short-supply situations, such as export controls, import quotas, export expansion programs, and concessional sales.

The commodity policy management of the past year limited thorough identification, definition, analysis of short-supply problems, and alternatives to export controls and led to inconsistencies in public policy statements on short-supply situations, thereby increasing domestic and international uncertainty. In some cases interagency task forces increased interagency disagreement instead of producing a working consensus.

Although short-supply decisions affect a wide variety of domestic interest groups, including the general public, consultation in the commodity decisionmaking process has been largely limited to the views of commodity exporters and has excluded domestic interest groups ranging from producers to consumers.

Economic groups affected by short-supply actions in the decisionmaking process could be more involved through public hearings or some other appropriate forum.

Our review isolated many deficiencies in the Government's short-supply decisionmaking process. Short-supply decisions are the products of complex interactions of many

divergent forces, and recommendations to improve the decision-making process must necessarily embody many management considerations. Government adoption of a more active and anticipatory short-supply decisionmaking process could resolve many of the problems noted. Identifying or establishing a focal point organization to substantially reduce organizational and information overlap and fragmentation is central to such a role. Such an organization should be able to resolve differing data inputs and policy interests so that more responsive short-supply decisions can be made.

#### RECOMMENDATION

We recommend that the Council on Economic Policy and the Office of Management and Budget identify or establish a focal point organization to:

- Coordinate data inputs and policy interests of executive branch departments and interrelated economic policy councils.
- Permit an opportunity for private and public groups concerned with specific commodity policy to express their views on such policy.
- Form a group to work with departmental commodity forecasting groups to establish data and reporting requirements.
- Report periodically to the Congress and the public on specific and general commodity situations.

## CHAPTER 3

### IMPACT OF EXPORT CONTROLS

The U.S. Government has traditionally opposed short-supply export controls because of the domestic and international economic disruptions precipitated by such restrictive actions. The President's message to the Congress proposing the Trade Reform Act of 1973 stressed the need to achieve a more open world-trading system, including reduced quantitative barriers. Export controls imposed in 1973 on ferrous scrap and soybeans and related commodities have somewhat challenged the credibility of the Government's commitment to free trade among nations.

Export controls, however, have temporarily alleviated domestic supply and price pressures of the controlled commodities. Both CLC and ERS have produced impact analyses which show that reducing exports increases available domestic supplies and decreases domestic prices. When the 1973 export controls were relaxed or removed, however, high prices and tight-supply situations continued.

Although many officials of foreign governments considered that U.S. Government export control actions in 1973 represented a serious threat to the concept of free world trade, many nations have restricted exports through licensing systems and government or quasi-government trading agencies to:

1. Support strategic and foreign policy objectives.
2. Slow down other countries' penetration of foreign markets.
3. Maintain export prices, as in the case of tin and coffee.
4. Maintain adequate domestic supplies and avoid depletion of natural resources.
5. Limit domestic price rises caused by worldwide shortages.

Currently countries such as Canada, the European Economic Community, Japan, Australia, Argentina, and Brazil have export controls on a variety of commodities.

FOREIGN IMPACT

U.S. restrictions on soybean exports in 1973 caused strong foreign reaction, as shown by the following excerpts from U.S. Embassy reports from major importing nations:

- June 28 "Trade and Government officials are showing great concern in embargo action announced on June 27 \* \* \*."
- June 30 "\* \* \* we do not consider 'such procedure' [U.S. export embargo] as justifiable, since it would mean that the leading liberal trading country U.S.A. would disregard her international obligations entered into [during] the course of the preceding months."
- July 2 "\* \* \* Such action on the part of a major exporting nation in peace time is unprecedented and likely to undermine confidence in future trade arrangements."
- July 9 "\* \* \* U.S. action gives weight to the argument that too great reliance on imports of vital agriculture commodities has its dangers and that U.S. arguments for specialization have lost credibility."
- July 14 "\* \* \* The Government of \_\_\_\_\_ is also taking heavy flak for 'over optimism and ignorance of the real situation facing \_\_\_\_\_.' The \_\_\_\_\_ are claiming injury mainly on three counts: (1) the U.S. broke its word by not honoring in full soybean contracts in force as of June 13; (2) the U.S. did not give the 'consideration' of its best traditional overseas cash customer as the U.S. promised, that is, the \_\_\_\_\_ got 50 percent of their contract quantities just like everyone else; and (3) there was not the kind of prior consultation and explanation that should prevail among friends."
- July 16 "\* \* \* This serious action seems likely to have damaging effects, and the procedures adopted in handling the matter have

unfortunately accentuated difficulties caused."

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"\* \* \* the U.S. Government decision to allow only partial fulfillment of registered soybean and soybean meal contracts a glaring breach of international rules of trade \* \* \* such a decision is all the more alarming because no one could imagine the World's greatest trading nation violating the principle of contractual responsibility, and creating unsolvable problems for their customers."

An additional September 1973 comment, from a European soybean industry group official, observed that

"\* \* \* Such measures as the embargo may be helpful for domestic purposes but are inexcusable if you weigh them against the damage they have done to international trade and morale. After all, it was the U.S., the most powerful military and economic basis of this world, which carried the torch of free trade. And, if I am correctly informed, only last year the U.S. impressed trade partners to enlarge purchases of agricultural commodities."

The adverse international reaction was partly caused by the U.S. Government's failure to give foreign governments--particularly the European Economic Community and Japan, traditional major importers of U.S. soybeans--prior notification of the restrictions.

State Department messages clearly showed that Government uncertainty over whether export controls would be imposed existed right up to the time they were imposed. The possible imposition of controls prompted the U.S. Ambassador to Japan to meet with the Secretary of Agriculture on June 20, 1973, to determine the Government's intentions. According to an Agriculture memorandum of the meeting, the Secretary's response included the following points:

"Currently no controls [are] in effect and export licensing [is] only in the thinking stage."

\* \* \* \* \*

"If it becomes necessary to institute a licensing program, it probably would be based on an historical base of imports. He [the Secretary] realized there would be some problems with the base period selection but felt the Japanese would emerge without undue hardship being placed on them"

After export controls were placed on soybeans and cottonseed, the Deputy Assistant Secretary of State for International Resources and Food Policy summoned representatives from various foreign governments to the State Department on June 28th to explain the decision and to express his regrets that it had not been possible to meet sooner to explain the background of the decision. He emphasized that such action had been taken only after Commerce's export monitoring system had revealed the magnitude of foreign demand and the inadequacy of supply to meet domestic needs and that the Government was aware that it was a drastic measure.

A similar conference between U.S. and foreign government officials was held on July 2, after an export licensing and quota system was established. In the wake of the export control decision, the United States participated in a series of bilateral and multilateral consultations with importing governments to explain its control actions and to discuss ways to prevent the reimposition of export controls.

Crucial for minimizing adverse foreign impact to export controls is the State Department's inclusion as a significant force in the export control decisionmaking process. The failure of the executive branch to include State in the final decision to impose export controls on soybeans and cottonseeds precipitated intradepartmental discussions on the subject.

A recommendation to include State in the decisionmaking process at an earlier stage was eventually conveyed to the Chairman of the Council on Economic Policy by the Secretary of State through informal discussions in the late summer of 1973. In confirmation hearings before the Senate on September 12, 1973, the Secretary of State said that the

State Department must actively participate in export control decisionmaking because:

"\* \* \* when it comes to export controls this is one of the matters that the State Department must \* \* \* participate [in] extremely actively, because, as I pointed out in a previous hearing, our whole foreign policy, our whole foreign agricultural policy has been based on the assumption that we wanted a free market in agricultural products. Many other nations have geared their economy to the assumption of regular supplies from the United States. If suddenly we reversed this policy \* \* \* it would \* \* \* produce enormous dislocations in the countries \* \* \* which would in itself be a political factor of the first magnitude and \* \* \* it would affect those people's judgment of the constancy of America's policy generally \* \* \*.

"\* \* \* it sometimes happens \* \* \* I think it happened in the case of soybeans, that a decision is taken on extremely economic grounds \* \* \* is taken so rapidly that the foreign policy agencies do not get either adequate warning or an adequate opportunity to express themselves.

"When that happens it is a mistake, and I will do my best to prevent this as Secretary of State and I believe very firmly (that) in controls the foreign policy must be brought to the attention of the President before he decides on it."

\* \* \* \* \*

"It [export controls] had an adverse effect on Japan, and I must say candidly \* \* \* sometimes you have to do things even though you know they have an adverse effect. But in that case, I will have to admit it was done and the adverse effect was not fully taken into account."

The Secretary has also recognized that other international actions may be necessary. In an address to the United Nations General Assembly on September 24, 1973, the Secretary expressed concern over the recent depletion of world food and feed reserves and proposed:

"\* \* \* That a World Food Conference be organized under United Nations auspices in 1974 to discuss ways to

maintain adequate food supplies, and to harness the efforts of all nations to meet the hunger and malnutrition resulting from natural disasters."

The export controls imposed in 1973 also elicited foreign complaints that such controls also constitute severe hardships to the economies of the importing countries. In the case of soybean controls, representatives of foreign governments lodged reports with State, Agriculture, and Commerce. An Interagency Hardship Committee, consisting of representatives of these departments and of CLC and established on June 29 to consider hardships experienced by exporters, was commissioned to review the question of foreign hardships.

Countries severely affected by controls included Haiti, Bermuda, Trinidad, the Dominican Republic, Ireland, Israel, South Korea, Taiwan, Venezuela, Portugal, Poland, Japan, and European Economic Community members. They requested exemptions and waivers from export controls to alleviate their own critical short supplies. Although the export control program was designed to disallow waivers because they would undermine U.S. Government claims of impartial allocation of exports, the Office of Export Administration did grant foreign exemptions and waivers on a case-by-case basis. Importing nations claiming hardship were asked to present evidence of hardship to the Office for consideration.

As a result of an examination of soybean supply availability in July 1973, Commerce relaxed its control program to permit 100-percent licensing of exports for shipment in September. This alleviated many foreign hardship situations while retaining the impartiality of the export control program.

Export controls on ferrous scrap produced foreign hardship claims similar to those that emerged from the soybean experience. A State assessment of 1973 ferrous scrap hardship applications concluded that "the U.S. cannot be expected to remedy every foreign hardship caused by an imbalance between scrap supply and demand." It also advised

"(1) that the requirements of individual countries for U.S. scrap should be based on their past reliance on the United States as a scrap supplier allowing for reasonable growth in each country's steel production, and, (2) that an

importer hardship is a country hardship only if the matter is espoused by the government of the importer."

Some ferrous scrap hardship exemptions were approved in 1973 following intense foreign complaints of economic disruptions by traditional major importers. The countries which requested special allocations included: Japan, Mexico, Canada, Taiwan, the Republic of Korea, the People's Republic of China, Argentina, Italy, the Dominican Republic, Venezuela, the Philippines, and Chile.

As ferrous scrap export controls continued in 1974, Commerce revised procedures to accommodate foreign hardship claims. In the first quarter of 1974, the Office of Export Administration superseded its contract method of licensing exports with a quota system. Of the 2.1 million short tons licensable under the first quarter quota, 100,000 short tons were set aside for contingencies, hardships, and nonhistoric exporters. An identical quota was announced by the Secretary of Commerce for the second quarter of 1974. The Secretary of Commerce recommended a small cabinet-level interagency group to either review hardship cases or delegate that function to the Interagency Hardship Committee established on June 29.

#### Disrupted export contracts

Export controls on soybeans and cottonseeds brought threats of legal action against the U.S. Government and U.S. exporters from foreign importers whose contracts had been partially disrupted. Messages from U.S. Embassies in major importing countries informed the Government of importers' intentions to examine legal means of redress as a result of what they termed "a glaring breach of rules of international trade." A group of German importers, for example, stated:

"If now the American Government imposes export restrictions on domestic political grounds, then that Government assumes the responsibility for the resulting subsequent damages and therefore for the payment of applicable reparations to the injured parties. Should the American Government not be prepared to do this, then legal avenues will be investigated."

The fact that for months the U.S. Government had pressed foreign importers to increase the sales of American agricultural exports and then had imposed export restrictions was used to justify such actions.

In late July 1973, the European Community Commissioner for Agriculture met with U.S. Government officials "expressing great concern about the violence done to contracts," as a result of soybean export restrictions. Considerable confusion existed regarding the operation of "force majeure" (an event or effect that cannot reasonably be anticipated or controlled). Some Agriculture officials believed that force majeure nullifies all contractual obligations, while State argued that it only excuses a delay in delivery. Commerce's export control regulation appeared to provide for a waiver of rights on the unfulfilled balance of contracts. However, after receiving some foreign inquiries concerning the waiver issue, the Office of Export Administration informed importers that it was not requiring the waiving of rights under partially disrupted contracts.

In an effort to resolve the confusion and respond to threats of legal action, the U.S. Government instructed Embassies to inform importers and foreign governments that it was not legally liable for fulfillment of export contracts.

As of early February 1974, Commerce's Office of General Counsel had not been involved in any litigation against the U.S. Government caused by the partial disruption of export contracts, and no suits had been brought against the Government. Executive branch legal advisory officials claim that the Government has the right to disrupt private export contracts and impose temporary export controls to protect the domestic economy and that legal precedent exists to support its position of no legal liability under national and international law.

Exporters may be liable, however, depending on the terms and conditions of individual contracts. Commerce's General Counsel indicated that some private exporters were involved in litigation resulting from disruption of contracts. The Government is not currently involved in resolving such private lawsuits.

## Use of export controls

As a result of hearings in July 1973 on Export Control Policy, the Subcommittee on Foreign Agricultural Policy of the Senate Committee on Agriculture and Forestry recommended that the executive branch take the initiative in proposing to the Organization for Economic Cooperation and Development and to the General Agreement on Tariff and Trade<sup>1</sup> the following rules that "take full and sympathetic account of the implications of Export Controls on all importing countries."

1. Governments are obliged to avoid where possible and otherwise to foresee the development of the situations requiring export controls.

This principle implies the need for better methods of reporting and forecasting. Although essentially a task for national governments, such international organizations as the General Agreement on Tariffs and Trade, The Organization for Economic Cooperation and Development, and the U.N. Food and Agriculture Organization have a role to play.

Further implied is that it may be necessary for the nations of the world to develop and maintain their own systems of reserve stocks to meet their domestic emergency needs and to have minimum capability to supply regular customers. Until recently, the United States had such stocks. The United States and other nations of the world should seriously consider rebuilding and financing such stocks to deal with crop failures at home and those that have been experienced in Africa and South Asia the past 2 years.

2. The country considering imposing export controls should consult beforehand with the importing nations to:

--Exchange information on supply and demand of the commodity.

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<sup>1</sup>An agreement and organization on basic international trade rules involving the United States and other nations.

- Get advice on what to do about the potential shortfall.
  - Coordinate and improve production policies, if this could usefully reduce the burden of controls.
  - Agree, where appropriate, to joint action on producing and allocating scarce supplies.
  - Seek, whenever possible, voluntary agreements before imposing mandatory export controls.
3. Export controls--like increased restrictions on imports--should be permitted only under special circumstances and then only for a temporary period of time.

The special circumstances would be limited primarily to supply failures at home or abroad that put extraordinary pressure on domestic availabilities.

4. Export controls should treat all nations equitably.

This principle has several implications.

- Each nation should be entitled to its historic share of the available supply.
- Provision should be made for new customers. For example, the Soviet Union and China have become recent importers of grain.
- Special consideration should be given to sharing available supplies, especially food, with poorer nations, who often must rely on other nations to obtain needed imports through grants or concessional sales.
- The country applying the export controls should also limit domestic consumption of the product in a reasonable proportion to the curtailment of foreign availabilities.

CEA's annual report in February 1974 stated its belief that it will be necessary in the future to consider new kinds of commitments by exporting countries on foreign access to their supplies when world demand is strong. CEA stated that formulating a more general code of good conduct for exporting countries and adopting more systematic procedures to resolve disputes over access to supplies should be addressed in the forthcoming multilateral trade negotiations.

In summary, the shortrun effect of export controls on foreign economic policy has been to weaken international confidence in the U.S. trade liberalization commitment, and multilateral trade negotiations for reducing quantitative trade barriers may have been impaired. Also U.S. market development programs to create new markets and to establish a reputation of being a reliable supplier appear to have been temporarily subverted.

The imposition of export controls has had at least a temporary adverse influence on the balance of trade and payments position while contributing to uncertainty over the stability of the dollar. Conceivably, benefits in these areas during the last quarter of 1973 would have been greater had export controls never been imposed. Clearly, the prospects of regional economic self-sufficiency programs, such as the European Economic Community's Common Agricultural Policy, were enhanced as a result of the imposition of export restrictions.

Agriculture officials informed us that the European Community is currently considering proposals to introduce large scale production of soybeans and to eventually impose a variable levy to restrict soybean imports. They also indicated that Japanese diversion of rice acreage to soybeans, initiated prior to U.S. export controls, continues unabated.

A significant foreign impact of export controls has been the intensified interest among traditional importers to develop alternate sources of supply. Japan and the European Economic Community, for example, increased their soybean imports from Brazil, America's principal soybean export competitor, and expanded research and development efforts overseas to generate alternate sources of protein.

They have also increased investment in Brazilian soybean production and processing facilities. Spain, a traditional importer of U.S. soybeans, also retaliated against U.S. export controls by temporarily imposing a variable levy and by importing large quantities of soybeans from Brazil.

It is uncertain how much the temporary imposition of controls in 1973 permanently damaged the U.S. soybean export market; it did temporarily reduce the dependence of traditional foreign importers on the U.S. soybean market. An international shortage and an expanding demand for protein exists, so it appears that the U.S. soybean export market could continue to expand.

The long-run effects are not known either. It is clear that 1973 export restrictions jeopardized the future credibility and reliability of U.S. foreign trade policy. Success of the Administration's trade liberalization policy depends on how effective the United States is in continuously providing adequate supplies for domestic and international markets.

No formal assessment has been made of the effectiveness of imposing the export controls. Some government officials contend that an ex post facto analysis would serve no useful purpose and might precipitate renewed and intensified criticism of past U.S. export control actions. In the absence of any comprehensive and coherent assessment, executive branch policymakers and the Congress remain essentially uncertain about the actual impact. Therefore, strategies to minimize adverse international consequences of any future export control decisions do not have the benefit of a thorough and disciplined analysis.

## DOMESTIC IMPACT

While the foreign impact of export controls has generally been characterized by some government and private officials as negative, the domestic impact has been described as being mixed. For several months before export controls were imposed in 1973, executive branch officials were hailing the fact that increased exports generated new jobs in production, processing, and transportation industries. This greater productivity prompted the executive branch to discontinue agricultural setaside acreage and export and domestic subsidies which had cost the taxpayer millions of dollars for many years. However, as exports increased, domestic supplies decreased and domestic wholesale and retail prices rose sharply, offsetting the benefits of increased employment and decreased Government spending.

Early in 1973, concern in Government and industry over possible export controls led to the development of impact analyses by CLC and Agriculture. A CLC analysis completed in May determined that reducing soybean and corn exports would increase available domestic supplies and reduce domestic prices. It concluded that critical export levels should be determined in advance so that a triggering device for imposing export controls would be available if such action became necessary.

An ERS analysis completed in June concluded that (1) restricting agricultural exports by \$100 million in 1973 or early 1974 could decrease farm prices by more than 5 percent and retail prices by at least 0.2 percent and (2) impacts on the nonfarm economy would be less than normal, particularly for such agricultural-related industries as warehousing, transportation, and trade. For 1973, the estimated maximum effect on related agricultural industries would be a \$35 million decrease in gross business and a 2,000 member decrease in the work force.

Agriculture completed an analysis of the impact of export controls on crop production in 1974 for CEA in July. As a result of that analysis, a CEA member sent a memorandum to CIEP, concluding:

"\* \* \* export controls that cause prices to fall to [these] levels [corn \$1.50 a bushel, wheat \$1.90, and soybeans \$5] \* \* \* the average prices

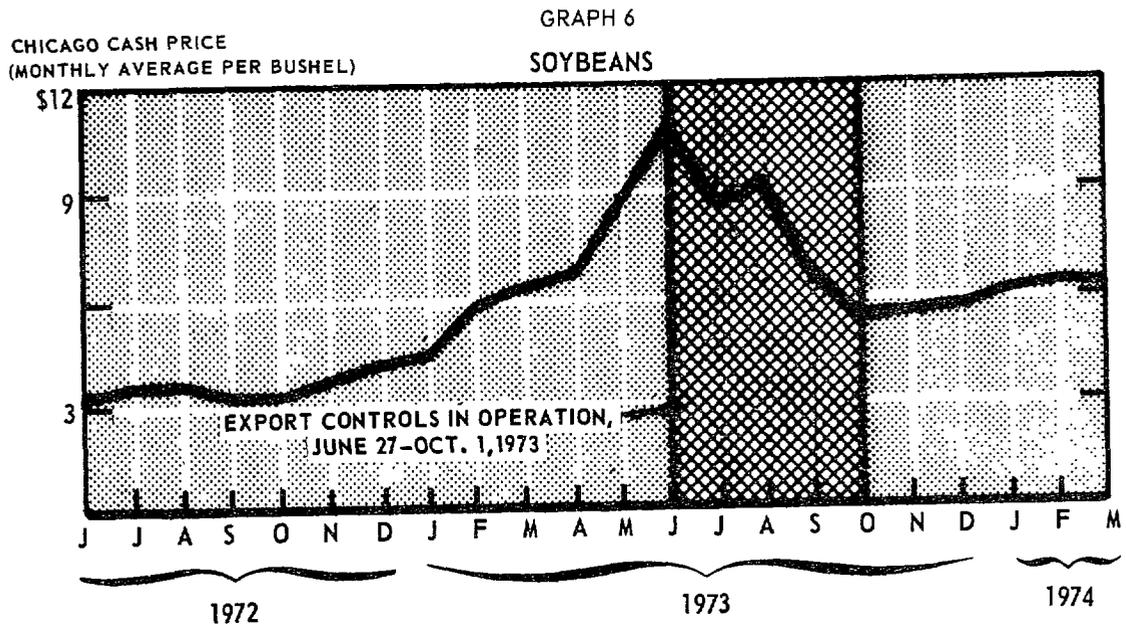
that are consistent with achieving food price stability sometime in calendar year 1974 \* \* \* would have a rather small disincentive effect in 1974 crop production. \* \* \* these prices are well above production costs of all but the most marginal production."

Similar quantitative impact analyses completed in late November 1973 by Agriculture showed that restrained levels of wheat, feed grain, and soybean exports would alleviate high domestic prices and provide increased domestic supplies without severely reducing farm income and acreage.

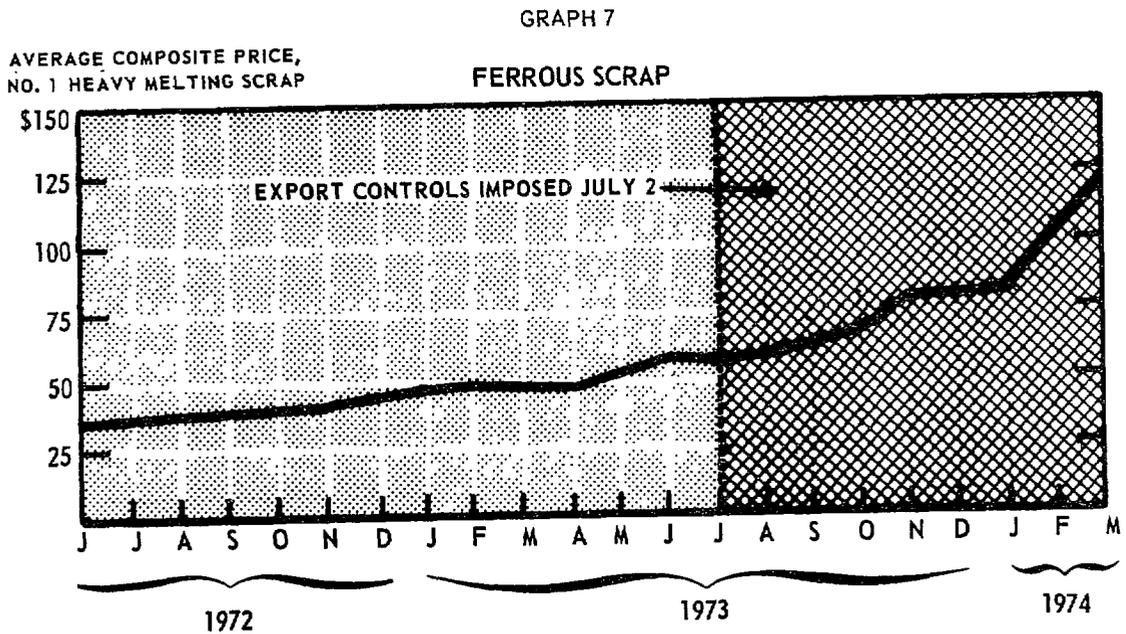
Imposing export controls on selected agricultural commodities temporarily decreased domestic feed costs, but they subsequently staged a partial recovery. Farmers received \$10 a bushel for soybeans in June 1973. After controls were imposed, they received \$6.69 a bushel in July and \$8.99 in August, which was significantly more than during the identical 3 months of 1972, when prices were \$3.32, \$3.34, and \$3.36 a bushel, respectively. Since export controls on agricultural commodities ended on October 1, prices have remained unseasonably high, partly because of many supply and demand uncertainties that characterize domestic and international markets. Recent soybean price movements are shown in graph 6. However, 1974-75 cropyear supply estimates indicate production should satisfy both domestic and foreign demand for most agricultural commodities.

The domestic impact of export controls on ferrous scrap has been somewhat similar to that on soybeans. Prices of ferrous scrap have risen substantially, as shown in graph 7 on the following page. The composite price of No. 1 heavy melting steel scrap in Pittsburgh, Chicago, and Philadelphia of \$79.50 a gross ton on November 14 was 105 percent above that of a year ago, 45 percent above the June 1 to 8 ceiling price of \$55, and 22 percent above the December 1956 historic high of \$65. Prices have continued to rise sharply during early 1974, to \$141.67 on April 1, 1974. Prices of other grades have risen similarly in all parts of the country. Under export controls, prices of ferrous scrap briefly stabilized at levels significantly higher than those of previous periods; however, prices have since risen sharply despite the continuation of export restrictions.

DOMESTIC PRICE RISES AND EXPORT CONTROLS



NOTE: SOYBEAN CROP YEAR SEPT. 1-AUG. 31



Uncertainty over the adequacy of domestic supply persists. Seriously questioned, in the light of anticipated continued high levels of domestic and foreign demand, is whether additional obsolete scrap will be available and whether the scrap-processing industry can produce at a level capable of satisfying demand.

Imposing export controls on selected agricultural commodities and ferrous scrap in the summer of 1973 has not resolved supply and price problems. Instead, the conditions that precipitated the controls continue to exist. Although offering some temporary relief to the domestic economy by alleviating supply and price problems, controls are not designed to resolve the substantive economic problems which cause such symptoms.

The reactions of domestic producers and processors to export controls are relevant to any description of domestic impact. In the August issue of Soybean Digest, published by the American Soybean Association, an article entitled "Export Control: Growers Call It A Serious Mistake," stated:

"\* \* \* the export embargo and restrictions announced in late June and early July - may be one of the most stunning blows ever for the soybean industry, from the growers who again feel like the government's scapegoat to the processor here."

\* \* \* \* \*

"U.S. processors who bought some beans at pretty high prices, are now stuck with their storage full of meal, and some shut down their plants rather than sell at low, freeze-limited prices."

The Association, during its annual meeting in September 1973, further defined and clarified its opposition to export controls:

"The export restrictions on soybeans have led to a counterproductive reaction in farmers minds. Farmers may hold their beans off the market in hopes of a better price when the export licensing is lifted.

"The government has failed to recognize that soybean farmers have a greater alternative to withhold their products from the market than most other farmers. Soybeans are not perishable like most farm products, thus can be stored for several years.

"The artificial market situation created by the embargo will cause farmers to be extremely careful about when they sell the 1973 crop. Farmers are confident that when restrictions are removed prices will go up so they will hold their beans in hopes of a better price."

One of the most significant potential domestic impacts of export controls on agricultural commodities has been the fear that such restrictions would act as disincentives for farmers to expand production. It is not known at this time whether controls on soybeans and related commodities have dissuaded farmers from expanding soybean acreage in the coming crop year. Soybean acreage harvested in 1973 was up 23 percent from the previous year. Agriculture's projections of a 225-million bushel carryover for the 1973-74 crop year and lower prices for such competing crops as corn, cotton, wheat, and rice indicate that soybean acreage will be reduced 4 percent by planting time this spring. However, unabated increases in foreign demand for soybeans resulting from protein shortages abroad, improved foreign diets, and population growth may stimulate expansion of soybean acreage. Already, foreign demand for wheat has raised its price to levels comparable to soybean prices. Other current market uncertainties may prevail, necessitating an increase in soybean acreage at planting time. In essence, the relationship between export controls on soybeans in 1973 and farmers' intentions to decrease or increase soybean acreage in 1974 remains uncertain at this time.

One prominent domestic impact of ferrous scrap export controls has been intensified cooperation between processors and the Government to generate more scrap to eliminate continued controls. Attempts have been made to get more information on scrap availability and on the impact of high levels of steel production on scrap prices. Action has been initiated to expand scrap collection and processing facilities and to develop research and development activities.

Controls on soybeans precipitated renewed concern in private and Government sectors over the need to develop alternate sources of protein. Accelerating domestic and foreign demand, coupled with limited supplies of protein, have contributed to renewed interest in research and development.

Government actions taken to restrict exports before formal controls were imposed produced an uncertain impact. Reducing the amount of Public Law 480 exports, barter sales, and Commodity Credit Corporation credit export sales was designed to increase supplies available to the domestic market, but probably resulted in exports being made on a commercial basis at the higher, more attractive world price. This is demonstrated by the fact that the level of consumption in the United States decreased, while commercial exports increased substantially. Officials involved in reducing these concessional export programs disclosed that the Government had no system for insuring that supplies were retained for use by the domestic market.

In summary, the total domestic impact of Government export control actions in 1973 is essentially uncertain at this time. They temporarily alleviated domestic soybean and ferrous scrap shortages and restrained soybean prices, but have been ineffective in modifying ferrous scrap prices over a prolonged period of time.

#### POSSIBLE WINDFALL PROFITS

Government's decisions to impose short-supply export controls should involve consideration of the financial consequences of disrupting existing export contracts. In a June 26, 1973, memorandum to the Interagency Task Force on Food Export Controls, its subgroup on Export Control Systems recognized the possibility of windfall profits occurring when it concluded:

"\* \* \* to the extent that export controls result in higher world prices and lower domestic prices, there is a potential for windfall profits. \* \* \*

it should be noted that for at least some crops a two-tier price might not develop as a result of export controls. In those cases this windfall allocation problem would not exist. It might be possible to determine in advance those crops for which this problem would or would not exist."

The subgroup also observed that those segments of the economy capable of receiving substantial profits as a result of short-supply export controls were

- certain foreign countries with significant market power,
- importers and exporters,
- the U.S. Government,
- farmers, and
- middlemen (processors, transportation industries, owners of storage facilities, etc.) in the distribution chain between farmers and exporters.

Distribution of such profits depends on the type of export control system imposed. The subgroup considered the beneficiaries under various controls. It mentioned, for example, that a system based on allocating export quotas by country or region would:

"Gives the foreign purchaser a considerable bargaining advantage, particularly if a state controlled economy is involved. In such case, the state purchasing organization would need only to offer a fraction above the U.S. domestic price. In effect the foreign country has the ticket. If it wishes it can profit by transshipping or selling its own commodities at world rates and using U.S. imports in substitution. By removing competition among the buying countries for the crops made available for export, the windfall gain is eliminated by an artificial increase in market power and a consequent reduction in purchase price."

A control system based on the sale of export permits at a fixed fee with no quota on the number of permits to be sold was cited as not having the same clear domestic psychological impact as export quotas because "the consumer would not see any direct benefit and the farmer would view the permit fee as a rake-off by the Government of his legitimate profits." The subgroup claimed that "If profits from the fee are directed to the farmers the program will become difficult to terminate politically."

Perhaps the most politically acceptable export control system considered was one in which export quota licenses would be sold to exporters at auction. The subgroup concluded that such a system would allocate "the windfall to the U.S. Government where it can remain either in general revenues or be used to fund farm programs."

The subgroup considered other export control systems that might result in windfall profits such as distributing export licenses to:

--Farmers according to crop histories, which "would allocate any windfall profits to the farmer \* \* \*."

--Exporters based on historical market shares. This would place "any windfall profit in the hands of the exporters."

The above options were submitted to the Interagency Task Force on Food Export Controls on June 26, 1973, 1 day before the embargo was announced on soybean exports. However, the export control system adopted by the Office of Export Administration on July 2 did not include any of these options. Instead, a system based on partial fulfillment of contracts was established, which involved indiscriminately reducing soybean export contracts by 50 percent and soybean meal export contracts by 60 percent. Thus, exporters and importers were relieved of certain existing export commitments, and large quantities of low-priced soybeans and meal were available for resale to the domestic market at higher prices.

Through June 13, 1973, 519 million bushels of soybeans had either been exported or contracted for export during the remainder of the cropyear (Aug. 31, 1973). The 50-percent reduction in export contracts between June 13 and the end

of the crop year provided an additional 33 million bushels of soybeans for domestic use. An additional 1,125,000 short-tons of soybean meal was also made available to the domestic economy during the same time period as a result of the 60-percent reduction in meal export contracts.

To illustrate the possibility of windfall profits for this situation, soybeans purchased in January 1973 at an average price of \$4.49 a bushel for export in late June, July, and August could have been resold to the domestic market at prices averaging \$8.60 for July and \$9.08 for August. Soybean meal purchased in January for \$188.40 a short-ton for export in late June, July, and August could have been resold at about \$311.20 a short-ton in July and \$285.00 in August.

It is possible that some exporters and importers experienced losses as a result of export controls. Those who purchased soybeans in early June (before export controls) at \$10 to \$11 a bushel for export later in the summer probably lost money by being forced to resell to the domestic market at slightly lower cash prices in July and August. Also, those who bought soybean meal at average prices of \$314.60 in May and \$412.50 in early June and sold to the domestic market at average cash prices in July and August lost money. However, since the majority of soybean export contracts were sold before June, 1973 at considerably lower prevailing cash prices it is likely that overall exporters and importers profited as a result of the Government's export restrictions. To date, no investigation has been made of unusual profits resulting from 1973 soybean export controls.

Although the Interagency Task Force on Food Export Control acknowledged the possibility, it decided that the need to provide adequate domestic supplies through export controls had a higher priority than did preventing windfall profits precipitated by such actions.

Another dimension of the windfall profits issue concerns the agricultural export reporting system established by Commerce in June 1973 and currently administered by Agriculture. The reporting system shows that exporters enter into export contracts with their foreign affiliates without specifying delivery destinations. Approximately one-fifth of all soybean and soybean meal export contracts reported under the export reporting system failed to designate a final

destination, with affiliate export transactions representing a significant percentage of such contracts. Agriculture considered that many contracts with unidentified destinations would never be shipped, because they represented overbuying by exporters and importers who feared future government disruption of export contracts.

Such transactions can present an exaggerated picture of foreign demand, and contribute to projections of tight or short supplies resulting in higher cash and futures market prices. However, under the reporting system exporters can cancel export contracts without penalty and are free to sell to the domestic market at the higher prices thereby realizing windfall profits. Although Agriculture officials recognized the dangers inherent in the export reporting system they pointed out that the trade customarily operated in this manner and saw no need to tighten the reporting regulations.

#### CONCLUSIONS

The total impact of Government export control actions remains uncertain at this time. Although some Government and private officials considered the foreign impact to be generally negative, the domestic impact has been described as mixed.

No comprehensive analysis of the domestic and foreign impact has been made although such an assessment appears to be necessary and desirable if Government is to remove the uncertainty that stemmed from recent export control decisions. Such an after-the-fact analysis could provide the Congress and policymakers with information and insights that would minimize the adverse impacts of export controls if similar Government actions are needed in the future.

#### RECOMMENDATION

We recommend that the Council on Economic Policy initiate a comprehensive interagency evaluation of the foreign and domestic impacts of the 1973 short-supply export controls, including an assessment of windfall profits and hardship situations resulting from the disruption of export contracts.

## CHAPTER 4

### NATURE AND LIMITATIONS OF SHORT-SUPPLY EXPORT CONTROLS

As applied during 1973, short-supply export controls created substantial debate over the adequacy of existing criteria for imposing controls and raised questions about their relationship to the General Agreement on Tariffs and Trade. The Government also had problems with implementing controls, particularly in staffing and funding, monitoring of export activity, and obtaining compliance. The 1973 export controls caused further debate over their basic value, particularly over the basic conflict of stable domestic commodity supplies and prices versus U.S. national and international economic and foreign policy requirements.

### LEGAL ASPECTS OF EXPORT CONTROLS

Article 1, section 8, clause 3 of the Constitution authorizes the Congress "To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes." There is no constitutional prohibition against the Congress delegating some of its powers and responsibilities to the executive branch, especially in the area of foreign affairs.

The President's export control authority is essentially derived from the provisions of the Export Administration Act of 1969, as amended (50 U.S.C. App. 2401 et seq).

The act's provisions speak specifically of the President's prohibiting or curtailing exports from the United States. Some provisions (2405(c) and (d)) appear to authorize an export licensing system and one (2406(a)) authorizes the head of any department or agency with responsibilities under the act to require reports from and to gain access to the records of persons connected with exporting. The authority of the President to use the above-mentioned statutory provisions (and their predecessors) has long been recognized.

Commerce, which has been designated by the President to carry out the provisions of the act, has interpreted the sections on the use of export controls in short-supply situations (2402(2) and 2403(c)), as requiring (prior to the exercise of export control authority) the commodity in question to be (1) in domestic short supply, (2) under serious inflationary pressure, and (3) due to abnormal foreign demand.

As an outgrowth of short-supply export controls during 1973, statutory concern has arisen over (1) the adequacy of the criteria for imposing short-supply export controls and (2) the propriety of U.S. export controls under GATT.

#### Debate over short-supply criteria

In May 1973, before a subcommittee of the House Committee on Banking and Currency on a bill to amend the Export Administration Act, a Commerce official testified that the act's three criteria for implementing export controls should be applied in most short-supply controls. He said that the bill being considered seemed to assume that export controls were price control devices in the absence of specific shortages but that Commerce did not believe controls could be justified solely on such grounds, particularly with the existing state of the U.S. balance of payments.

On June 13, 1973, the President announced he would seek new and more flexible statutory authority to impose export controls when needed to curtail domestic inflation. An administration-supported bill was introduced during June which provided that export controls could be imposed to curtail serious inflation in domestic prices without meeting the act's short supply and abnormal foreign demand criteria and by deleting the existing requirement that the Secretary of Agriculture determine whether an agricultural commodity was in short supply.

Administration testimony argued that the new authority was necessary because:

1. Future needs might require controls to curb inflation even though the other criteria were not met.
2. Current criteria are so strict that action can be taken only when a situation is serious and existing export contracts might have to be broken; proposed criteria would permit action to be taken sooner.
3. Actual scarcity is difficult to determine, so export controls might be needed to guard against prospective scarcity.

4. Abnormal foreign demand may be difficult to establish.
5. Even though there is no scarcity, controls may be needed to guard against foreign stockpiling or speculative buying.
6. The new authority would allow controls without precluding Public Law 480 exports of that commodity, as the current law does.

In its June 25, 1973, report on a bill amending the Export Administration Act, the House Committee on Banking and Currency revised export control criteria to guard against the excessive drain of scarce materials or to reduce the serious inflationary impact of abnormal foreign demand. The Committee stated that the authority given the President should be broadly construed and not subject to narrow interpretations allegedly restricting his ability to impose controls to curtail inflation and that controls need not be held in abeyance until an excessive drain of scarce materials had actually occurred. The criteria as revised by the Committee passed the House on September 6, 1973.

In a July 30, 1973, report on export control policy, the Subcommittee on Foreign Agricultural Policy of the Senate Committee on Agriculture and Forestry concluded that the administration-backed bill was too broad, leaving almost entirely up to the executive branch when, and under what conditions, export controls might be imposed.

On December 7, 1973, the Senate Committee on Banking, Housing and Urban Affairs stated that it believed that the changes proposed by the executive branch and the House were unnecessary and undesirable. It modified the criteria by dropping the word "abnormal" from "foreign demand" so that controls could be used when foreign demand resulted, or would result, in an excessive drain of scarce materials and serious inflation, although foreign demand must remain a significant factor. The Committee felt that the executive branch's view of the act's authority was too rigid because the act allows action to "protect" the domestic economy, so it is not necessary that the economy actually be damaged before action can be taken. It instructed the executive branch to exercise the act's authority to insure "that

export controls do not have to be imposed in the tardy and hastily conceived manner of 1973." In a rebuttal published with the Committee's report, however, the Secretary of Commerce argued that the requested criteria modifications were still needed, authorizing the President to act promptly before a crisis point was reached.

Export control propriety under  
General Agreement on Tariffs and Trade

The propriety of U.S. short-supply export controls relative to the Agreement has been discussed for a number of years. In 1965 hearings before the House Committee on Banking and Currency, for example, industry group testimony advocating short-supply controls disagreed with Commerce over whether reduced domestic consumption was necessary for export controls under the Agreement's provisions and with State over whether other countries might complain about export control applications under the Agreement.

In May 1973 testimony before a subcommittee of this Committee, Commerce questioned whether export controls could be used as a price control in the absence of specific shortages without being inconsistent with article 20 of the Agreement.

In June 1973 a forest products industry official testified before the Senate Committee on Banking, Housing, and Urban Affairs, opposing export controls on raw or manufactured wood products. He argued that such controls might restrict domestic wood production. In September 1973 a Japanese Government trade official, attacking the U.S. decision to control soybean exports, pointed out that the Agreement's article 11 for international agreement on export restrictions should be refined. Other U.S. Government sources have also urged reconsideration of the international rules for access to supplies. (See "Use of export controls" in ch. 3.)

Provisions on the use of export controls are in articles 11, 20, and 13. Article 11 contains an absolute prohibition on export controls but is followed by an important exception which allows

"export prohibitions or restrictions temporarily applied to prevent or relieve critical shortages

of foodstuffs or other products essential to the exporting contracting party."

Article 20 permits the adoption of measures:

"(i) involving restrictions on exports of domestic materials necessary to assure essential quantities of such materials to a domestic processing industry during periods when the domestic price of such materials is held below the world price as part of a governmental stabilization plan; Provided that such restrictions shall not operate to increase the exports of or the protection afforded to such domestic industry, and shall not depart from the provisions of this Agreement relating to nondiscrimination;

"(j) essential to the acquisition or distribution of products in general or local short supply; Provided that any such measures shall be consistent with the principle that all contracting parties are entitled to an equitable share of the international supply of such products, and that any such measures, which are inconsistent with the other provisions of this Agreement shall be discontinued as soon as the conditions giving rise to them have ceased to exist."

Article 13 provides that:

"1. No prohibition or restriction shall be applied by any contracting party \* \* \* on the exportation of any product destined for the territory of any other contracting party, unless \* \* \* the exportation of the like product to all third countries is similarly prohibited or restricted."

Article 13 also provides guidance for allocating import and export restrictions and makes the principles, insofar as applicable, apply also to export restrictions. It suggests that a global quota for import restrictions be established or, if there is to be allocation among countries, that quota shares be negotiated or allocated as in the past. Article 20 states that there must not be "arbitrary or unjustifiable

discrimination between countries where the same conditions prevail," and the general rule that "all contracting parties are entitled to an equitable share of the international supply of \* \* \* products."

Several recent analyses made within the U.S. Government have concluded that U.S. export controls during 1973 were consistent with U.S. obligations under the General Agreement on Tariffs and Trade.

#### EXPORT CONTROL IMPLEMENTATION DURING 1973

The Office of Export Administration (formerly the Office of Export Control) implements short-supply export controls. The Office is responsible for:

- Developing regulations.
- Establishing export reporting systems.
- Issuing export licenses.
- Designing actual control systems.
- Enforcing regulations, including compliance.
- All operational duties involved in developing and maintaining short-supply export controls.

Since its inception following WW II, the Office has performed in an era of limited short-supply problems. Traditionally, it has been primarily responsible for controlling exports of strategic materials abroad, which has led to its organizational location in Commerce's Bureau of East-West Trade. Nearly all its efforts have been structured toward that specific objective.

In the past, staff members already involved in strategic materials control activities were responsible for implementing short-supply controls. Since these actions were temporary and occurred infrequently, the Office responded to short-supply problems on an ad hoc basis. No permanent implementation program was ever established for commodity shortages because officials assumed that there would be

sufficient supplies of commodities available to meet both domestic and foreign demand and that the free market system allocated resources effectively under both surplus and shortage conditions.

In June 1973, however, because of the great stress placed on domestic supplies by foreign demand, the President directed the Secretary of Commerce to establish and administer a program to monitor agricultural exports on an independent basis. This action followed a similar action taken by the Office on May 22, 1973, to monitor ferrous scrap exports. By midsummer, export controls had been imposed on ferrous scrap, soybeans, soybean substitutes, cotton seed and cotton seed oil, and an export monitoring and licensing system was effective for other critical agricultural commodities. (See app. II.)

From the outset, the Office of Export Administration was not prepared for its enlarged short-supply role. A June 1973 Commerce memorandum stated that:

"The Bureau of East-West Trade has not budgeted for nor does it have personnel available for such a short supply program. \* \* \* Establishing the program, which includes the allocations of quotas to exporters and the processing of export license applications, will be onerous for industry and government, but when the program is underway, personnel requirements can, hopefully, be reduced. \* \* \* To implement this program we will need access to a computer for tabulating and analyzing the weekly reports. Personnel requirements would have to be greatly increased if the program were conducted manually."

The Office of Export Administration broadened its short-supply activities and increased its staff. The expanded short-supply program involved the following interrelated functions.

1. The monitoring of a large quantity of diverse information from a variety of sources. Monitoring activities required all exporters to file weekly reports on all outstanding export contracts and other anticipated exports for a select group of agricultural commodities. (See app. II.)

2. An audit and review program to validate export information produced by the monitoring system.
3. A two and sometimes three-shift licensing operation. Licensing activities included receiving license applications together with supporting documents, such as export contracts; affirming the amount remaining unexported in these contracts, and statements of reports made during a base period.
4. A major increase in legal work pertaining to continuous revisions of export control regulations on monitoring, licensing, and enforcement. Additional legal advisory responsibilities involved determinations of hardship claims by exporters and importers and other matters relating to the legal basis for imposing short-supply export controls.
5. The development and oversight of an expanded enforcement program which included inspection of cargoes at port and general export clearance procedures.
6. The development of a specialized hardship case procedure designed to review and evaluate claims submitted by exporters, and foreign importing countries on humanitarian hardships resulting from restricting exports to their countries.
7. The substantial expansion of data processing and other administrative support involving increased telephone and telegraphic services. This function required written responses to inquiries from producers, exporters, importers, and congressmen; publishing of bulletins and disseminating other informational documents; increased processing, routing, reviewing, and issuing of applications and licenses; and providing of a special receiving unit for weekly reports.
8. A market analysis and survey to estimate supply and demand of commodities in short supply or those which represent a potential short-supply problem.

As the Office broadened and intensified its activities, it developed an ad hoc organization composed of professional

personnel loaned from Agriculture, the Internal Revenue Service, Customs Service, and other Commerce bureaus. It supplemented this group with other temporary administrative and clerical personnel assigned to various support activities.

Although Commerce was expanding the Office's capacity to perform activities, a description of the short-supply program prepared by Commerce's Domestic and International Business Administration showed continued opposition to any prolonged commodity export control commitment.

"Notwithstanding the severity of the problems with which we are now confronted in the area of short supply control, this program as now operated is wholly temporary in nature. Though some portions of the short supply control apparatus now in operation will of necessity remain available for a period of time subsequent to the suspension of short supply controls, this apparatus will not be incorporated into the normal functions and operations of the agency."

The agricultural export reporting system established by Commerce in June 1973 provided export information which led to the export controls on soybeans and related agricultural commodities. Although Agriculture agreed that a domestic shortage of soybeans existed, a debate soon emerged between Commerce and Agriculture over the accuracy of the information. Although Commerce admitted that its figures were exaggerated to some extent as a result of early administrative problems in developing and compiling information, its export reports continued to differ with Agriculture's estimates even after those difficulties were resolved.

Some Agriculture officials claimed that Commerce statistics were unrealistic and inflated because they did not reflect the fact that (1) foreign importers were overbuying, thinking that export controls might cut their contracts and (2) grain exporters were registering grain for export which would eventually be resold to the domestic market.

In an effort to improve the administration of the agricultural commodity short-supply program, the Deputy Assistant Secretary for East-West Trade requested Commerce's Office of Organization and Management Systems to survey the licensing,

monitoring, and compliance of the program. On September 15, 1973, the Office of Organization and Management Systems released a preliminary report which concluded:

- "1. The Licensing function was, and is, being handled adequately from both the substantive review and the application processing viewpoints. This finding is made notwithstanding the temporary backlog of license applications which accumulated in the early phases of the program, and the auxiliary problems caused by the lack of immediately available trained staff.
- "2. The Compliance function is apparently being handled adequately. This finding is made pending the outcome of the several company audits currently underway and the resulting actions undertaken by the Compliance staff.
- "3. The Monitoring function appears to be the one most susceptible to improvement and most likely to be the subject of outside criticism. This is understandable since this function is: (a) the only function for which there was no prior experience in the Office of Export Control; (b) the intelligence gathering and analytical operation on which crucial Short Supply Program decisions are based; and (c) the core of future Departmental involvement in Short Supply problems.

"The problems in the monitoring function include:

- a. An information system which does not effectively answer all current information needs.
- b. A lack of sufficient controls on the data base, which makes it subject to question.
- c. A lack of written procedures. (This also applies, to some extent, to the licensing function.)
- d. A lack of specifics on the complete range of current and future information needs.

- e. An absence of current efforts directed towards improving the validity of the data base and correcting the deficiencies noted above."

The problems with accuracy of reported export data remained unresolved and the debate over expected export amounts continued through November 20, 1973, when Commerce discontinued its export reporting system. At the direction of the Congress under the Agriculture and Consumer Protection Act of 1973, Agriculture assumed responsibility for export reports and initiated its own system in October 1973.

The failure of Commerce and Agriculture to reconcile their difference over the accuracy of reported exports was due, in part, to an interagency conflict that emerged over the question of which agency was ultimately responsible for interpreting export information gathered by the Office of Export Administration. Agriculture contended that it was responsible because of its extensive experience in grain export marketing. Commerce maintained that it was responsible because of its short-supply authority under the Export Administration Act of 1969 and the Presidential directive of June 13, 1973, ordering it to establish an agricultural export reporting system. The question was resolved when the Congress assigned the function to Agriculture as part of the new Agriculture Act. However, the conflict reduced the information's effectiveness because policymakers did not know which agencies figures to rely on. If Commerce's estimates were right, for example, most of the Nation's soybean crop for 1973-74 had been committed for export by July 1973. If Agriculture was right, adequate stocks existed for domestic supply purposes.

During the existence of its agricultural monitoring system, Commerce attempted to improve the quality of its export reports through audits of the firms submitting information and through a comprehensive management evaluation of the entire short-supply program.

Action to audit the accuracy of the export information submitted was initiated by Commerce's Compliance Division on August 9, 1973. The Compliance Division is located in the Bureau of East-West Trade under the Office of Export Administration. It is responsible for insuring compliance with export control regulations, developing intelligence

information on areas of possible export control violations, investigating suspected violations, and preparing cases on violations for referral to the Hearing Commissioner through or to the Office of General Counsel for other legal guidance or action.

The increasing short-supply control actions that occurred in 1973 placed a heavy burden on the staff and organizational resources of the Compliance Division. Auditors from the Defense Contract Audit Agency, Health, Education, and Welfare Audit Agency, and the Bureau of Customs helped the Compliance Division to fulfill its expanded role. The assistance provided, however, proved to be inadequate in establishing a comprehensive enforcement arm for the short-supply program because many areas of suspected violation remained unexamined due to lack of experienced staff. Most compliance investigations resulted from outside complaints rather than self-initiated efforts.

The Compliance Division had no role in the Office of General Counsel's and the Office of Export Administration's drafting export control regulations. This lack of communication and coordination between the agencies responsible for imposing export controls has, in some instances, resulted in unenforceable regulations. This was evident in the ferrous scrap control situation in which the regulations did not adequately define and clarify the meaning of an export contract. In the agricultural program a similar problem existed over the definition of export transactions between parent and affiliate companies and exports lacking a specific destination.

During September 1973 Commerce completed its audit of 10 exporters, representing more than 80 percent of anticipated agricultural exports reported to the Office of Export Administration. These audits concluded that most company reporting violations were the result of a variety of unintentional clerical errors which were voluntarily rectified once they were brought to the attention of officials.

Although the agricultural short-supply reporting function was taken over by Agriculture, Commerce has remained primarily responsible under the Export Administration Act for monitoring exports of all commodities in short supply.

A Commerce memorandum noted that relying solely on Agriculture for export information created the following problem.

"\* \* \* the inability of the Commerce Department, once it has dismantled its [export monitoring] apparatus, immediately to respond on its own to new export commodity crises, e.g. fertilizer, wool, for which it might acquire export control responsibility."

The continued emergence of short-supply control situations for nonagricultural and agricultural commodities has exerted greater demands on Commerce's short-supply implementation capabilities. Before an export monitoring system on fertilizer, petroleum, and petroleum products was established in November and December 1973, the Deputy Assistant Secretary of Commerce for East-West Trade appeared before the Congress in October requesting supplemental short-supply export control staff and functions to continue the operation as an ad hoc program, stating that:

"\* \* \* additional resources are required to sustain the Short Supply Control program at its current level of operation through FY 1974. Substantial additional costs have already been incurred for the months of July through September over and above normal costs for operation of the Export Control program. It is estimated that to recover the expenditures already incurred and operate the current Short Supply Control program through the end of the fiscal year, additional resources totaling \$1,321,000 and 24 temporary positions, will be required."

The President approved a revised supplemental short-supply appropriation of \$1,173,134 in January 1974. However, the ability of the Office of Export Administration to identify and respond to short-supply situations remains limited because of insufficient funds and inadequate staffing. The Office's budget has been considerably reduced over the past 3 years as a result of actions taken to remove or relax "unnecessary or unduly restrictive procedures" controlling the flow of commodities to Communist countries. In fiscal year 1972, the Office operated on an appropriation of \$5.1 million and had a staff of 184. Its 1975 budget

reflects a reduction in appropriations to \$3.5 million and a reduction in staffing to 114. At the height of recent short-supply activity in August 1973, it had a staff of 191, of which 66 were involved in administering the short-supply program--20 permanent employees and 46 temporary appointments.

In addition to budget reductions, the Office of Export Administration has recently deemphasized one of its administrative responsibilities. The Export Administration Act requires that the President and the Congress be provided with a quarterly report of the operations performed under the act. Before 1973 the Office was responsible for preparing and publishing the report. At the direction of the Deputy Assistant Secretary of Commerce for East-West Trade, control of the report was shifted in 1973 to the Bureau of East-West Trade. This action in part reflects a shift in East-West trade policy from controlling exports to facilitating trade.

Placing responsibility for the report in the Bureau of East-West Trade produced a significant change in its contents. The report now focuses on the expansion of East-West trade and relegates the subject of export controls to one chapter. The primary emphasis of that chapter is on strategic export controls, and it only briefly describes short-supply actions taken. In essence, the report provides the President and the Congress with only a limited description of short-supply export control actions, which lacks substantive analysis and assessment of domestic and international impacts of export control decisions.

#### PROS AND CONS OF SHORT-SUPPLY CONTROLS

The legal and implementation problems of export controls illustrate some of the complexities involved in using them for commodity tight-supply situations. The policy conflict involved in export control use, however, is more clearly shown by the major arguments advanced for and against their use during 1973.

The Export Administration Act states that they should be used:

"\* \* \* To the extent necessary to protect the domestic economy from the excessive drain of scarce materials and to reduce the serious inflationary impact of abnormal foreign demand \* \* \*."

While the arguments for export controls focus on preventing the drain of various commodities and inflationary impact in the American economy, the arguments against short-supply export controls are much more varied.

PROS

1. In allocating American products between foreign and domestic markets, the interests of the American consumer in receiving adequate supplies at reasonable prices should come first.
2. Other countries already use a variety of export control policies of their own to insure adequate domestic supplies.
3. Export controls dampen sharp rises in domestic commodity prices which would otherwise severely disrupt other sectors of the economy which depend on the tight-supply commodity as a basic input.
4. Export controls protect small commodity-user firms and fixed- and low-income consumers, who are hit most heavily by tight supplies and sharply increased prices.

CONS

1. Export controls cut U.S. export earnings and hamper a much-needed strengthening of the U.S. balance of payments.
2. Export controls, by cutting off foreign customers, reduce the demand pressures and higher prices which serve as incentives for domestic producers to expand production of the commodity--the basic economic solution to tight supplies.
3. Controls hurt the U.S. record as a steady commodity supplier and may encourage foreign customers to seek other sources of supply or spur efforts to find substitute commodities.
4. Controls weaken the credibility of the U.S. position, which emphasizes reducing trade barriers, for upcoming international trade talks.
5. Although other countries already have a variety of export controls of their own, U.S. controls raise the possibility of retaliatory controls by

foreign countries on other commodities which the American economy needs.

6. Discussing the possibility of export controls to control commodity price inflation can spur inflation by causing a rash of speculative buying, particularly as foreign buyers are encouraged to stockpile the commodity if they think its supply will be cut off.

### LIMITATIONS OF CONTROLS

The critical choice involved in whether to impose export controls is whether to use them to remedy domestic economic difficulties or to avoid them because of their negative impact on U.S. national and international economic needs and foreign policy requirements. This conflict is illustrated by Administration policy statements that the American consumer must be given priority when allocating the supply of American products but also that U.S. foreign trade commitments and responsibilities must be honored.

Both Administration statements and the legislative history of export control legislation in the Congress show that short-supply export controls are expected to be used only sparingly and when necessary. Export control decisions involve a delicate balance among economic, social, and political needs both domestically and internationally. Undoubtedly, cases exist of sharp drains on domestic supplies of essential commodities and of sudden large price jumps related to foreign demand which justify temporary impositions of export controls. For the 1973 export controls, however, opinions and analyses seem to indicate that foreign economic and political drawbacks negated any domestic economic benefits.

Export controls are at best only a temporary solution to a commodity short-supply situation. They represent an artificial reduction of demand by restricting foreign purchases of U.S. commodities and, as such, do not address the more fundamental, underlying supply and demand factors. In

fact, they may even distract attention from other domestic and international economic policy actions which could be taken to deal effectively with underlying supply and demand imbalances.

In its December 7, 1973, report on 1973 export control amendments, the Senate Committee on Banking, Housing and Urban Affairs stated that it wished to make a comprehensive review of the Export Administration Act, and, since the act expires on June 30, 1974, it expected to begin its review early in the second session of the 93d Congress. In view of the 1973 short-supply export control problems, such a review could be very timely and useful in developing a clear perception and statement of U.S. export control policy.

The Committee also stated in its report that it:

"\* \* \* expects the Executive Branch to develop and maintain information systems and procedures which are adequate to anticipate developing short supply situations so that appropriate action can be taken to forestall critical shortages before they materialize."

We feel that the Committee's expectations are not being fulfilled. The problems and limitations of executive branch forecasting and long-run policy planning programs are discussed in the following two chapters.

## CONCLUSIONS

The short-supply export controls applied in 1973 created much debate over the adequacy of existing criteria for imposing export restrictions. The adequacy of those criteria remains essentially uncertain and subject to further definition and clarification by the Congress and the executive branch.

Although the propriety of U.S. short-supply export controls in terms of American obligations under the General Agreement on Tariffs and Trade has been debated for years, several 1973 executive branch analyses concluded that recent controls were consistent with the Agreement's provisions.

Disagreement exists on the nature and limitations of short-supply export controls. Although arguments supporting

export controls focus on preventing the drain of commodities and modifying inflationary pressures, arguments opposing them are that they weaken the U.S. international economic position and disrupt the domestic economy.

The increasing incidence of short-supply export control actions in 1973 placed a heavy burden on the organizational resources of Commerce's Office of Export Administration. It lacked sufficient experience, funding, and staffing to respond to shortages of the magnitude experienced in 1973. Although the Office temporarily expanded its short-supply activities, it has no permanent program to continuously implement short-supply export controls. This limited capability is due, in part, to the fact that its primary responsibility over the past 20 years has been to control the export of strategic materials. As a consequence, the quarterly report to the Congress and the President under the Export Administration Act has traditionally focused on strategic controls rather than on short-supply controls.

The Secretary of Commerce, in congressional testimony in April 1974 concerning the extension of the Export Administration Act, said that the authority to mitigate commodity scarcities and to preserve adequate supplies for the domestic economy is indispensable and that short supplies and rising prices of some commodities can be expected intermittently in the future.

#### RECOMMENDATIONS

In view of the many difficulties encountered in implementing short-supply export controls in 1973 and the threat of other future shortage situations, we recommend that the Secretary of Commerce:

- Consider expanding short-supply export control implementation activities by establishing a permanent high-level organization within Commerce having sufficient staffing and funding to respond to shortage situations on a higher priority basis and to improve the short-supply control implementation functions of (1) export reporting, (2) licensing, (3) enforcement, (4) management analysis, and (5) development of alternative control systems.
- Include in future quarterly reports on export administration activities to the Congress and the President

increased information on the causes and nature of short-supply controls then in effect, alternative policies and actions being pursued to allow termination of the controls, and an assessment of domestic and foreign impacts caused by the export control actions.

The Secretaries of Agriculture, Commerce, and Interior should, as part of their commodity analysis and forecasting functions, develop internal operating procedures as an early warning system for identifying possible short-supply situations.

## CHAPTER 5

### PROGRAMS FOR GATHERING COMMODITY INFORMATION

#### AND MAKING FORECASTS

An ability to forecast future economic events is a basic requirement if Government is to be aware of impending short-supply or over-supply situations and able to devise policy actions to avoid or moderate their effects. The problems discussed in chapters 2 and 4 indicate the shortcomings of commodity monitoring and forecasting information that has been available for short-supply decisionmakers and for export control implementation. Further problems and difficulties of obtaining good commodity information, and the resulting negative impact on policy formation, are discussed in connection with long-term policy planning in chapter 6 and in the specific commodity case studies in appendix I.

This chapter deals with programs, policies, and processes employed by the major agency forecasting groups for gathering commodity information and making forecasts: ERS (Agriculture); OBRA (Commerce); Bureau of Mines (Interior); and the Offices of International Commodities, Food Policy and Programs, and Economic Research and Analysis (State). There is a pressing need to reevaluate these programs. Except for ERS, which has recently been restructured and reoriented, these agency forecasting groups are undeveloped in potential and static in operation as a source of policy inputs.

- Organizational structures are inadequate and unresponsive to the requirements of analyses and forecasting.
- Administrative procedures and priorities are not defined.
- Several agencies are understaffed and their personnel lack necessary research skills.
- The data base of relevant information needed for statistically reliable commodity forecasts has been neglected.
- Production, consumption, and price information needed to monitor key industrial and mineral products is unavailable to the Government except to the extent that private industry is willing to provide it.

--Modern statistical methods and research techniques have not been used to make commodity forecasts.

--Agency analysts having relevant information are frequently not consulted by decisionmakers and inter-agency coordination is lacking.

These observations are based on a review of the organization, staffing, data bases, research techniques, and information exchanges of the major commodity analysis groups, using in particular a series of structured interviews with more than 50 of their key officials.

#### ORGANIZATIONAL STRUCTURE

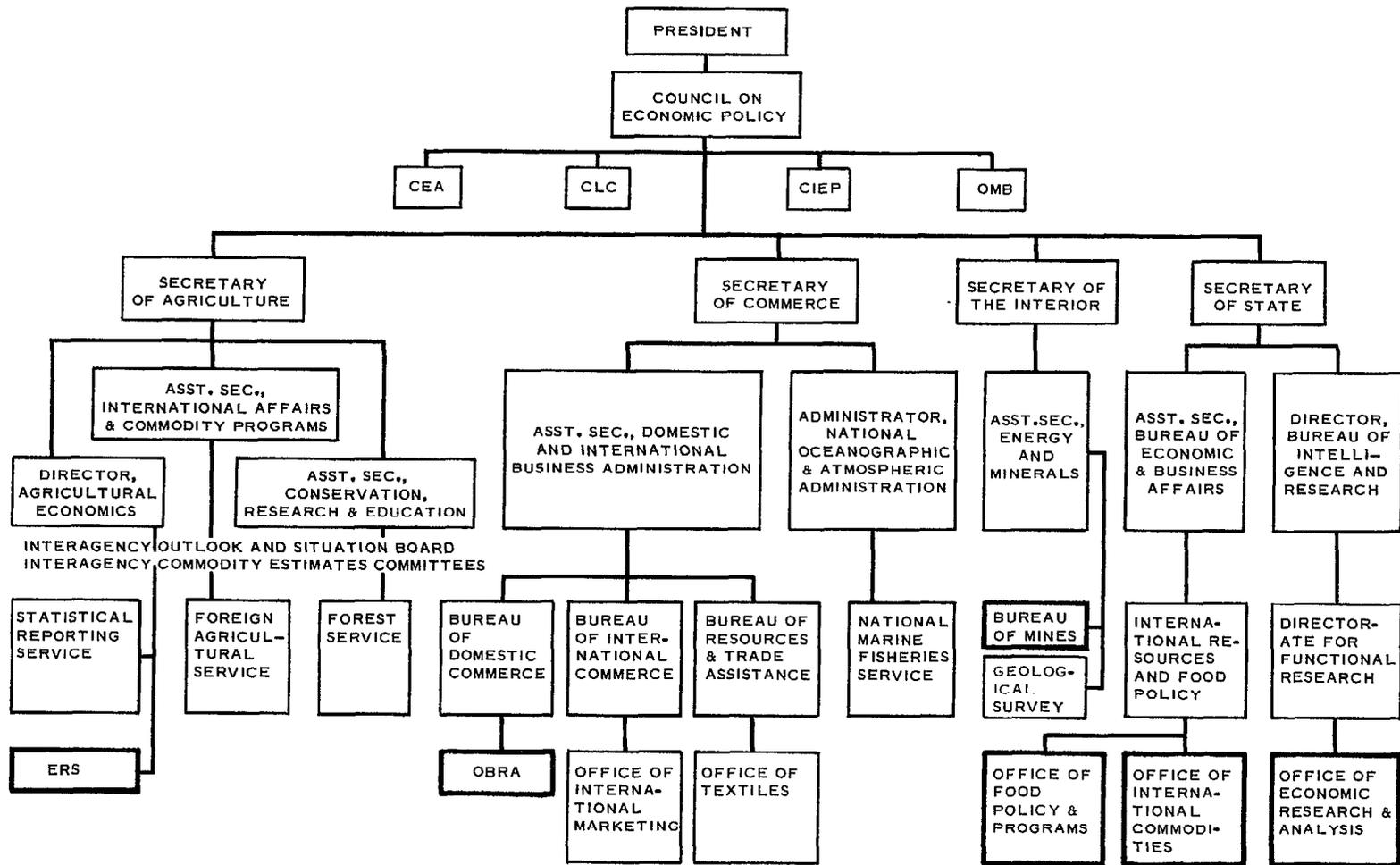
An organization chart of the commodity analysis groups and their reporting structure, illustrating the complexity of the overall structure, is shown on the following page.

#### Commerce

The Bureau of Domestic Commerce is responsible for developing "early warning systems that anticipate shifts in competitive conditions" and for "analysis of key competitive factors within and across industries." Within the Bureau, OBRA is responsible for keeping abreast of developments in manufacturing industries. Because of OBRA's monitoring role and the Bureau's responsibility for analyzing competitive conditions, OBRA has been backed into a commodity-forecasting role but has not developed a comprehensive system for making forecasts. Commodity specialists assigned to OBRA reply to ad hoc requests for commodity forecasts from Commerce, other executive agencies, and Members of Congress.

OBRA's resources for adequately performing its forecasting mission have been successively reduced. In fiscal year 1969 its predecessor had an authorized staff of 297 and a budget of more than \$6 million. OBRA officials told us that at that time they had a forecasting capability and their activities were much broader. In fiscal year 1974 OBRA had an authorized staff of 146 and a budget of slightly more than \$4 million. The commodity specialists have been forced to cover increased numbers of commodities and to expand their fields of expertise in these areas.

# ORGANIZATIONAL CHART



The OBRA staff has 110 commodity specialists who have been monitoring events in a group of industries for several years, but few of them are familiar with the requirements of aggregate data analysis or possess training in particular research or analytical techniques which could facilitate their monitoring and forecasting tasks.

Budgetary restrictions have reduced published commodity forecast work to a minimum--in most cases to only a few paragraphs of an annual report. As a result, retrievable and consistent data series necessary for developing an information base have been deemphasized and most of the commodity specialists' time is now spent on ad hoc requests for information and analysis.

OBRA has only two regular forecasting routines, the Business Conditions Report and the cost-price model projections program. Neither significantly affects OBRA commodity forecasting, adds to its data base, or improves the analytical techniques used by commodity specialists. Since little attention has been given to systematic procedures for either routine, the data base and its use have become fragmented bits of personal knowledge.

### Interior

The Bureau of Mines is responsible for monitoring and forecasting mineral commodities, and the Geological Survey locates and maps mineral resources. Both bureaus are under the Deputy Assistant Secretary for Mineral Programs.

The 275 commodity specialists in the Bureau are organized by commodity and geographic areas of responsibility. The two areas do not necessarily coincide. The specialist responsible for Rhodesia, for example, may have little familiarity with chrome mining and marketing. Major metals specialists generally are not supposed to be assigned major geographic responsibilities.

Geological Survey expertise is highly scientific and officials said they were concerned only with the location of the mineral resources, not with the commercial character of reserves. Their work in identifying domestic and foreign mineral resources is well known and is a significant factor in the preeminence of American-developed mineral reserves throughout the world.

## State

The Office of International Commodities and the Office of Food Policy and Programs (Bureau of Economic and Business Affairs) and the Office of Economic Research and Analysis (Bureau of Intelligence and Research) are responsible for monitoring and analyzing commodity information. Officials in these offices stated that they attempt to stay abreast of developments in other Government agencies and to report on the political implications for the conduct of foreign policy. They do no commodity forecasting or primary economic research.

State has economic officers in these bureaus and in the regional bureaus and country desks, but no commodity specialists. Because there are no methodological research specialties in the functionally organized bureaus, their reports and analyses are essentially the same as those of the desk officers, and focus on the political consequences of economic changes rather than on analyzing the changes.

The small number of professionals (an average of five per division, including administrative personnel) for the eight divisions of these three offices suggests that commodity analysis has been assigned a low priority. The Department's practice of rotating nonspecialized Foreign Service Officers to these offices contributes to the absence of research skills and the unstructured reporting.

Specialized analytical bureaus are of little benefit unless they have superior research techniques, analyze pertinent data, and communicate this expertise to policymaking levels. State's bureaus have no procedural formats for economic reporting nor have they established criteria on data sources, methodologies, and levels of significance to be attached to their findings. Their reports do not differ significantly from those of the regional bureaus organized along geographic lines.

General political analysis approaches to economic phenomena may be appropriate at country-desk levels, to anticipate policies and actions of foreign states or to promote American economic interests, but seem inadequate for specialized bureaus responsible for projecting State's foreign policy considerations into considerations of U.S.

economic policy. The Department has been unable to translate its political analyses into forecasts and evaluations of future economic consequences that are as compelling as those advanced by other agencies for interagency policy decisions on commodity problems. This may well be a direct result of the limited processes by which economic data are gathered, stored, and analyzed in the specialized offices and bureaus.

### Agriculture

Agriculture's commodity monitoring and forecasting structure is conspicuously different from the other executive branch agencies examined. Responsibility for analyses, including commodity forecasts and long-range projections, is centered in ERS. Other Agriculture agencies generate and compile data, and a computerized inventory of all research projects and activities of Agriculture agencies, State agricultural experimental stations, and land grant universities is contained in the Department's Current Research Information System.

ERS has recently attempted to improve its commodity forecasting procedures because of increased demands for reliable agricultural forecasts and its measurably poor forecasts of 1972 and 1973. ERS officials have characterized commodity forecasting as the "primary and central function of the Service".

ERS' basic mission is to develop and disseminate economic information that public and private decisionmakers can use for improving agricultural performance, including economic efficiency and the impact upon people in the food, fiber, and other sectors of the economy. The Administrator of ERS has stated that the long-term interests of agriculture can be served only if the impact of agricultural policies and programs on consumers are respected.

The research program to fulfill this mission is expected to:

1. Develop and maintain continuing data series for socioeconomic decisionmaking and research.
2. Identify and quantify economic and social relationships in specific commodity, functional, and insituational areas by developing socioeconomic theory.

3. Use alternative projects and assumptions for long-range planning and for measuring the need for adjustments.
4. Make economic analyses of existing policies and programs.
5. Respond to specific, immediate inquiries for information or analyses.

To accomplish this research program ERS reorganized its staff, effective July 1, 1973, under two deputy administrators, as shown in the organization chart on the following page. The Food and Fiber Economics sector includes the three divisions primarily responsible for monitoring and forecasting agricultural commodities.

The divisions were formerly divided according to commodity situation and outlook, farm production economics, marketing economics, and foreign analysis. ERS officials claimed these groupings hampered efforts to analyze inter-related problems affecting all aspects of a commodity.

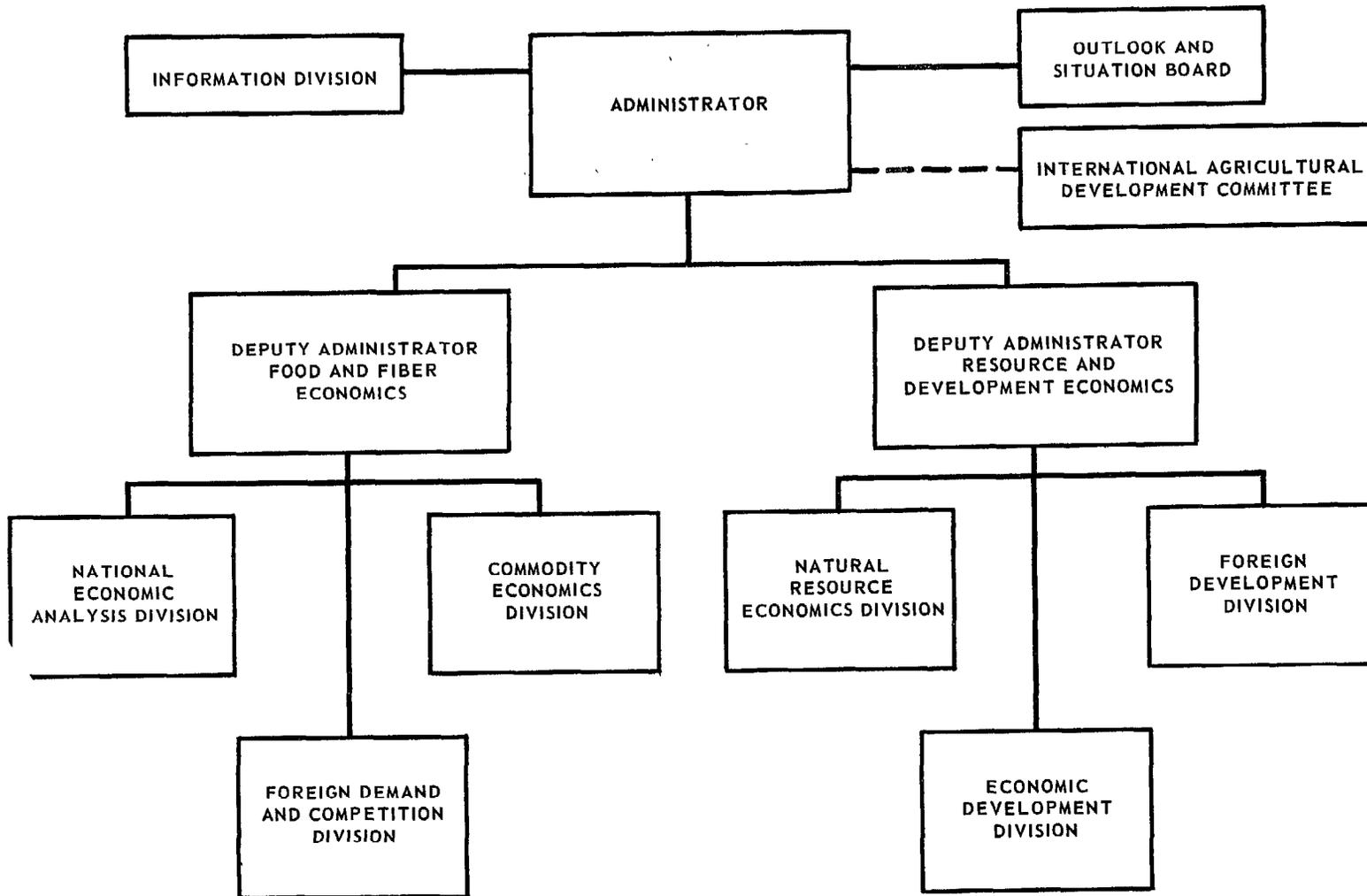
The three new divisions are:

- National Economic Analysis (262 employees), which deals with the entire agriculture sector and focuses upon issues that cut across commodity lines, including food prices.
- Commodity Economics (219 employees), which concentrates on commodity subsectors, including the supply-demand situation and commodity forecasts.
- Foreign Demand and Competition (126 employees), which studies worldwide supply and demand conditions for U.S. commodities and foreign government policies on trade.

The new organization emphasizes program areas--working combinations of project groups containing from 1 to more than 30 analysts for special research problems. After completing special project work, analysts return to their home division.

The new organization was to become fully effective in January 1974. ERS was developing a management information system to administer procedures for maintaining maximum

REVISED ORGANIZATIONAL STRUCTURE  
OF AGRICULTURE'S ERS



initiative and autonomy of research personnel in their projects and for permitting management review and redirection of priorities. The system recognizes the differing information needs of research activities and uses the project as the documented work unit. This permits ready identification of overall emphasis and relative cost of all ERS activities.

Two types of interagency groups coordinate ERS efforts with other Agriculture agencies. Interagency Commodity Estimates Committees review ERS supply figures on each major agricultural commodity. Its acceptance constitutes recognition of the forecasts as official Agriculture estimates. These Committees are chaired by representatives of the Agricultural Stabilization and Conservation Service and consist of commodity specialists from ERS and Foreign Agricultural Service.

In addition, Interagency Outlook and Situation Boards review the manuscripts and supporting data for every published Outlook and Situation Report. The Boards are chaired by ERS and their memberships vary with the commodity being reported but always include the Agricultural Stabilization and Conservation Service and Foreign Agricultural Service.

Publication of the Interagency Commodity Estimates Committees' figures and the numerous quarterly Outlook and Situation Reports constitutes a vital public service to farmers, farm groups, and others who rely on Agriculture's statistics in making marketing decisions.

These two types of interagency groups encourage lateral contacts among commodity analysts in different Agriculture agencies and expose agency differences in perspective and outlook. They do not record the range or rationale for differing commodity estimates but use the semantics of consensus reporting.

A committee of specialists recently examined commodity forecasts in the Outlook and Situation Reports and concluded that farm price forecasts for most commodities were typically underestimated. Significant forecast errors in farm commodity prices for 1972 and 1973 could not be explained in terms of other data series used in price forecasts. This suggested that relationships of price adjustments for most commodities in periods of excessive demand were inadequately understood.

After receiving the committee's recommendations, ERS formed a data requirements committee to determine its information needs commensurate with its reordered priorities. This committee had not completed its review and recommendations at the time of our review.

PERSONNEL INVENTORY

A staffing chart for the major commodity groups illustrating the considerable variations in agency staff strength is shown below.

Personnel Levels in Key Agencies (note a)

	<u>Profes-</u> <u>sional</u>	<u>Nonpro-</u> <u>fessional</u>	<u>Totals</u>
Agriculture:			
ERS	580	347	927
Commerce:			
OBRA	110	36	146
Interior:			
Bureau of Mines	275	191	466
State	44	20	64
Office of International Commodities	-	-	-
Office of Food Policy and Programs	-	-	-
Office of Economic Research and Anal- ysis	-	-	-
	<u>1,009</u>	<u>594</u>	<u>1,603</u>

<sup>a</sup>Figures represent recent estimates.

The number of people involved in commodity monitoring and forecasting in the Departments of Agriculture, Commerce, Interior, and State is relatively small, as shown above. These limited staffs have many projects and responsibilities besides commodity forecasting. Only about 10 percent of the ERS professional staff is engaged in regular, short-range commodity forecasting. Many OBRA professionals do commodity

forecasts from time to time, but the proportion of time spent in this manner could not be determined. Officials interviewed in the State Department said none of their economic analysts did any commodity forecasting. An official of the Bureau of Mines claimed that all its commodity specialists did forecasting, but he also estimated the Bureau had only 70 to 80 commodity specialists.

The skills that commodity analysts bring to their tasks are unevenly distributed among these agencies. ERS has a high number of Ph.Ds possessing specialized research skills and techniques. It is the largest group of agricultural economists in the world. Commerce and Interior primarily use industry or commodity specialists rather than research specialists. Most economic officers in State's offices lack research training.

There is a further imbalance in the distribution of specialists within agencies having commodity forecasting and monitoring responsibilities. The number of commodity specialists greatly exceeds that of research specialists, but shortcomings in organizing the use of existing research technologies in Commerce, Interior, and State are due only partly to this fact. Although some commodity specialists are concerned about the loss of detailed information and accumulated wisdom which they believe the more procedurally rigorous statistical techniques entail, most of them use whatever methods provide easily communicated results.

Other responsibilities of these agencies prevent committing even the small numbers of commodity forecasting personnel to forecasting tasks. Needed skills are unevenly distributed among the agencies. Existing personnel are generally ill-equipped to develop the kinds of statistical relationships needed to create forecasting models and to improve the science of forecasting.

Departmental administrators have failed to develop a concept for uniting research procedures and forecasting responsibilities and have not used training and education programs to reorient personnel. Relatively modest retraining could decrease the imbalance in required research skills for most agencies. Upgrading of research skills, like the lack of procedural criteria for forecasting, has been left to the

initiative of individual employees and educational training has not been recognized as an important solution to manpower and budget ceilings.

#### DATA BASES

Data bases in these agencies partly reflect the organizational structures and personnel attitudes toward research procedures and are partly the cause of them. ERS was the only agency to systematically try to accumulate and retrieve information needed for commodity forecasting.

Publications are key elements in developing useful administrative procedures for forecasting research. Without funding for serial publications (with their deadlines and priorities) the data are seldom gathered consistently or retained in a retrievable form by anyone but the principal researchers. Without retrievable sequential data series, aggregate data analysis is impossible and replication of the analysis irrelevant. And without the objective of replicable research, insufficient attention is given to methods, implicit assumptions, and standards of reliability necessary to improve the forecasting process.

State's Offices of Economic Research, International Commodities, and Food Policy and Programs do not have serial publications with data series nor do they generate or aggregate primary commodity data. They call analysts in other Federal agencies for relevant data and informed comments. Because information is randomly generated in response to work assignments, there are no established research procedures.

OBRA's serial publications have been reduced. The only Commerce serial publication dealing explicitly with forecasting industrial commodities is the annual U.S. Industrial Outlook, whose preparation offers one process for constructing a solid data base; however, the lack of procedures for research and analysis on other work assignments prevents these data from being centrally stored and used for developing mathematical forecasting models. OBRA officials also advised us that production, consumption, and price information needed for key items such as chemicals and fertilizers was available only through industry's willingness to provide it.

The Bureau of Mines produces extensive periodic publications on minerals by country and commodity, compiles country data for all mined minerals in its Mineral Yearbook and commodity data for major minerals in its monthly Mineral Industry Surveys. In our examination of these publications we found great emphasis on production data, but no production and price forecasts. Long-range price projections to the year 2,000 are contained in Mineral Facts and Problems, published by the Bureau every 5 years, and in the annual testimony of the Director of the Bureau before the House Committee on Appropriations. A Bureau official said it was very difficult to forecast commodity prices because the industry did not need them and would not voluntarily provide price data. Published mineral price data is unreliable. The "gross inadequacies of the Government's mineral information base" mentioned in the Secretary of the Interior's report to the Congress, "Mining and Minerals Policy, 1973," are particularly applicable to market information dependent on cooperation by private firms.

ERS publishes 22 Situation and Outlook Reports, most of them quarterly. These reports contain data series, usually in tabular form, for the subject commodities of the reports and price, production, and consumption forecasts in narrative form for the crop year. The narrative portions are often ambiguous, reflecting disagreements among and between Agriculture agencies represented on the Interagency Commodity Estimates Committees or the Interagency Outlook and Situation Board. The tabular data is now punched on computer tapes so that actual and projected values are readily retrievable over a period of time.

#### METHODOLOGY

Most of the research and analysis in commodity forecasting is a result of informed opinion rather than such scientific methods as partial simulation models embodying judgment and statistical relationships or fully computerized models. Methods used are generally selected in an ad hoc manner from a variety of sources, not programed by type of inquiry or analysis. The research is not based on a steady accumulation of data and analysis. Agencies, therefore, rely on an individual analyst's expertise, developed within the organization on specific commodities, and do not build a general data

base that can be used as a permanent record. Relying on such commodity expertise hinders the development of standards of reliability and improved forecasting.

None of the agencies had procedures for systematically considering the possible impact of events upon commodities monitored. For example, an ERS memorandum advised some analysts to be aware of such events and to anticipate their effects in their forecasts. OBRA analysts attempted to consider the impact of events in their forecasts but generally determined the impact after the events occurred. In all the agencies, analysts anticipated reactions to the occurrence of events affecting commodities only upon requests from superiors.

Agriculture, Commerce, Interior, and State did not assess the likely consequences of future events on commodities they were concerned with. In the past 2 years, we believe that failure to anticipate the direction and magnitude of commodity consequences has been critical and stems from the absence of carefully considered assumptions about characteristics of a commodity which link it to the consequences of the event.

The Bureau of Mines has used linear projections to demonstrate future commodity shortages in basic metals based on expected use and available resources. Most of its reports are based on alarming projections of future consumption. Projecting future use in excess of supply is necessarily tenuous, because certain assumptions must be made concerning price levels. Prices affect use, substitutability, and production of a commodity. Many Bureau projections assume current or constant prices, and therefore forecasts of projected use which greatly exceed production are of questionable value, because increased demand can also increase price, production, and commodity substitution.

OBRA prepares a weekly Business Conditions Report of current commodity shortages for internal use and circulation to CLC, CEA, and the Secretary of Commerce. Because of the limited time that policymakers have to consider commodity shortages, OBRA's division directors meet weekly and edit the Conditions Report to include only the most pressing shortage problems. Anticipated future shortages are generally removed from the report to keep it brief, and commodity shortages are

not forecast because they already exist. The report contains little systematic analysis of the shortage estimate or its reliability or information on how the problem came to the analysts' attention or was collected and analyzed.

OBRA also uses a cost-price model which measures the impact of estimated commodity price increases on the wholesale price index. The commodity specialist's estimates of price increases provide the baseline data for the model's projections. The reliability of the model's output, therefore, depends on the reliability of the values the specialist assigned to commodity price increases. The projections are reported weekly and biweekly to CLC and CEA and produce a readily available estimate of the impact of commodity shortages and an apparent certainty as to projected impacts. We found no evidence of any attempt to relate the narrative analysis of the Business Conditions Report to the model's projected shortage impacts of the commodities on the wholesale price index.

Most OBRA analytical and monitoring reports do not use models or rigorous research techniques in support of their findings. General methodological skills which can be assigned to the development of forecasting systems in OBRA currently exist only within the director's office because of the emphasis upon commodity specialists at the operating level. The cost-price model offers an opportunity for commodity specialists to use quantitative research methods. However, we found no evidence of any systematic efforts by OBRA division directors to improve the quality of the commodity analysts' price forecasts through the use of such research methods.

State's Offices of International Commodities and Food Policy and Programs analyses of the reaction of foreign nationals to trade policy decisions are essentially political and subjective. General forecasts of commodity exports were taken from trade sources. Neither office analyzed the domestic economic impact of various U.S. commodity export levels. An official of the Office of Economic Research and Analysis said its economists did not make formal economic analyses of shortage problems. The Bureau of Intelligence and Research had one agricultural economist who dealt with the foreign political implications of shortages. State Department officials saw no need to implement procedural changes to acquire skills consistent with forecasting responsibilities.

Agriculture has the most developed commodity forecasting procedure and methods. Data on crop production, stocks, and major commodity exports are generated in its Statistical Reporting Service, and ERS is responsible for analyzing this data for the development of supply utilization measures.

All utilization and price estimates are reviewed according to commodity by Agriculture's Interagency Commodity Estimates Committees and Interagency Outlook and Situation Boards. The latter approve all serial Outlook and Situation reports and publish quarterly production-utilization-supply estimates for major commodities reviewed and approved by the Estimates Committees.

ERS officials believed that, until recently, outlook and situation work tended to attract less innovative personalities. Because Agricultural programs determined the level of farm productivity and prices and huge agricultural surpluses were evident, commodity price and quantity forecasting was a relatively simple matter. The static character of outlook and situation work changed with the advent of the Russian wheat sales in July and August 1972. Commodity forecasting then became vitally important because of the increased world demand for agricultural products and the absence of commodity stocks.

The supply utilization measure most commonly used in ERS commodity forecasting is essentially an additive technique similar to an accounting balance sheet. In developing data, the previous cropyear's carryover is added to current production for a total stocks position. From this figure, domestic utilization and exports are deducted and a new yearend carryover derived. This latter figure is used in forecasting prices. Since utilization depends on price, errors in estimating price require corrections in utilization figures. Corrections in use figures produce a new yearend carryover figure.

Exact statistical relationships between prices and size of carryovers, domestic utilization, and exports, or the way various commodities are interrelated are difficult to determine. The balance-sheet technique was adequate as long as agricultural production maintenance programs controlled vital supply-demand, price-level relationships. Since these

programs were suspended, however, the uncertain statistical relationships among the data are much more important. Until the June 1973 reorganizations, ERS personnel qualified to determine these statistical relationships and to incorporate their findings in partial sectoral models for forecasting purposes were not likely to be involved in commodity forecasting. The Department's new emphasis on a projections program for creating a simulation model of U.S. agriculture, however, and the increased importance given commodity forecasting, should involve more sophisticated techniques of analysis in commodity forecasts.

The projections program was scheduled to begin in January 1974 and is designed to formulate a series of alternative futures concerning (1) external variables, such as assumptions on population, gross national product, employment, and disposable income, and (2) uncertainties within agriculture, such as public farm policies, institutional variations of international agricultural trade, and public and private spending for agricultural research. These alternative futures will constitute the core assumptions, or parameters, within which projections will be made.

ERS' National Economic Analysis division will coordinate the projections program. Some ERS officials believe the program will provide the data base and relevant statistical relationships needed for commodity forecasts, but the time frame has been placed at least 2 years into the future, so the program does not take the place of existing commodity forecasting functions.

The primary advantage of the agricultural projections program is its systematic structuring of the data and events relevant for commodity forecasting. It is expected to provide long-range parameters for commodity forecasts which will improve the capability of ERS in considering the consequences of alternative futures. Relationships derived from the projections will be available for commodity analysts in making their quarterly forecasts. Over a period of time, the interaction of projections, forecasts, and accumulated economic data may isolate the critical relationships in commodity forecasting and progressively improve Agriculture's forecasting capability.

## COMMUNICATION

To be useful, commodity analysis or forecasting information must be communicated to those who need it. Key commodity analysis agencies, however, have had continuing problems of information flow, both up the chain of command and laterally to other agencies.

Only Agriculture's ERS, for instance, has direct communication channels through the Director of Agricultural Economics to high-level Agriculture policymakers. This direct access makes it difficult to ignore ERS analytical inputs, which can be a constructive factor in improving forecasting performance. Agriculture officials' criticism of ERS as being out of step with the Secretary's priorities and not providing timely or pertinent data brought about the recent reevaluation of ERS research procedures to minimize errors and improve forecasting.

Commodity analysis groups at the other agencies are segments of bureaus having other primary program responsibilities. In these agencies, commodity information may be screened several times before passing from commodity analysis groups to policymakers.

Officials in Commerce's National Marine Fisheries Service doubted whether the commodity shortage information they reported reached the Secretary of Commerce. Officials in Agriculture's Forest Service and in a commodity analysis group at State expressed similar reservations. Officials in one agency claimed that their commodity organization had fallen into disrepute with a newly appointed administrator. Reports concerning the impact of fertilizer shortages were held up in OBRA for some time. When CEA assigned fertilizer producers a low allocation priority for propane gas, the reports were given to the Deputy Assistant Secretary of Commerce.

Problems of lateral communication also exist on an inter-agency and an intra-agency basis. Some informal and ad hoc exchanges of commodity-related information do exist, but established communication channels are lacking. Mineral analysts in the Bureau of Mines do not gear their output to the requirements of materials analysts in Commerce. State

economic analysts are not regularly appraised of commodity work in Agriculture, Commerce, or Interior having possible foreign policy implications.

Officials responsible for Interior's minerals policy said they were not consulted on proposals for propane allocations affecting nitrate production, price control decisions, or the sale of the copper stockpile. Officials responsible for commodity analysis at State were not asked their opinion on soybean export controls despite the far-reaching foreign policy implications.

Commerce's Office of International Marketing said its export promotion plans for 15 target industries were unaffected by commodity shortages, despite the fact that 7 of the industries used electronic components cited as shortage items in OBRA's Business Conditions Reports. Commerce's Office of Export Administration did not customarily receive OBRA analyses of shortage situations so that it might anticipate requirements of possible export restrictions.

In contrast, Agriculture's Interagency Commodity Estimates Committees and Interagency Outlook and Situation Boards are unique in their exchanges of commodity information. The Department's recognition of the importance of commodity forecasting has led to positive efforts to exchange and improve information among its agencies.

### CONCLUSIONS

Forecasts involve explicit observations and theory, consistent data series, and opportunities to later verify their accuracy. A variety of deficiencies detracted from major agencies' abilities to monitor and forecast commodity situations.

Commodity monitoring and forecasting agencies are not equipped to provide prompt and relevant information to decisionmakers. With the exception of Agriculture's ERS, they had not reassessed commodity data requirements, administrative procedures, or management information needs.

The agencies had not reexamined past forecasting roles and performances. Thus, there was little awareness of procedural modifications necessary to improve commodity forecasting.

There were no regular interdepartmental exchanges among agencies having commodity monitoring and forecasting responsibilities. Different agencies studied many commodities that were interactive or that responded similarly to the same occurrences. Regularly communicated findings and techniques of analysis could prove helpful to commodity specialists in other areas.

Serial publications were not adequately reviewed for purposes of developing and maintaining reliable and retrievable data bases for commodity forecasting. Often they lacked forecasts of pertinent information, provided only narrative analysis without supportive data series or methodologies, and served limited industry needs.

ERS has attempted to examine its forecast record and to determine its data requirements, administrative procedures, and management information needs. No other agency has undertaken this necessary first step. No agency approached these problems in concert with other agencies as common concerns. Since these problems are not unique to a particular agency, presumably all agencies would benefit from such interaction.

Only ERS possessed research autonomy and lateral access to policymaking levels. Research autonomy and greater organizational stature would limit the intrusion of departmental program constraints into the information and analysis flow before it reached policymaking levels, which would reduce information loss and establish accountability.

The data base of most of the agencies was in a nonretrievable form. Insufficient attention had been given to the use of automatic data processing techniques or to the relatively large number of persons who could not use them. Adopting computerized information retrieval systems would facilitate consideration of aggregate data techniques and promote use of these techniques by a larger number of persons.

The imbalance of specialized skills was apparent in all agencies except ERS. Not enough emphasis had been placed on transferable research skills and too much on nontransferable commodity expertise. Commodity analysis and forecasting

agencies should have technically proficient research capacities as well as commodity expertise. Manpower assigned by Commerce, Interior, and State was inadequate in both size and research skills for analysis and forecasting purposes. More effective use could be made of existing educational programs and career incentives to upgrade employee research skills in order to minimize dependence upon overtasked commodity analysts.

Management information systems in Commerce, Interior, and State were generally inadequate. Research and analysis tasks are not distinguished by function in accounting for expenditures. The allocation of resources to commodity forecasting or monitoring and analysis functions within agencies having multiple responsibilities could not be determined.

Commerce, Interior, and State have not attempted to determine the amount of effort required to develop an adequate, systematized information base and its role in using predictive economic models to fulfill agency commodity monitoring, analysis, and forecasting work.

The acceptance of responsibility for commodity forecasting was not universal among the agencies. Department of State officials did not feel that responsibility for commodity monitoring and analysis entailed a forecasting capability. Officials at the Department of Commerce were leery of commodity forecasting systems and their implications. The Bureau of Mines defined its responsibility for commodity forecasting in terms of mining industry requirements.

Only ERS had undertaken the rigorous and painful self-analysis of agency procedures necessary for gathering, interpreting, and storing analytic and forecasting data. As a result, ERS adopted constructive administrative procedures designed to focus accountability in the forecasting process and to improve output.

#### RECOMMENDATIONS

Because of the insufficient attention given to commodity monitoring and forecasting by responsible agencies of the four departments, we recommend that

The Secretaries of Agriculture, Commerce, Interior, and State and the Director of the Office of Management and Budget:

- Review the commodity monitoring, analysis, and forecasting record of their agencies with a view toward isolating actions needed to upgrade their capabilities for these functions.
- Create an interdepartmental commodities committee of representatives from agencies with monitoring, analysis, and forecasting responsibility to regularly exchange information on data requirements and research findings and techniques.
- Review and upgrade serial publications emphasizing reporting of forecasting methodologies, findings, and sources of data.

The Secretaries of Commerce, Interior, and State and the Director of the Office of Management and Budget:

- Instruct commodity monitoring, analysis, and forecasting agencies to determine their respective data requirements and to establish appropriate operating procedures.
- Insure that such agencies have research autonomy and lateral access to policy levels.
- Make more effective use of existing automatic data processing facilities in generating and retrieving aggregate data and relevant research findings.
- Insure that managers of these agencies have adequate personnel and the requisite inhouse research skills for the tasks of commodity monitoring and forecasting and that they use educational curriculums to maintain these skills.
- Direct the agencies to implement management information systems embodying cost accounting of research functions and tasks.
- Determine the effort and information necessary to develop predictive economic models for commodity forecasting or monitoring and analysis and the agency requirements.

The Secretaries of the Departments of Commerce and State and the Director of the Office of Management and Budget establish responsibility for commodity monitoring, analysis, or forecasting in a single designated agency of each department.

The Secretaries of Commerce and Interior and the Director of the Office of Management and Budget emphasize the general public interest rather than private sector interests in determining forecasting priorities and evaluating the impact of commodity forecasts.

## CHAPTER 6

### LONG-TERM EXECUTIVE BRANCH

#### COMMODITY AND RESOURCE POLICY PLANNING EFFORTS

##### NEED FOR LONG-TERM PLANNING

The recent incidence of global and domestic shortages in agricultural and mineral resources has concentrated widespread attention on the need and potential for long-term Government planning in natural resource development and allocation. Awareness that these shortages could have major impact on the U.S. economy has focused concern on the prospects for avoiding potential crisis through long-term planning.

Such planning would permit the Government to anticipate and respond to impending shortages on a timely basis rather than reacting on a crisis basis as it did in recent export control decisions. These decisions tended to deal with surface manifestations of basic economic and political forces, rather than with the forces themselves. In the absence of advance planning, policy options were constrained, time available for deliberation was limited, and policy choices were ad hoc and detrimental to other domestic and diplomatic interests.

Upgrading the Government's long-range planning mechanisms would require a consistent and institutionalized perspective on future policy problems and choices, an acceptance of planning as integral to the governing process, and the capacity to perceive the complex interrelationships of myriad forces as they impact on available supply and effective demand. In contrast to decisions responsive to immediate needs, a long-term policy planning system would attempt to project possible futures and to modify basic economic and political forces in directions compatible with the Nation's long-term objectives. Such a system would require a coherent set of national priorities which would lend direction and substance to the policy planning system.

The present system is not totally incapable of perceiving and responding to future problems. For example, anxiety over possible food shortages has stimulated a flurry of Government studies on future supply and demand, prospects and advantages of agricultural reserves, and effectiveness of U.S. government-to-government food sales and economic development programs.

The gradually developing fuel shortages have induced a variety of bureaucratic adjustments designed to centralize authority for energy policy, and the Federal Energy Administration has been vested with responsibility for long-term policy planning. The President has recently announced a 5-year, \$10 billion energy research and development program designed to achieve potential self-sufficiency by 1980.

The heightened concern with nonenergy minerals and industrial materials shortages--exemplified by the June 1973 report of the National Commission on Materials Policy--resulted in formation of the Minerals and Materials Policy Subcommittee under the aegis of the Domestic Council.

#### POLICY PLANNING SYSTEMS REQUIREMENTS FOR AGRICULTURE

Although the above actions indicate a commitment to improving the Government's policy planning system, decisions within the present structure continue to rely upon the onset of crisis. To a certain extent, this orientation results from the inherent limits to predictability given rapidly changing global forces which may or may not be permanent.

However, differing perceptions in the past year of agricultural developments and their long-term effects have produced divisions among concerned Government agencies. Although a diversity of views is necessary for a full examination of the issues, this situation has increased the problem of projecting supply and demand, impaired coherent approaches to long-term trends, and limited analytic and policy inputs from important sources of expertise. In addition, weaknesses in the long-term U.S. agricultural policy planning system, unrelated to these agency divisions, further impede accurate projections and necessary policy responses to future trends.

#### Uncertainties of the present environment

The forces which have generated the greatest controversy include:

- Future Russian demand and the frequency and extent to which that demand will be imposed upon world markets. Although recent large Russian grain purchases probably reflect a basic policy decision to improve the protein diet of its population, Russian import demands are

uncertain, and Agriculture's projections of Russian purchases are considerably below those of other agencies. Since variations in Russian production are considerable and its basic demand for grain is enormous, the implications of Russian willingness to purchase on the global market are significant.

- Future U.S. agricultural production. Some agencies believe that Agriculture's projections on productive capacity, and production response to price increases, are too optimistic. National Security Council and CIEP officials perceive these projections as reflecting an exaggeration of the U.S. resource base, yield per acre, and farm sector ability to respond to free market forces. A high level Agriculture official's statement that "farm production will not increase as fast in the future as some people have thought" appears to conform to these perceptions.
- Relationship of technology to agricultural production. Agriculture's projections frequently include implicit assumptions of recurrent technological innovations which are challenged by CIEP, CEA, and some ERS officials. This bears significantly on the prospects for increasing yields within less developed countries, with Agriculture more optimistic than some other agencies.

These differing perceptions and projections are further aggravated by serious gaps in available information, assumptions inadequately measured against reality, and distortions in the flow of data, analysis, and policy inputs within the system.

Furthermore, the following variables, relevant for long-term, supply-demand trends, are either inherently resistant to long-term analysis and projections or have only recently been subjected to analytic efforts.

- Seasonal weather variations and long-term weather trends. Some experts are convinced that the drought conditions experienced in West Africa and India during 1972 represent a basic climatic change. However, ERS' projections have generally assumed normal growing conditions or excluded the variable entirely. Such

considerations should be assimilated into long-range projections, but no concerted efforts in this direction have been made.

- Availability of agricultural production inputs. Recent energy shortages and the inability of the less developed countries to substantially increase per capita agricultural production have raised questions about the availability of various production inputs and the long-term implications for U.S. and foreign agricultural supply. These inputs include energy, fertilizers, water for irrigation, pesticides, high-grade seeds, resource base, technology, and management expertise necessary to exploit these technologies. ERS projections of U.S. productivity assume the availability of sufficient supplies of fossil fuels and fertilizer at reasonable prices, but ERS reports concede that recent developments mitigate this assumption. Yet there has been little concerted effort to systematically analyze the impact of these variables and to integrate them into long-term projections and policy planning. A belief exists, however, that the energy crisis and the limitations it will impose on U.S. and foreign agricultural productivity throw previous projections into doubt; and raise serious questions about less developed countries' abilities to compete against affluent nations for agricultural products on a world market characterized by escalating prices.
  
- Production and consumption responses to price fluctuations. The shortage of production inputs; currency realignments; low levels of wheat, feed grain and soybean stocks; new sources of demand (Russian and People's Republic of China in particular) and increased demand from traditional sources; and U.S. Government efforts to remove itself from the market have combined to induce wide and unpredictable fluctuations in agricultural prices. The extent to which such fluctuations will provide consistent incentives for increased production and maintenance of reserve stocks and stimulate or suppress consumption in foreign developed and underdeveloped markets cannot be predicated given present knowledge and data.

--Implications of imminent changes in the international economic system. The United States has been engaged in, or is about to enter, a series of international negotiations which may basically revise the international legal framework governing economic relationships. These negotiations include trade and monetary reform, and the United Nations Law of the Sea and World Food Conferences. The U.S. Government is, at present, debating about the position with which to approach these negotiations and their possible impacts on the future of U.S. and world agriculture. The Flanigan Report, which represented a concerted U.S. Government effort to identify various implications of international trade reform for U.S. agriculture, was completed before the dramatic events of 1973. No subsequent efforts of similar magnitude have been made to isolate the relevance of present--and possibly future--shortages for the U.S. position during these negotiations.

These uncertainties--some unavoidable, some resulting from weaknesses in the policy planning system--and associated agency differences persist during a period of profound changes in U.S. domestic agricultural policy. That policy, which seeks to remove the Government from the marketplace and to maximize the impact of free-market forces, has generated its own demands on the ability to perceive long-term trends. Particularly important here is the lack of historical experience or data for predicting the farm sectors' reaction to free-market forces--particularly its willingness to fully exploit the resource base, invest in technology, and to develop, maintain, and release stocks.

Given this uncertainty, the imponderables proliferate. For example, if, as many believe, the private trade will not sustain the burden of carrying stocks over prolonged periods in quantities adequate to confront serious shortages, the ability of the United States to consistently supply food at reasonable prices for domestic and foreign commercial and humanitarian requirements and the future of Public Law 480 concessional sales is cast into doubt. The credibility of the U.S. negotiating position in multilateral trade negotiations, which relies in part upon foreign perceptions of U.S. exports as reliable at stable and reasonable prices, may be weakened. The ability of less developed countries to

compete on a global market characterized by year-to-year price fluctuations unmitigated by releases from U.S. Government stocks, also becomes questionable.

The policy of Government abstinence from the market has its convincing advocates, particularly within Agriculture. The uncertainty of future agricultural developments, however, is exacerbated by Government policy which eschews management of domestic supplies, particularly since U.S. supply has a decisive impact on global supply and demand.

These uncertainties cumulatively preclude consensus on the crucial issue confronting U.S. agricultural policy--has the world entered a basically new agricultural era or do the present shortages reflect the confluence of events unlikely to reoccur? Despite general agreement on the trend toward increased world protein demand, some ERS and Treasury analysts emphasize the abnormal combination of widespread crop failures, new sources of demand, and currency realignments which have created temporarily tight supplies, probably enduring through the 1974 cropyear. Recent statements by Agriculture officials reveal differences of opinion within that Department.

CEA and CIEP officials tend to perceive in the current environment forces of greater permanence which will result in occasional agricultural surpluses and shortages around a trend of increased relative scarcity. Most officials concede, however, that they are uncertain about this basic question. A recent ERS study of grain reserves noted that:

"There are \* \* \* both short and long run factors which have influenced the present situation. It may or may not represent a fundamental change in the world food situation. An analysis of the situation is needed."

## Elements of a long-term planning system

Long-term agricultural policy planning requires far more than a systemic, consistent perspective on the future. Data development and aggregation, economic projections, acquisition and coordination of data and policy inputs from nonagricultural fields, policy development, and communication of priorities throughout the system are all necessary and interrelated components. Data gathering, for example, cannot proceed effectively without a coherent and disseminated set of policy priorities to guide the gathering of relevant information. Policy development can be compromised by inadequate inputs from all available sources of expertise.

### Data base

The data base on several factors relevant for agricultural supply and demand is inadequate. An ERS analysis of data accuracy and availability maintains that "we can accept as given the proposition that our data systems are inadequate for our current needs," and another recent ERS paper observes that:

"Presently there are numerous gaps and inaccuracies in world food data which compound the problems of developing appropriate policies to deal with the world's food situation."

A National Agricultural Outlook Conference paper on the concept of world food security urges that better data be developed on the world food economy. Officials in various other agencies as well as several private experts express the same view.

The categories of data gaps are numerous. An ERS paper identifies the lack of data on the production, demand, and stock levels and policies of Russia, People's Republic of China, and less developed countries as a major problem. The paper concludes that "what is needed is a world agricultural monitoring and data retrieval system keeping track of weather, yields, acreage and production." The National Agricultural Outlook paper lists national stock levels, stockholding policies and programs, and prospective export availabilities and import requirements for cereals, including food aid, as major data requirements. Increased reliance on market forces to determine supply and demand

generates further informational needs, including the likely response of less developed countries to increased prices and the quantity of available acreage and prospects for technological and managerial innovation within the United States.

Given the unwillingness of some countries to accumulate information and the limited resources available to others, some data gaps are unavoidable. However, improved procedures for accumulating data within the U.S. Government would ameliorate this problem. One major possibility would be a greater concentration of Foreign Agricultural Service's resources on data-gathering on foreign supply and demand. Furthermore, according to ERS, "There has been no one place in ERS that has had a continuing responsibility for identifying the deficiencies in our data and recommending plans for improvement." Related to the latter deficiency is uncertainty regarding policy priorities and data needed to pursue these priorities. ERS further notes that "it would be difficult to make a very useful plan for data development unless we have at least some general ideas of what we want to use the data for" and urges "a look at what problems are likely to be high priority candidates for research in the next 5 to 10 years."

#### Aggregation and analysis of data

Sound economic policy depends on sound economic analysis. The Government must, therefore,

- discern trends from the wealth of often seemingly unrelated data,
- integrate the data into projections of supply and demand, and
- identify the policy objectives affected by the trends which emerge.

Raw data, in other words, is useless for long-term planning unless it contributes to meaningful generalizations about current developments and the realistic assumptions necessary for accurate projections of possible futures.

Analytical requirements for developing coherent agricultural policies are numerous; they include all factors

which have contributed to the uncertainty concerning whether the present environment is transitory or permanent. State, for example, lists the following information needs as necessary for the United States to have a soundly based position at the 1974 United Nations World Food Conference.

- An inventory of recent studies of the world food problem (now in progress).
- Prospects of the major developing countries developing their agricultural production sufficiently to keep pace with population and income growth.
- Outlook for the least developed countries.
- Outlook for agricultural production and consumption in Russia and whether Russia will continue to be an unstable, erratic influence on world markets over the next decade or longer.
- Food production and consumption trends in developed countries.
- Impact of rising incomes on food supplies, shift in dietary habits that is occurring, structural changes in the farm sector, changes in the making of farm policy, and implications of these developments.
- World weather patterns or cycles and their implications.
- Status of research and development in new technologies--synthetic protein, new hybrid seeds, storage, etc.
- World fish situation.
- Implications of the energy shortages.
- World food nutritional needs--the protein and calories necessary to eliminate hunger.

Some of these matters have already been studied, mostly by Agriculture. However, the quality of Agriculture's analysis and projections has been questioned, particularly the

assumptions forming the basis for its projections, and its ability to isolate significant trends, test the validity of assumptions and the accuracy of projections against emerging reality. ERS' assumptions on prices, the available U.S. resource base, and the ability of U.S. agriculture to accommodate increased global demand have also been questioned, as have the consistency and explicitness of assumptions from various Agriculture commodity groups.

As a result, there is a feeling that Agriculture tends to project past trends, rather than build possible new developments into its projections. Recent ERS innovations designed to anticipate alternate futures under differing assumptions about basic variables, and to impose uniform and explicit assumptions upon ERS' various commodity groups, may resolve this problem.

For these renewed projection efforts to succeed, the necessary simplifying assumptions must be periodically tested against emergent trends in international agriculture. Unless the assumptions are revised accordingly, the projection process becomes an academic exercise. Data collection and analysis by and coordination between the Foreign Agricultural Service and ERS has been inadequate for this purpose, although cooperative efforts are now underway.

Agricultural attaches assigned overseas by the Foreign Agricultural Service are responsible for collecting and reporting of information to assist in policy formulation and market development activities. The attaches' performance in carrying out these responsibilities will be examined in another review.

#### Acquisition and coordination of analytical and policy inputs

Projecting future trends in agricultural supply and demand is logically an Agriculture responsibility. As the variables impacting on agriculture have proliferated and the complexity of the projections process has increased, however, other executive branch agencies with broader responsibilities have become increasingly active. Such activity has involved their own analytic efforts, identification of responsibilities for other agencies and attempts to develop common grounds for agreement through interagency discussions of basic agricultural issues.

The National Security Council has recently coordinated an interagency National Security Study Memorandum (NSSM 187) on international agricultural policy, which sought to identify pertinent issues and policy options. CIEP has requested a grain stocks study from Agriculture, and an interagency food aid study under OMB direction. Agriculture's report will be scrutinized by the interagency CIEP Operations Group, chaired by State. OMB has chaired a meeting of an agricultural forum intended to stimulate interagency debate and plans to continue this procedure.

ERS has responded to its inaccurate 1973 commodity price projections by attempting to improve its own projection capability and has discussed improved coordination of data and forecasts with the Foreign Agricultural Service. One purpose of this exercise is to more effectively integrate variables which have not received adequate attention within Agriculture. An ERS memorandum noted that:

"There is a great amount of good economic research completed, under way or planned. \* \* \* relating to many components of this problematic situation. But these efforts are generally partial analysis and limited to historic, current, or short-term analysis. We look down one road without knowing its relationship to other roads."

These efforts recognize that analyzing agricultural problems is a complex undertaking, demanding new methodologies, perspectives, and organizational arrangements which can encompass the totality of forces shaping international agriculture. There are severe limits to the abilities of present Government structures to accomplish such an undertaking, although the actions cited above demonstrate efforts in this direction.

The basic problem is the lack of focused responsibility for soliciting, weighing, and assimilating inputs of all variables relevant for policy formulation. The present system is centered neither in the White House nor in any single department or combination of departments. A White House system would require its own analytic capability covering the broad range of forces impacting on agriculture and would assign administrative and narrow analytical responsibilities to the departments. Although CEA is considering major

expansion of personnel to provide such a capability, White House policy groups are presently inadequately staffed, too narrowly focused, or too preoccupied with current and short-term issues to serve policy-planning purposes, either by providing their own analysis or by coordinating departmental inputs.

Furthermore, no clear focus of responsibility exists within the White House. Four principal agencies are responsible for some aspect of agricultural policy: CIEP, international agricultural policy and development; the Domestic Council, domestic agricultural issues; OMB, budgetary decisions on domestic and foreign agricultural programs and activities; and CEA, macroeconomic developments and their relevance for agricultural policy.

The limitations in the White House systems produce a basic dilemma--White House staff officials perceive Agriculture Department inputs as often unreliable yet have not adequately developed their own analytic capabilities. Thus, these agencies must depend, to a certain extent, on Agriculture analyses in which they have little faith, and individuals with broad economic competence are forced to take positions requiring narrow, specialized expertise.

An alternative, department-centered system would require integrating all relevant variables and developing policy options within the departments--particularly Agriculture--with the White House attempting to monitor and verify this analysis and to place these inputs in broad policy context. Such a system would require major improvements in the policy-planning and coordination function within the departments and successful efforts to improve long-range projections. The latter requirement would assume that Agriculture officials understood, and gave proper weight to, variables which originated in other fields, including energy and meteorology. This is not the case at present.

#### Cumulative effects of uncertainty

Whatever pattern of decisionmaking ultimately evolves, a sharper focus of responsibility for analyzing, or coordinating analysis of, the broad range of forces relevant for agricultural policy must be developed. The present structural diffuseness, combined with the inherent uncertainties of the present agricultural environment, precludes a

concerted analytic approach to the basic question of systemic transformation. As a result, the implications of this possible transformation for public policy in various areas--Government-held commodity reserves, agricultural trade policy, Public Law 480 sales--remains indistinct.

In effect, the present uncertainty has compromised the development of a hierarchy of goals and the construction of a broad agricultural policy framework. The National Security Council, for example, perceives a need for further study of the broad range of U.S. agricultural policies and programs, including stocks, trade, and aid policies. An ERS policy study notes that "in weighing the alternatives with respect to reserves the U.S. will have to clarify what demands on our food supply will be supported--what is the priority of commitments." Another ERS paper reiterates this requirement.

## Policy development

In developing policy in any area which cuts across agency jurisdictions, a certain level of disagreement is not unusual, particularly prior to the development of an official position. However, the uncertainty about the nature of the present environment and appropriate policy responses has complicated agricultural policy development in at least three areas: multilateral trade negotiations, Government-held grain reserves, and Public Law 480 concessional sales. On multilateral trade negotiations, State, Treasury, the National Security Council, ERS, the Office of the Special Trade Representative, and private experts feel that a credible position on trade liberalization requires U.S. Government-held stocks in order to insure foreign access to supply at reasonable prices during periods of scarcity.

The Special Trade Representative stated in discussing possible interruptions in supply, that:

"\* \* \* if the U.S. is to be a good supplier, it has to deliver and we can't deliver to one market one year and then pull out the following year.  
\* \* \* So there is a reason here to look to how  
\* \* \* we can maintain stocks if there is a disruption."

Another Government official notes that:

"No longer is it credible to talk about total liberalization of agricultural trade, allowing market forces to control production and consumption.

\* \* \* \* \*

"We would be more likely to succeed in preserving and expanding export markets if we began soon  
\* \* \* with other free world producers and consumers, to arrive at understandings of production, demand and trade \* \* \* during the period of short supply when their need is greatest. \* \* \* Failure to do so would encourage self-sufficiency moves by our main customers."

A September 1973 Brookings Institution report on world agriculture by 14 experts from the European Community, Japan, Canada, and the United States urged an international reserves policy "as a necessary counterpart to agricultural trade liberalization \* \* \*. The only alternative to the spreading use of unilateral export controls when supplies are short." A major U.S. grain company stressing the need for trade liberalization cautioned that "foreign importing nations will be unwilling to embark on greater dependence on U.S. supplies in the absence of increased confidence that such supplies will be available" and noted that "conscious U.S. reserves are a logical extension of past market development policies."

Furthermore, the entire thrust of trade liberalization through multilateral trade negotiations is now an issue as a result of possible basic changes in world agriculture. The Assistant Secretary of Agriculture for International Affairs and Commodity Programs has noted that:

"Access to supplies [as contrasted with access to markets] will be a more important part of future trade negotiations. The world is facing a demand explosion \* \* \*. Export embargoes and rationing of export supplies are becoming as bothersome as tariffs and import levies."

Although Agriculture shares the objective of trade liberalization and has argued against export controls because of their damage to the U.S. reputation as a reliable supplier, it is divided on the stocks issue, with some officials in ERS in favor and others in the Foreign Agricultural Service opposed. The latter group views U.S. Government-held stocks as a burden on the U.S. taxpayer, a disincentive to both the accumulation of foreign stocks and less developed countries' productivity, and unnecessary to sustain farm income given the high prices farmers can presently obtain for agricultural commodities. These views are opposed, to varying degrees, by some officials in CIEP, CEA, OMB, the National Security Council, State, and the Treasury.

These officials believe stocks are necessary to maintain farm income, stabilize domestic and export prices during future shortages or surpluses, satisfy normal foreign commercial requirements, and insure adequate concessional sales and food donations to less developed countries

during periods of scarcity. They do not agree with the Agriculture officials that the private trade is inclined or able to carry stocks adequate to satisfy these interests, and they appear to favor an international agreement requiring the maintenance of Government stocks by developed country importers and exporters. Agriculture is opposed to any negotiations designed to achieve such an agreement.

A third issue in contention is the future of the Public Law 480 program. One argument maintains that the United States derives no advantage from the provision of food aid, that its availability removes incentives for less developed countries' productivity, and that the less developed countries should be required either to purchase food commercially or cut consumption. The other view anticipates continuing less developed country requirements for food aid because of population growth, various inhibitions to productivity, and limited foreign reserves available for purchasing in the market. They conceive of food aid as a necessary component of development assistance in that it stimulates growth in output and employment, holds down prices, and satisfies nutritional requirements.

#### POLICY PLANNING SYSTEMS REQUIREMENTS FOR ENERGY AND NONENERGY MINERALS

Policy planning requirements in the minerals area are similar to those associated with agriculture. Both areas involve resource scarcity issues resulting from rising population and affluence imposed on a finite supply and global economic boom.

Policymaking in both areas also must contend with the same multiplicity of variables including:

- Limits of productivity.
- Technological capability and its relationship to resource development.
- Trends in land use and availability of other production inputs.
- Production-inhibiting effects of environmental regulations.

--Unpredictable and uncontrollable foreign political and strategic developments affecting foreign demand, supply, and price.

--Long-term foreign diplomatic and economic trends.

Policy planning for minerals and agricultural commodities is also characterized by various competing public policy objectives. This competition, particularly between environmental protection and increased productivity, has intensified as fears of scarcity have spread. It has also generated varying degrees of conflict on the extent of transformation in the present environment, necessary adjustments to a transformed environment, and respective roles of government and industry in achieving those adjustments.

Finally, both areas exhibit a complexity requiring integrated and coordinated policy-planning structures capable of collecting, analyzing, and assimilating large volumes of data on diverse international and domestic developments and of forging consensus on policy objectives for optimum satisfaction of competing interests. Despite recent organizational and policy initiatives, neither area is currently approached with adequate institutional frameworks.

Despite these similarities, the challenge of developing policy planning systems for minerals is greater than that for agriculture. While both are resource allocation issues from a global perspective, the minerals area presents for the United States the added problem of resource acquisition. In contrast to the near self-sufficiency the United States enjoys in agriculture, it is increasingly dependent for energy and nonenergy minerals upon frequently unreliable foreign sources at a time of growing risk for U.S. foreign direct investment in extractive industries and an increased inclination and capacity on the part of suppliers to dictate the volume, price, and direction of their raw materials exports. This dependency, the sheer number of minerals and mineral sources involved, and the inherent difficulty of measuring and projecting resources located within the earth multiplies the relevant variables and imposes great demands on policy planning systems.

As a result of these complexities and the weaknesses in present policy planning efforts, agency positions on minerals policy have not coalesced to the extent they have in

agriculture. Different perceptions of the problems prevail within and between responsible agencies. Thus, policy development is inhibited less by a lack of consensus on specific issues than by an inability to define the issues, understand trends in minerals supply and demand, and conceptualize the relationship between these trends and national objectives.

### Uncertainties of the present environment

#### Volume of domestic demand

The aggregate volume of domestic demand for minerals can be projected within broad parameters based on current volume of consumption, projected gross domestic product, population growth, and trends in intensity of use. Volume of import demand is difficult to project, since it depends upon the difference between aggregate demand and domestic supply and the supply variables introduce considerable uncertainty. Projections of the total value of import demand for petroleum and nonenergy minerals are subject to wide ranges of interpretation. Finally, it is difficult to discern the responsiveness of demand to price increases.

#### Volume of domestic supply

The data gaps and uncertainties are relatively greater here. Resources and reserves of energy and nonenergy minerals are particularly resistant to projections. (Interior defines reserves as "known, identified deposits of mineral-bearing rock from which the mineral or minerals can be extracted profitably with existing technology and under present economic conditions" and resources as including reserves and "other mineral deposits that may eventually become available - either known deposits that are not economically or technologically recoverable at present, or unknown deposits that may be inferred to exist.")

Further uncertainties include the nature of economic incentives necessary to convert resources to reserves, level and character of private industry exploration and investment in research and development, effects of environmental regulations on exploration and refining, potential rates of resource recovery through recycling, availability of production inputs (energy required for mineral exploration and

industrial materials available for energy exploration), and possible levels of foreign demand for U.S. supply. The latter variable increases the uncertainties because of changes in currency values and the forces influencing foreign countries' productivity, foreign reserves, indigenous mineral supplies, and import policies. The U.S. Government data gaps are particularly serious in this area.

#### Volume of foreign supply

This area contains great uncertainties, and serious data limitations. Calculations and projections of foreign resources and reserves are frequently little more than educated guesses, and the uncertainties attending other domestic supply variables are magnified. Furthermore, because the operative issue from the U.S. perspective is the export availability of foreign supply, other variables must be introduced. These include the identification of foreign government attitudes and policies on U.S. foreign investment; increased desire and ability of suppliers to conserve and strengthen national control over their materials resources; incidence of cartelization and producer country alliances affecting price, volume, and direction of exports; and increased international competition for available supplies from other consumer countries and coalitions. These non-market forces are not susceptible to precise prediction but do represent trends increasingly significant in global raw materials markets.

## Elements of a long-term planning system

Despite recent U.S. efforts to centralize energy policymaking and to coordinate energy, materials, and environmental policies, the present policy planning system remains incapable of fully understanding and integrating the forces described above or of identifying their pertinence for the Nation's overall objectives.

### Data base

The quantity, quality, accessibility, and interchangeability of data is inadequate for the task of developing natural resource and environmental policies.

The National Commission on Materials Policy, for example, concluded in its June 1973 report that "almost every aspect of policy work in this area is handicapped by inadequate, inaccurate, or inaccessible information." Of the existing U.S. Government data banks, it said "none permit a comprehensive evaluation of the materials flow. Consequently, critical decisions on materials proceed without full benefit of the resources of information now latent \* \* \* in uncoordinated files." A senior staff member observed in November 1973 that "there is no comprehensive computerized material or mineral inventory system in the Federal Government, and there are no plans to implement one."

Interior's Second Annual Report under the Mining and Minerals Policy Act of 1971 observed that "the U.S. Government information base for the conduct of its mineral responsibilities is grossly inadequate."

A Council on Environmental Quality task force, examining methods for determining resource availability, concluded that "better efforts will have to be made to obtain and coordinate information on the availability of critical resources." An overview panel on energy research and development, chaired by Interior and with representation from the Council on Environmental Quality, Atomic Energy Commission, Environmental Protection Agency, Commerce, and the National Science Foundation, reached similar conclusions.

The most important data gaps include domestic and foreign resources and reserves. Unavailability of Russian and less developed country data is particularly serious, as is the data gap on U.S. industry research and development investments and technological capabilities. All these data gaps are evident for the aggregate as well as for specific energy and nonenergy minerals.

Our February 6, 1974, report<sup>1</sup> on energy data collecting cited four categories of data unavailable for policy planning purposes.

- Petroleum and petroleum product inventories held by other than refiners and major terminal operators (secondary stocks).
- Petroleum product inventories held by large-volume consumers and retailers.
- Regional and local petroleum product inventories, distribution, and consumption.
- Value and economic data from which to make supply and demand analysis.

Apart from the inherent limits in data availability, the most frequently cited reason for inadequacy of data is private industry's reluctance to furnish information on resources, reserves, prices, and costs.

The February 6 report cited the following weaknesses.

- Much of the energy data is voluntarily reported by industry and receives little verification by the Federal Government.
- With limited exceptions, only aggregate data is reported and individual company data is proprietary and held to be confidential.
- Industry provides the only complete and current information on oil and gas reserves.

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<sup>1</sup>"Actions Needed to Improve Federal Efforts in Collecting, Analyzing, and Reporting Energy Data" (B-178205).

--The Government relies on leaseholders for information on oil and gas reserves of energy-source fuels on Federal lands.

--Reporting of data is not timely.

--Data published by Federal agencies is contradictory and inconsistent.

Concern has also been expressed about the administrative capacity of the small number of U.S. mineral attaches to collect data on foreign reserves, resources, and related minerals issues. Only four U.S. mineral attaches are currently at overseas posts. A high-level Interior official was also critical of the training and competence of the attaches and of the guidance given them by Washington agencies. These issues are currently under discussion between State and Interior.

The Minerals and Materials Policy Subcommittee of the Domestic Council, in responding to the National Commission on Materials Policy recommendation for a national computerized mineral inventory, noted the recent formation of the Office of Energy Data and Analysis within Interior and the strengthening of, and improved coordination between, Interior's Geological Survey, Bureau of Mines, Office of Oil and Gas, and Bureau of Land Management. These actions, while not fully consonant with the Commission's recommendation, may enhance the minerals data base. The functions of the Office of Energy Data and Analysis and the Office of Oil and Gas, however, were recently transferred to the Federal Energy Office, and therefore any evaluation of these offices' impact on the data base would be premature.

The Commission also noted the advantages of a multilateral review of proliferating national programs for minerals exploration, production, and trade. It recommended that "the U.S. Government initiate a multilateral program to collect data on past and prospective supply and demand for materials and to exchange information and views on current and prospective needs through an appropriate international body."

The Subcommittee opposed this recommendation, stating that "such efforts regarding data collection are already underway in a variety of specialized international study groups." We believe that, in taking this position, the Government is neglecting a potentially significant method of obtaining important data on foreign producer and consumer government policies on minerals exploration, production, and trade. Such international cooperation could appreciably enhance the minerals data base.

#### Aggregation and analysis of data

Present Government capabilities to discern trends from raw data, project probable developments, and isolate their implications for public policy, are inadequately developed within the present policy planning structure. Both the National Commission on Materials Policy- and Interior-chaired panels on energy research and development advocated a centralization of raw data and data analysis.

Present analytical requirements are numerous, but are concentrated in the following areas:

- Interactions between materials and environment. The National Commission on Materials Policy emphasized that "there is insufficient knowledge, awareness and understanding of the basic interactions in the materials--energy--environment system. This lack of knowledge, and the disparate short-term objectives that tend to characterize public policy, encourage conflict among conservation groups, industry and government agencies, despite long-term common interests."
- Trends in foreign country attitudes and policies on U.S. foreign direct investment. Recent events have demonstrated an increased frequency of disputes involving U.S. direct foreign investment, many of which were resource related. Officials in State's Economic Bureau were reluctant to draw broad generalizations about such trends. However, officials in several agencies perceive significantly increased conflict involving U.S. investment, particularly in extractive industries.

Interior's Mining and Minerals Policy report noted that "expropriations, confiscations and forced modifications of agreements have severely modified the flow to the United States of some foreign mineral materials produced by U.S. firms operating abroad, and have made other materials more costly." The report also detected increased risk to foreign investors. A Government-wide study recently conceived of by the National Security Council and CIEP with State coordination, will probably consider this problem within the broad framework of the access to supply issue.

--Trends in foreign regional integration, producer alliances, and cartelization. The recent success of the Arab oil-producing countries in dictating export prices of petroleum has raised the possibility that nonenergy-mineral-producing countries might attempt to emulate these efforts. Considerable uncertainty exists regarding the feasibility of successful cartelization in nonenergy mineral sectors and their consequences for U.S. mineral acquisition.

A representative from State raised this issue during a 1971 conference on the Impact of Economic Nationalism on Key Mineral Resource Industries.

"The question that arises \* \* \* is whether we are witnessing a basic change in the situation in that competition among host countries tends to be greatly attenuated because of the development of a common attitude \* \* \* and because forums have developed in which they can concert their actions--UNCTAD, OPEC, The Andean Pact and so on. More and more we seem to be confronted with a united front of host countries. \* \* \* This may call for a different model, and it may call for a different policy. \* \* \* If this is the trend, what are the implications for our policy, for the policies of the developed countries in general?"

The National Security Council-CIEP initiated study noted above will attempt to focus on possible producer alliances in key nonenergy minerals, including bauxite, copper, nickel, and tin.

--Competition from other developed consumer countries for scarce minerals. Among foreign developed countries, increased productivity and associated material requirements, trends toward supranational groups which inhibit competition by U.S. firms, and greater assistance to foreign firms from their governments, have combined to inhibit U.S. access to foreign mineral supplies. Interior's Second Annual Report notes that "U.S. industry is encountering greater competition from foreign nations and supranational groups in developing new foreign mineral supplies and in assuring the long-run flow of minerals to the U.S."

The National Commission on Materials Policy report noted that "other major industrialized countries are intensifying their activities and adopting new measures to obtain materials."

--Economic and technological capacity of private industry to raise domestic energy production. Lack of data on (1) reserves and resources of energy minerals, (2) levels of industrial research and development and technological sophistication, (3) the effects of environmental regulations, and (4) the level of profitability needed to stimulate private investments in exploration, extraction, and refining combine to complicate accurate projections of mineral production. This has important implications for the energy program and the feasibility of national self-sufficiency.

The present capacity to systematically address these factors is limited by serious information gaps, a shortage of individuals and institutions tasked primarily with integrating data from diverse sources into meaningful generalizations about possible trends, and an inadequate mineral attache system.

Acquisition and coordination of  
analytic and policy inputs

The distinct analytic requirements described above must be assimilated into broad projections of supply and demand in order for the Government to anticipate developments and make necessary policy adjustments. Two significant recent bureaucratic revisions may achieve such a capability.

The first was the appointment of the Minerals and Materials Policy Subcommittee, under the aegis of the Domestic Council, chaired by Interior's Assistant Secretary for Energy and Minerals, and with representation from Agriculture, Commerce, Justice, OMB and the Council on Environmental Quality. The Subcommittee has an ad hoc staff of officials from these agencies and CEA, National Science Foundation, Environmental Protection Agency, GSA, and Treasury, with State invited when appropriate. The Subcommittee's responsibility, broadly defined, is to analyze the Nation's mineral problems and develop solutions. The Secretary of Interior's initial instructions to the Subcommittee noted that "we need to develop mineral and material policy to utilize present resources and technology more efficiently, to anticipate the future material and mineral requirements of the Nation, and to make recommendations on the supply, use, recovery and disposal of materials."

It is too early to judge the Subcommittee's effectiveness as a policy planning instrument but certain preliminary observations can be made. First, it has the broad representation and mandate required to serve, at a minimum, a coordinating function by identifying policy problems and selecting lead agencies to develop options. Its immediate audience--the Committee on Environmental Resources--consists of cabinet-level officials. It has been assigned initial tasks of potential significance, including the Administration's response to the National Commission on Materials Policy report and to add inputs into the President's State of the Union Address.

However, the Subcommittee has no permanent staff and must rely upon the responsiveness of line agencies in issuing prompt and competent analyses on problems identified. Agencies' willingness to devote their own staffs to efforts mandated by an external, and recently established, Subcommittee may legitimately be questioned. This tendency to continue as before is strengthened by the incidence of crisis, which tends to draw necessary staff away from long-term issues and to truncate long-term policy planning bodies. These tendencies may also be enhanced by the possibility that this Subcommittee is indeed a temporary organization designed to expire upon the formation of the Department of Energy and Natural Resources. Furthermore, the Subcommittee's informality places considerable demands upon its staff to convey the members' own expertise and the activities and positions of

the members' agency to Subcommittee discussions; to perceive the relevance of developments in their own particular area of responsibility for the minerals area; and to insure that Subcommittee decisions or conclusions are made available to other officials responsible for minerals-related issues. The data gaps may limit the capacity to analyze resource problems. Finally, the Subcommittee's lack of actual decisionmaking power renders its utility ultimately dependent upon the Committee on Environmental Resources and on that Committee's relationship with the Domestic Council.

The crucial requirements, given these tendencies which have often frustrated policy planning efforts, are vigilance at the Subcommittee level and a basic commitment at higher levels to maintain a long-term perspective despite the constraints of crisis while simultaneously resolving other problems--data base, analytical capabilities, etc.--which impede policy planning efforts.

The formation of the Federal Energy Office and the proposal for a permanent Federal Energy Administration are other developments of potential significance. The Federal Energy Office, however, is confronted with the need to achieve prompt short-term solutions in the energy area and, therefore, may not yet possess the time or manpower to confront long-term issues. The Administration would be authorized to examine long-term issues but must await congressional approval.

Although this centralization of responsibilities for energy policy insures greater coherence and, probably, greater foresight, in this specific area, it does not rationalize policy planning for all natural resources. The Nation's interests--as embodied in legislation and pursued by various agencies, are of a diversity which demands close integration of energy and nonenergy minerals and environmental requirements within the policy planning structure. As the Materials Policy Commission noted, "to achieve coordinated and integrated materials, energy and environment policy planning and execution, the Federal Government must be organized to cope effectively with the changing interactions of the materials system."

Opinions differ on reasons for the inability to develop a coordinated systemic focus on minerals issues. These reasons include general structural problems--poor data base, limits on the Departments' analytic capabilities, dispersion of authority, and short-term preoccupations of White House agencies. In addition certain attitudes toward long-term planning inhibit systemic perspectives. The possibility of scarcity as a possibly enduring feature of the international economy has not fully penetrated the Government, and officials who think only in terms of surpluses tend not to view planning as a compelling necessity. Furthermore, long-term planning is still perceived as an interference in the functioning of the marketplace.

## Cumulative effects of uncertainty

The various data and analytic gaps relating to the present minerals environment result from inherently unpredictable elements, structural weaknesses, and present attitudes which minimize the role of Government. These gaps heighten the uncertainty on the basic issue confronting U.S. mineral policy--has the global minerals and materials system undergone a basic transformation from relative abundance to relative scarcity? A CEA member posed the question this way: "Is the economy entering a period of several years when resources will become increasingly scarce economically? Or is it a one-time adjustment that will, after 1974, no longer cause resources to occupy such a prominent place in economic policy as they do today?"

This fundamental issue has confused and divided Government officials, particularly on the supply-demand trends for nonenergy minerals. Some officials perceive transitory forces resulting in temporary scarcity and emphasize the differences between the energy situation and that prevailing for nonenergy minerals. They tend to attribute Interior's concern with the supply of nonenergy minerals as reflecting its implicit support for self-sufficiency, thus discounting foreign supply.

Other officials approach the nonenergy issue with greater urgency, asserting that immediate action is required to prevent serious shortages or dangerous dependence on unreliable foreign supplies. They express concern about preoccupation with energy problems which may obscure the severity of nonenergy minerals problems. Interior's Assistant Secretary for Energy and Minerals recently warned that in addition to the energy issues, "we face a similar situation in some of the nonfuel minerals that the American public is not yet sufficiently aware of \* \* \* before the end of this decade we may become as concerned about supplies of many other minerals as we are those which provide our energy."

An ad hoc Committee On Materials Policy, assembled in 1972 and composed of industry, Government, and academic experts, expressed concern about the fact that "the U.S. is now almost completely dependent on foreign sources for 22 out of the 74 non-energy mineral commodities considered essential for a modern industrial society."

The Chairman of the Council on Environmental Quality observed that:

"Economists often argue that we will never exhaust our resources because the market mechanism will run the price up, encouraging substitution and conservation. If the price mechanism is allowed to function, they say, these resources will never be completely exhausted. We often overlook the fact that resources which are too expensive to use are, in effect, exhausted."

#### Policy development

The accumulated effects of data gaps, analytical limitations, aversion to planning, and lack of high-level policy coordination prevent effective long-term planning efforts. An example of these difficulties is provided by the energy research and development program which has been the major issue in recent policy development for the energy and non-energy materials area. This effort is designed to achieve potential national self-sufficiency by 1980. While this commitment demonstrates the realization that current policy must consider long-term national requirements, the commitment itself does not insure its own success nor absolve Government of the need to develop an improved policy planning system. As a Cornell University Workshop on energy research and development noted:

"Some more effective form for coordination than we presently have (for energy R & D) will certainly be required if our national goals are to be achieved on a timely manner. It will be necessary also for the Government to organize itself effectively at the energy-policy level and maintain close connections with its R & D arm." (Underscoring supplied.)

#### Adjustability

The ability and the willingness of private industry to respond affirmatively to Government research and development expenditures is a function of the domestic and international environments and their evolution during the next decade. The commitment of public funds does not in itself insure increased productivity, much less self-sufficiency. These

results are contingent on external variables, such as (1) trends in world petroleum prices, (2) environmental constraints, (3) foreign political and strategic developments affecting availability of materials, and (4) developments within the research program itself. For example, major global price fluctuations for petroleum or cartelization by producers of a nonenergy mineral vital for U.S. energy production, could disincline or diminish the ability of U.S. industry to substantially increase domestic productivity.

Because of these potential developments, the Government must adjust public policies to maintain a stable domestic climate conducive to industrial investment and utilization of new technologies. Adjustments must also be made in the research program--to increase or reduce the level, or alter the direction, of Government funding--as industry response to the program is clarified. The Government's ability to make such adjustments will depend on its ability to assess technological developments and to monitor external economic and political trends. The capacity of the present policy planning system in this regard is limited.

#### Feasibility

The influence of external events upon industry investment decisions raises a broader question: is potential national self-sufficiency attainable by 1980? Many Government scientists and other officials believe that it probably is not. The energy overview panel calculated that, given the efficient expenditure of research funds and subtracting expected conservation savings from demand, the United States would still have to import the equivalent of 5.9 million barrels of oil a day by 1980.

The Cornell Workshop listed the rate at which additional drilling rigs could be assembled, the availability of critical materials and skilled labor, and environmental constraints as "serious limitations on how rapidly domestic energy supplies can be expanded," even assuming that petroleum prices of \$7 to \$10 a barrel provide adequate incentive for exploration. Other inhibitions include Government inexperience in promoting energy research and the unpreparedness of the scientific community to effectively utilize a sudden increment in funds. In this regard, the research budget was

announced in June but the objective of self-sufficiency was added in November.

This analysis is most concerned with the defects in the present policy planning system which render any projection of self-sufficiency hazardous. The purpose of Government-sponsored research and development is to develop a technological capability to achieve a given level of production. Whether that level is achieved depends on the innumerable decisions made by private industry in response to new technological developments and economic and regulatory climates, within the constraints of its own resource base, capital accumulation, and technological capabilities.

Thus, any judgment on the feasibility of self-sufficiency--and the level and direction of Government involvement necessary to induce such an outcome--depends upon the quality of data and degree of knowledge about private industry resources, capital, and technologies. As noted earlier, such data and knowledge are seriously deficient. The Cornell Workshop report emphasized this point:

"Another area which serves to illustrate the role of government in protecting the ultimate interest of the public is represented by resource assessment and exploration. For many fuel minerals, this activity is carried out largely by the private sector. Since so much of our planning depends on having a reliable estimate of reserves and resources, it is highly desirable that there be an independent government capability in this area." (Underscoring supplied.)

#### Government involvement

Even if the Government maintained perfect and complete information on industrial capability, the appropriate extent of its direct participation would be difficult to define. Ideally, such involvement should include: (1) research offering only long-term benefits, such as solar energy, (2) research entailing high economic risk, such as the liquid metal fast breeder reactor, (3) fundamental research designed to enhance scientific understanding of basic phenomena, without tangible economic payoffs, and (4) research on the 'external' effects of certain energy developments, such as the effects of automobile emissions on health and environment.

Again, under ideal circumstances the Government's participation in research and development would diminish for technology (1) which already existed and was not being exploited by industry for lack of economic incentive or (2) which was within industries capacity to develop. The ideal Government role in such areas would then be restricted to providing economic incentives to investment, production and utilization of available technology. If the Government intruded beyond this point the industry role might actually decline as public funds replaced private capital.

However, the ideal Government role necessarily gives way to reality under the pressures of project independence; environmental constraints; expense of latter research stages, which may inhibit industry participation; and possible limits to industry resource bases. The organizational issue here, given the large expenditure of public funds, is the Government's ability to acquire data, analyze trends, and adjust the level and direction of its involvement accordingly.

The Cornell Workshop report noted that "the details of what is the ideal government-industry partnership for achieving stated goals in the shortest time remain to be worked out and deserve very careful consideration at this time." The present policy planning structure--the data it generates, its analytical and coordinating capabilities--is inadequate for this task.

#### OTHER LONG-RANGE ECONOMIC AND SOCIAL POLICY AREAS

The agricultural and minerals areas which we have discussed in this chapter are two critical sectors for long-term U.S. policy planning. Other economic and social areas also clearly important are timber and sea resources; water, land, and air resource considerations; population and demographic growth patterns; ecological considerations; and industrial goods and services.

Although we have not discussed these areas in this chapter, they are important not only in themselves but also in terms of the distinct interrelationships each one has with agricultural and mineral policies and with each other. Effective Government long-range planning must recognize the importance of all these areas and their interrelationships as well as determine their specific needs and priorities.

## CONCLUSIONS

The lack of consensus on future U.S. agricultural policy reflects three prevailing and related uncertainties.

- The present global environment may contain permanent features inducing chronic or more frequent shortages or it may represent a historical accident of transitory character.
- The hierarchy of policy goals--in effect the priorities assigned to various sources of demand on U.S. agricultural resources--is indistinct.
- The constraints that the future environment may impose on U.S. agricultural policy are unclear.

As a result, the strategy and tactics of pursuing U.S. agricultural policy goals within present and future environments are in open dispute. In the present context, this has complicated efforts to assimilate U.S. agricultural policy objectives--market access, assurance of supply, food aid, and farm income maintenance--into the U.S. negotiating position for multilateral trade negotiations and hinders the orchestration of U.S. approaches to these negotiations and the United Nations World Food Conference.

These difficulties are not fully responsive to administrative reform. To an extent, they reflect inherent uncertainty, as well as the different perspectives of agencies with separate interests and constituents. However, the problems of long-term policy planning would be ameliorated by the development of focused responsibility, wherever its location, for analyzing and reporting on the broad range of forces impacting on world agriculture. Such a structure would allow the United States to approach the current and upcoming series of negotiations with a higher level of understanding and a greater degree of consensus.

We have also noted basic defects in the minerals and energy policy planning systems which inhibit understanding of, and responses to, the complexities and uncertainties of the contemporary environment.

- The data base is inadequate in terms of quality, quantity, and accessibility.

--Ability to discern trends from among the data and to project possible futures is limited.

--Capacity to integrate all relevant variables and to achieve coherent long-term minerals policies is underdeveloped.

These structural defects have complicated policy development in the energy and nonenergy minerals areas in general, and in energy research and development policies in particular. They have inhibited evaluations of the feasibility of energy self-sufficiency and obscured the necessary relationship between industry and Government in the research and development program. They have also inhibited projections of the availability of nonenergy minerals.

The following recommendations are, therefore, intended to resolve two related problems. First, certain interagency studies are needed to fill various analytic gaps in the agricultural and minerals areas. These studies do not imply a total lack of Government attention in these areas. Efforts have recently been made to evaluate the producer alliance issue on an interagency basis. However, many of the studies were partial analyses by particular agencies, without benefit of systematic inputs from other departmental sources of expertise, and were completed before changes in the global environment required reevaluation of positions.

The other set of recommendations suggest structural improvements intended to provide a permanent capability to systematically address long-term economic policy issues and are directed toward three aspects of any long-term planning system which we have found lacking.

First, improvement is needed in the energy and nonenergy minerals data base to permit more accurate projections of domestic and foreign supply and demand trends through (1) improvement in the functions and number of attaches at overseas posts, (2) development of an independent Government capability to collect minerals and energy data, and (3) increased use of international organization data-gathering activities.

Second, weaknesses in the ability of individual departments to analyze long-term trends indicate that more attention

should be devoted to enhancing analytic capabilities. This should improve departmental capacities to discern long-term developments in their areas of responsibility and the quality of their inputs for purposes of interagency analyses. In this context, we also suggest the development of a mechanism to coordinate long-term economic policy analyses by the departments and agencies and to identify pertinent issues for attention.

Third, the present system does not adequately integrate variables from diverse sources of governmental expertise. There is a lack of well-established institutions that transcend individual departments, with a consequent limitation on the ability to perceive relationships between seemingly unrelated elements as they affect natural resources. Therefore, the recently established agricultural and minerals interagency groups designed to assimilate inputs from the various departments should be strengthened.

#### RECOMMENDATIONS

We recommend that the Council on Economic Policy consider (1) upgrading the long-term planning and analytic capabilities of the Departments of State, Agriculture, Commerce, and Interior and (2) creating an organization, or instructing an existing agency or policy council, to coordinate department and agency analyses of long-range economic policy issues. The responsibilities of the designated group should include

- identifying possible long-term trends requiring analysis and continued surveillance,
- coordinating and evaluating departmental inputs, and
- evaluating periodically department and agency long-term planning capabilities.

#### Agricultural policy planning

We recommend that the Council on Economic Policy coordinate for items critical to the U.S. economy, such as wheat and soybeans, an interagency analysis of the ability of U.S. agriculture to increase production in response to price increases. The study should consider:

- The structure of the U.S. farm and food sector.
- Availability of production inputs, including fertilizer, land, and water (considering competition for resources from commercial, industrial, and mining sectors), new technologies, and agricultural management techniques.
- The nature of economic incentives required to stimulate use of marginal farmland and new private investments in technology and high-grade seeds.

The Secretary of Agriculture, the Administrator of the Agency for International Development, and the Council on International Economic Policy should cooperate in organizing an annual foreign agricultural outlook conference to consider:

- Trends in developed and less-developed country demands for protein, with particular emphasis on the effects of population and income growth.
- Prospects for less-developed country productivity under various price assumptions, considering availability of production inputs.
- Ability of less-developed countries to compete with the developed countries for agricultural commodities in the world market, given foreign reserve holdings and probable increases in commodity prices.

The Council on Economic Policy should establish the Office of Management and Budget's interdepartmental Agricultural Forum, or a similar group, as a permanent interagency committee, meeting at regular intervals and having authority to request departmental studies and to issue position papers.

#### Minerals policy planning

We recommend that the Domestic Council consider strengthening its Minerals and Materials Policy Subcommittee by:

- Granting formal membership to representatives from the State Department, the National Security Council, and the Council on International Economic Policy.

- Establishing explicit lines of communication between the Subcommittee and the Federal Energy Office, to insure that energy policymaking will benefit from the Subcommittee's broad perspective.
- Emphasizing the relationship between the Subcommittee and the Office of Management and Budget, to enhance consideration of long-term policy requirements during the budgetary process.

The Minerals and Materials Policy Subcommittee should identify, on an interagency basis, the appropriate unilateral and multilateral actions needed, consistent with the U.S. objective of insuring access to foreign minerals supplies. Such actions could include possible:

- Long-term contracts and barter agreements.
- Improving the foreign direct investment climate through bilateral and multilateral investment codes and insurance guarantees.
- Bilateral or Organization for Economic Cooperation and Development-sponsored agreements with other consumer countries to minimize destructive competition and enhance bargaining with producer countries or coalitions.
- Multilateral agreements to rationalize global resource allocations and cooperate in supply-demand projections.
- More active and supportive U.S. participation in international organizations having resource-related functions.

The Secretary of the Interior, the Administrator of the Federal Energy Office, and the Director of the Office of Management and Budget should consider developing an independent Government capability to collect data on domestic and foreign energy and nonenergy mineral resources and reserves and on private expenditures for research and development.

The Secretaries of State and Interior should expedite agreement on improving the quality, training, and guidance and increasing the number of mineral attaches.

The Minerals and Materials Policy Subcommittee should reconsider the need for increased use of international organization data collection capabilities.

## CHAPTER 7

### OVERALL CONCLUSIONS, AGENCY

#### COMMENTS AND OUR EVALUATION, AND MATTERS

#### FOR CONSIDERATION BY THE CONGRESS

### OVERALL CONCLUSIONS

Shortages of basic commodities have had major domestic and international impact during 1973 and early 1974. The energy crisis has shown how significant and pervasive the impacts of economic or politically induced shortages can be. Shortages or tight supplies of food, mineral, and material commodities have caused sharp price rises and dislocations in domestic and international industrial production, consumer expenditures, trade flows, and economic policies. Increasing concern and debate have focused on national and international policy efforts to resolve scarcity issues.

Many interpretations of the current commodity situation, analyses of its causes, and suggested policy solutions are being made. At present, however, future commodity and resource problems have not even been adequately defined, let alone agreed upon.

Statements of increasing concern about future commodity and resource problems have been made by various U.S. Government officials and agencies. Other analysts have expressed their concern about future supply and demand problems for agricultural, energy, mineral, and raw material commodities. Their analyses strongly suggest that the world has entered a new era in which basic commodity and resource problems pose increasing economic, social, and political difficulties for the United States and other countries.

We believe that the U.S. Government does not now have an adequate planning, policy analysis, and policy formulation system for basic commodity issues. In our opinion, existing executive branch programs do not provide a coordinated process and mechanism for dealing effectively with short-range commodity problems. (See ch. 2.) The programs encountered many difficulties using short-supply export

controls (chs. 3 and 4). They do not provide or coordinate the information needed for adequate forecasting of future supply and demand situations. (See ch. 5.) A variety of actions are being taken or considered to deal with long-range implications of resource and commodity problems, but this area too is characterized by fragmented long-range planning responsibility and a lack of established, interrelated, and publicized long-range national policies (see ch. 6).

Our studies of six commodities which have recently been in tight supply in the United States--soybeans, wheat, cotton, fertilizer, cattlehides, and ferrous scrap (app. I)--show the dimensions of the problem for individual commodities.

- Growing interdependencies of domestic and worldwide supply and demand factors.
- Interrelationships and dependencies among commodities which increase the severity and complexity of shortage situations.
- Limited information on key supply and demand elements.
- Continued debate among producers, users, and Government officials as to proper national policy actions for these commodities.
- Continued uncertainty about the future economic situation for these commodities.

Effective policy analysis and program management should systematically assess existing situations, identify basic problems and interrelationships, recognize uncertainties and ranges of possible events, seek new alternatives and improve existing ones, and strive to produce explicit, objective, and verifiable analyses. We do not believe that the existing executive branch policy processes for commodities meet these criteria.

The executive branch has taken the following positive commodity policy steps.

- An interagency food export control group operated during the period of agricultural export control use in 1973.

- Agriculture's ERS has reassessed and restructured its commodity forecasting work.
- Proposed a world food conference for late 1974.
- Initiated a Government system to monitor export sales of key commodities.
- Initiated a reassessment of U.S. export promotion programs.
- The State Department has advocated a greater role on its part in future export control decisions.
- Working groups for interagency agricultural and minerals and materials policies were established.
- The proposed budget for fiscal year 1975 contained (1) extensive programs for a national energy policy and (2) added funds to improve forecasting for major agricultural commodities and to increase research on meat and soybean production.
- The annual CEA and CIEP reports in February 1974 contained specific chapters discussing energy and agricultural commodity problems and the concern and uncertainties which these problems create.

Each of these actions is a positive step, but each affects only a segment of the system, has been temporary, or is still only a prospective change. In view of the basic problems and needs of existing commodity policy activities and the serious implications of future commodity problems, we believe that these actions should be only the initial steps in an ongoing effort to improve the Government's commodity policy process.

#### OVERALL COMMODITY POLICY CONSIDERATIONS

The recommendations we are making to executive branch agencies are directed at improving specific aspects of the Government's commodity policy process. In further assessing this process, we believe that at least five overall considerations are important.

## Importance of commodity policy

Commodity policy is only one aspect of the national economic policy process. Monetary and fiscal policies have received the most attention and expertise in recent years. Within the overall economic policy process, however, the commodity problems and impacts of 1973 and early 1974 suggest that increased attention should be given to specific commodity policy needs in the agricultural, mineral, raw material, industrial, energy and service sectors.

In addition, although current concern focuses on commodity shortage problems, an improved national commodity policy process is necessary for anticipating and dealing effectively with commodity dysfunctions of all types, whether shortages or surpluses. An improved process should also be flexible enough to cope with all types of factors underlying basic commodity problems, from short-term problems, such as currency devaluations, domestic or foreign economic policy changes, or a lack of processing capacity in domestic basic industries; to long-run factors, such as increasing population and world affluence pressures on supply or problems of resource recovery and improved production techniques.

A final point on the importance of commodity policy concerns relative priorities. Energy commodities are essential for operating modern industrial societies, and it is now expected that billions of dollars of Government funds will be spent to develop U.S. self-sufficiency in energy. The present and future problems and uncertainties of other commodity situations raise the question of what relative amounts should be invested in U.S. programs to assure sufficiency of food, materials, and nonenergy minerals supplies.

## Complexity and interrelations of commodity policy

Commodity policy analysis, decisionmaking, and planning cannot be effective if adequate information is not available. Commodity policy decisions can have only limited utility, and may even be counterproductive, if they are not guided by a

set of established long-range policies, and extensive data gathering has little value if the data is not effectively used for analysis. Data gathering, analysis, forecasting, decisionmaking, and planning must be considered together for the system to function properly.

In addition, as illustrated in the commodity studies and elsewhere in this report, there are important and complex relationships among commodities themselves. Shortages of one commodity can cause shortages of another, or set off a chain of short- and long-run supply and demand shifts from that commodity to others. Broad and complex relationships also exist between the basic variables of population, capital, food, nonrenewable resources, and environment. It is difficult to form effective national food, environmental, energy, or materials policies and programs, without considering the impact of each policy on the others.

#### International interdependence

Many recent U.S. commodity problems have been influenced by foreign events. As Government officials and other experts have stressed, there is a growing interdependence among almost all nations in supplying each other with products and resources and no nation can go it alone. These factors have received increasing attention in the executive branch and in the Congress, particularly in the growing emphasis for the pending world trade talks on the questions of access to supplies, and need for new international rules for dealing with commodity supply problems.

#### Need for commodity information

The Government needs increased information to formulate commodity policy and to improve decisionmaking, forecasting, and the data base for long-range policy planning. In the relationship between Government policy formulation and private sector activities, a difficult policy question is the one of costs and benefits of increased information gathering. The costs, complexities, debates over the propriety of Government intrusion, and administrative burdens of increased Government market information gathering could be considerable for Government and industry. On the other hand, the benefits could be considerable too, in terms of formulating Government national economic policy to better

foresee and most effectively deal with such matters as the Russian grain sale, the 1973 soybean export controls, and the current energy shortage problems. The Secretary of Commerce, in congressional testimony in early April 1974, acknowledged that 1973 short-supply decisions had to be made without demand and supply data needed to fully understand the impact a complex combination of factors was having on the domestic market. He said that steps were being considered for correcting this deficiency and that the Bureau of the Census is reviewing steps to:

- Initiate a feasibility study to develop a program for collecting monthly quantitative data on selected commodities, covering domestic production and inventories held by manufacturers and wholesale outlets.
- Proceed, in cooperation with Customs Service, to explore possible ways to expedite collecting, compiling and upgrading the reliability of monthly U.S. commodity export and import statistics.
- Initiate a review of the reporting of trade statistics on selected items by major trading nations, with a view to ultimately develop a methodology for a multi-lateral uniform data base.

The Secretary said also that, in the meantime, although Commerce recognizes the drawbacks of its ad hoc reporting requirements, it would continue to require reports from industry on short-supply commodities whenever such data was needed for Government decisionmaking.

#### Domestic and international needs

Possibly the most difficult commodity question concerns the need to insure adequate supplies of commodities at reasonable prices for U.S. domestic, industrial, and consumer use versus national economic growth and production needs and international economic, balance-of-payments, trade, and foreign policy requirements. The extensive debate over the use of export controls has revolved around this basic issue, and a clarification of the specific domestic and international impacts has not yet been developed. Decisions on how to (1) allocate U.S.-produced commodities among domestic and foreign customers, (2) improve access to foreign commodities necessary for the U.S. economy, and (3) balance these outflows and

inflows to maintain a healthy U.S. economy in a healthy and balanced world economy will be some of the most difficult and meaningful the U.S. commodity policy system must make.

- - - -

The Government commodity policy formulation process faces important operating challenges. Economic, social, and political implications of present commodity shortage situations are tremendously complex and diverse. We believe that this report, through focusing attention on the Government commodity policy process and suggesting recommendations and considerations to improve that process, will contribute to Government efforts to deal with these problems.

An effective Government commodity policy system, however, will require continuing debate and discussion among executive branch officials; members and committees of the Congress; and industrial, interest, and public groups to establish national goals for guiding future policy efforts and for developing a Government policy system fully responsive to emerging needs.

## AGENCY COMMENTS AND OUR EVALUATION

The executive branch agencies concerned with the commodity policy process agreed with our general findings and overall presentation of the facts. Their comments on the conclusions of the report, however, varied.

The Secretary of the Treasury, in his capacity as Assistant to the President, noted the problems and disadvantages of export controls and acknowledged the crisis atmosphere in which export control policies were developed during 1973. Although arguing that the 1973 export control experience showed the need to rely on the market system to correct supply-demand imbalances whenever possible, the response noted that Government actions are sometimes necessary to prevent development of a crisis and that the Administration has learned the importance of sound policymaking procedures to meet this responsibility.

The Assistant to the President's response stated that a number of organizational and operational measures have been taken since last summer in response to the emerging shortages of several commodities. The response also stated the belief that many of the organizational problems could be dealt with through congressional action on the Administration's proposals for a Department of Energy and Natural Resources and a Department of Economic Affairs. (see app. III.)

The Department of the Treasury concurred in the above comments (see app. IV), and OMB officials told us that their comments had also been incorporated in this response.

The Department of State agreed that Governmental machinery may need improvement and greater coordination to gather, analyze, and use commodity data for better policy formulation and decisions. The comments noted the steps already taken to this end, as discussed in our report, and said that further measures are under study. The comments expressed doubt as to the feasibility of increased efforts to improve commodity forecasting techniques but stated that an improved system for gathering and analyzing commodity data for long-range planning could probably be very useful. The question of improving the U.S. mineral attaches program is still under active discussion, and a study of access of foreign minerals supply is underway on an interagency basis.

State felt that its commodity policy group is functioning effectively and does not need the analytical improvements we suggest. It did agree that commodity policy decisions have been made occasionally within the Government without State participation. (See app. V.)

The Department of the Interior stated that it has become increasingly concerned that its planning, analysis, and policy formulating system for various mineral commodities has been inadequate. Actions to remedy the deficiencies are underway; some preliminary steps have been taken and others are under consideration, particularly for the deficiencies of data collection, analysis, and policy development. Thus, Interior had no disagreement with the basic conclusions of our report concerning it. (See app. VI.)

The Department of Agriculture agreed that improved analytical capability was a major need of policymakers because of the complexity of the market system. This capability should provide basic economic projections and analyses of alternative policies for adjusting to commodity shortage and surplus conditions. Agriculture questioned, however, the idea that a single, highly centralized analytical system would improve the decisionmaking process.

The Agriculture comments stated that its Foreign Agricultural Service is undergoing reorganization, as ERS did, designed to improve analyses and forecasting. The comments set forth the value of diverse opinions in economic projections, analyses, and policies as being healthy in a policymaking process and stated the belief that commodity analysts should not become involved in the decisionmaking process. (See app. VII.)

Commerce stated that a crisis atmosphere did exist when the 1973 short-supply decisions were made. It believed there was a greater degree of coordination on export control decisions than we indicated and that interagency differences were somewhat overstated. Commerce said measures had been taken to avoid the repetition of the 1973 crisis atmosphere. For example, the Bureau of the Census has made proposals for developing a data collection system to permit Government short-supply decisions based on accurate and timely trade data. (See app. VIII.)

The Assistant to the President and the State and Agriculture Departments were concerned that a revised commodity policy

system as discussed in this report could mean large Government bureaucracies and substantially increased Government intervention in the resource allocation process now handled by the market system. The Assistant to the President commented, for instance, that the report implies that an elaborate, centralized system of data collection and analysis would have alerted policymakers to commodity problems earlier and permitted a less disruptive policy response. After stating that there is no guarantee such a system would accurately forecast every commodity situation, and that it would have had to be in use for many years to have covered every contingency, his comments concluded that:

"More important, the basic premise of a government-managed system of resource allocation to deal with both actual and potential shortages needs to be clearly understood. Adoption of such an approach would constitute a fundamental change in the economic philosophy of this nation. It implies that an economy in which supply and demand are determined in a free, competitive and open market is less desirable than one in which government is relied upon to make the essential decisions concerning availability, allocation, and price. We do not believe this is true and we do not believe that the American people, given a clear understanding of the implications and consequences, would think so either."

We believe that the above comments indicate an ideological stance which is inconsistent with the facts of the Government's existing and past role and responsibilities in the U.S. economy and that they do not fairly interpret our report.

As the Assistant to the President's response itself notes:

"The government does, of course, have a responsibility under various statutes to monitor a developing situation as closely as possible. Conditions sometimes arise that justify government actions to prevent a situation from developing into a crisis."

The Employment Act of 1946, which created the CEA, begins with a declaration of the Congress "that it is the continuing policy and responsibility of the Federal government

to use all practicable means \* \* \* to promote maximum employment, production, and purchasing power." This goal is to be achieved "with the assistance and cooperation of industry, agriculture, labor, and State and local governments \* \* \* in a manner calculated to foster and promote free competitive enterprise and the general welfare."

The act also provides that the President should transmit to the Congress at the beginning of each regular session an economic report setting forth (1) current levels of employment, production, and purchasing power, (2) foreseeable trends in these levels, (3) a review of the Government's economic program and of economic conditions affecting employment, production, and purchasing power, and (4) a program for achieving maximum employment, production, and purchasing power.

A series of Government departments, agencies, councils, offices, and regulatory groups have economic policy responsibilities bearing on commodity availability, allocation, and price. In addition, these Government groups are responsible for a full series of programs affecting or impinging on the free functioning of the market system, including export controls, import quotas, investment tax credits, accelerated depreciation allowances, antitrust laws, government-to-government agreements, export promotion programs, concessional financing, tariffs, and so on. (See ch. 2.)

Finally, the Administration itself has recently sought new authority to intervene in market situations, such as the 1973 proposal to amend the Export Administration Act to give the executive branch greater flexibility to impose export controls. (See ch. 4.) The programs and authorities continue to be actively applied. In March, 1974, for example, Agriculture announced plans to intervene in the marketplace to buy \$45 million worth of "fed beef" for later distribution to schools. Agriculture stated that this should be "effective in stabilizing and improving cattle prices \* \* \* [and would] assist in preventing serious future dislocations in supply-demand relationships for high quality beef."

Our report is not directed toward creating either a massive bureaucracy or a centrally managed U.S. economy. It is concerned with finding ways in which the many statutes, organizations, and programs mentioned above can best be used to fulfill their intended purposes and to support and promote the effective operation of the market system.

Our recommendations are directed toward improving five facets of the existing executive branch commodity policy system: (1) accountability, by defining responsibilities for policy functions, (2) coordination, by clarifying the nature of coordinating policy mechanisms, (3) reporting, to better inform the Congress and the public of current and developing commodity and resource problems, (4) participation in the policy formulation process, by identifying key policy groups to whom interest group inputs can be directed, and (5) foresight, so that the systems can better respond to commodity dysfunctions before they reach crisis proportions.

We believe that in general the agency comments reflect an acknowledgment of commodity problems and responsiveness to the need to further improve the existing policy system. We believe also that our recommendations for improvement should be fully considered, and that the variety of improvement activities referred to but not identified in the agency comments should be further discussed and developed.

#### MATTERS FOR CONSIDERATION BY THE CONGRESS

We are making this report to the Congress because of the great interest expressed by its Members and Committees in the adequacy of the current Government policy system for dealing with commodity problems and the more than 100 legislative bills that have been introduced on this subject.

The Congress should consider in its deliberations the actions that executive branch agencies are taking and our recommendations for improving these agencies capabilities to cope with commodity problems. It should also consider the need for legislation to establish a centralized mechanism for developing and coordinating long-term policy planning.

## CHAPTER 8

### SCOPE OF REVIEW

We examined the executive branch's decisionmaking structure and process for commodity short-supply decisions and its long-run resource policy planning efforts; the impact, nature, and limitations of export controls; and commodity forecasting, reporting, and monitoring programs and capabilities of the executive agencies. We made case studies for six major U.S. commodities which have had tight-supply problems and have recently been subject to, or considered for, export control restrictions--soybeans, wheat, cotton, fertilizer, cattlehides, and ferrous scrap. Because of the rapid developments and the actions being taken in the energy area, we studied energy programs only in terms of long-term policy actions.

Documents, records, studies, and memorandums were reviewed and/or discussed with more than 220 officials of the Departments of State, Treasury, Agriculture, the Interior, and Commerce; the Domestic Council; the Council of Economic Advisers; the Council for International Economic Policy; the Cost of Living Council; the Office of Special Trade Representative; the National Security Council; the General Services Administration; the Office of Management and Budget; the Central Intelligence Agency; the Agency for International Development; the National Science Foundation; and the Atomic Energy Commission. We also reviewed congressional hearings, reports, testimony, and current legislative material; trade publications and media articles and analyses; and discussed the commodity shortage and policy situation with more than 60 officials representing a wide variety of interested industrial and trade groups, public and private interest groups, consulting firms, and academic groups.

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2. 38  
3. 42  
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8. 725  
9. 12  
10. 27  
11. 210  
12. 97  
13. 9  
14. 793

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## APPENDIX I

### SOYBEANS

#### BACKGROUND

The world food economy relies increasingly on U.S. corn and soybeans. Soybeans are the leading edible oilseed and are first in importance as meal for high-protein livestock feeds. They are now U.S. agriculture's top cash crop and its third largest export; 50 percent of U.S. soybeans, including oil and meal, are exported and account for 90 percent of world trade in this commodity.

Soybeans are less enmeshed in complex farm programs than other major crops which have price supports and (until recently) restricted outputs. Although soybeans and their products move in international trade with greater freedom from restrictive trade policies than most other agricultural commodities, Government decisions on soybean price supports and export programs do affect domestic and international market operations.

The demand for soybeans has increased in the United States and abroad since World War II. Except in Japan, which consumes large amounts of soybeans directly in food, soybeans are in demand almost entirely for their major products--oil and meal. These two commodities, joint products of a processing operation, are obtained simultaneously and in rather fixed proportions; a bushel of soybeans contains about 47.5 pounds of meal and 10.5 pounds of oil. The United States has the world's largest soybean-processing industry, but many other nations also process soybeans. Consequently, both U.S. soybeans and soybean products enter into world trade.

- Soybean oil is used primarily as a food, with heavy emphasis on cooking-oil blends in developing countries and on margarine, shortening, and salad oil production in wealthier nations. Soybean oil has been part of the food-aid program financed by the U.S. Government since 1954 under Public Law 480.
- Soybean meal is used primarily as a high-protein animal feed supplement because it is 45 to 50 percent high-quality vegetable protein. The expanding demand for meat and other livestock products in developed countries has stimulated demand for such high-protein

feeds. Soybean products are also gaining acceptance as a meat extender; Agriculture predicts that by 1980 soybean extenders will constitute 10 to 20 percent of the "meat" consumed in the United States.

Record production and prices are expected to raise the farm value of the 1973 U.S. soybean crop to \$8.8 billion, almost 60 percent more than the 1972 crop value. An increase of 10 million acres from 1972 plantings boosted the 1973 production to an estimated 1,567 million bushels, 23 percent more than in 1972. Yield per harvested acre remains at nearly 28 bushels. Domestic crush is estimated at 790 million bushels, producing 8,450 million pounds of oil and 18.7 million tons of meal.

Soybean exports are forecast at 525 million bushels in 1973-74 compared with 480 million bushels in the preceding season. Oil exports are projected at 1.1 billion pounds, about the same as the previous year, but meal exports may rise to 5.5 million tons from the 4.7 million in 1972-73.

These estimates, based on late January 1974 indications, leave a carryover of 240 million bushels of soybeans in September 1974, compared with the low 60 million bushels in September 1973.

Major importers of U.S. soybeans are Western Europe and Japan. In 1973 Russia and the People's Republic of China also emerged as significant importers of U.S. soybeans.

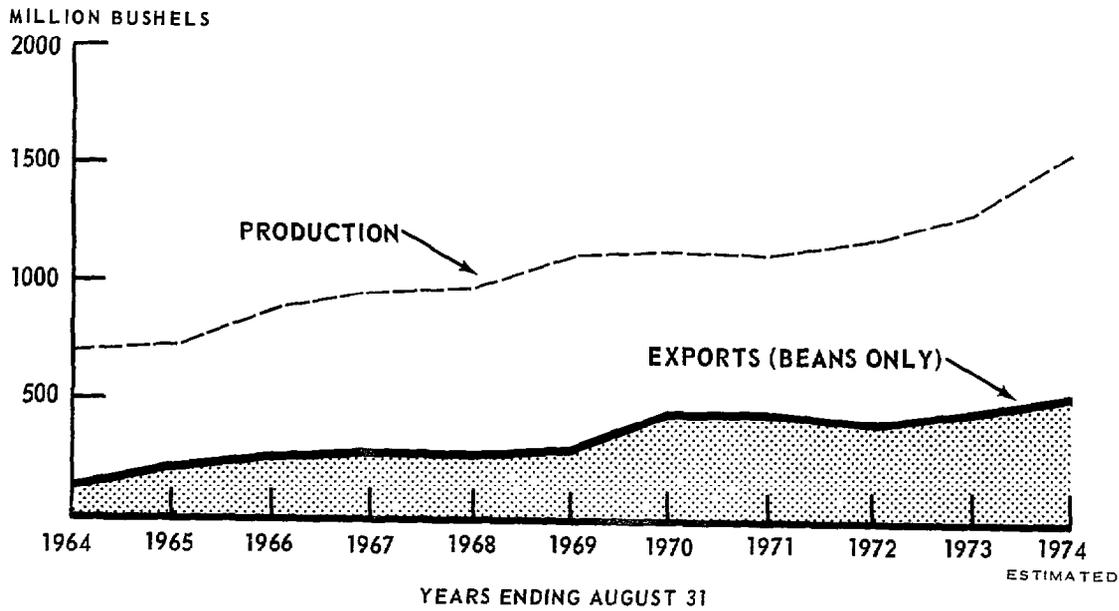
Brazil ranked as the world's second largest exporter of soybeans, meal, and oil in 1972, its production being almost 10 percent of U.S. production. Agriculture's trade experts do not expect Brazil to overtake the United States as the world's number one soybean supplier, but they do see a possibility that soaring Brazilian soybean output and exports might eventually affect U.S. prices.

Graphs 1 and 2 show recent U.S. soybean production, export, and price trends.

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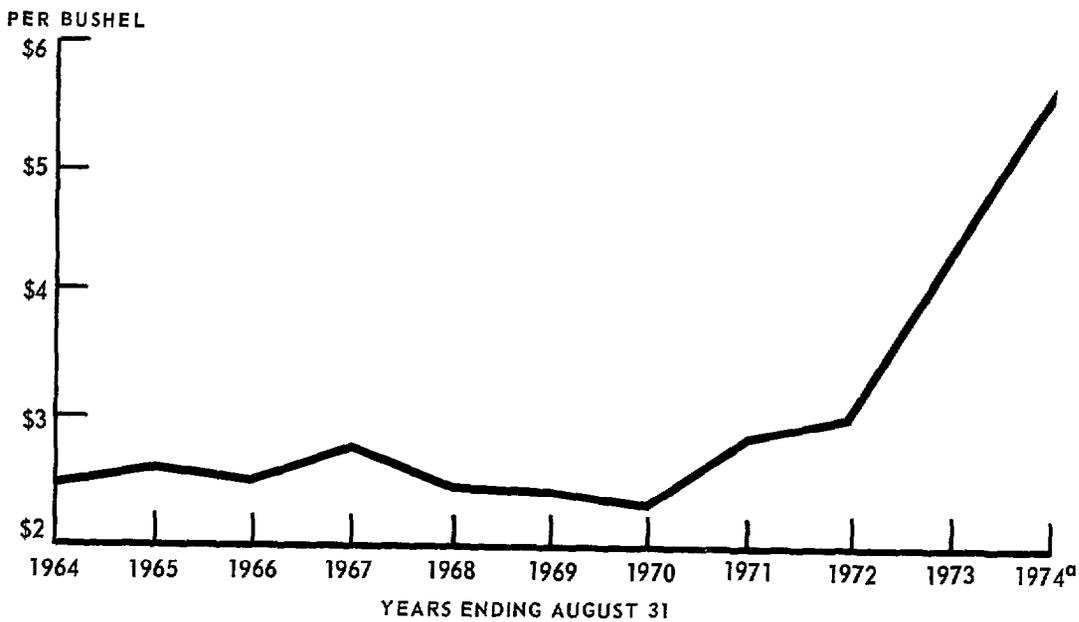
GRAPH 1

SOYBEAN PRODUCTION AND EXPORTS



GRAPH 2

SOYBEAN PRICES



<sup>a</sup>1974 PRICE AS OF DECEMBER, 1973

GATHERING INFORMATION AND MAKING FORECASTS

In June of each year, the Department of Agriculture's Statistical Reporting Service makes (1) field and mail surveys of U.S. farmers to determine the acreage they plan to plant per crop, including soybeans, and (2) objective yield surveys. These surveys are the basis for acreage and yield estimates for domestic crop production. Prospective plantings are released in the January and March Crop Production Reports, and statistics are updated in the July through November reports. Final figures are issued in the annual Crop Production Report in January of the following year.

A U.S. soybean econometric model, made by Agriculture and the University of Minnesota, describes the demand relationships for soybeans and soybean products in a set of 13 equations. By varying the assumptions which influence the soybean economy, forecasters derive alternative sets of demand and supply estimates. The model is used to generate expected price levels; it is more useful as a guide for future estimates than for short-range forecasts.

Agriculture has acknowledged a need to draw on the knowledge and experience of grain producers and representatives of the industry in carrying out its legal responsibilities for current and future grain and soybean programs. The Advisory Committee on Grains-Wheat, Feed Grains and Soybeans, was established in June 1973 to advise the Secretary of Agriculture and other officials on domestic and export requirements, production adjustment and stabilization programs, and other matters relating to these commodities.

The Interagency Commodity Estimates Committee for Soybeans, Flaxseed, Cottonseed, and Oils was established in response to the continuing need for estimates and projections of basic data on supply, use, price, and program effects. This information is used departmentwide for program planning and budgeting and for evaluating and administering present or proposed programs.

The Estimates Committee is composed of representatives from four Agriculture agencies.

1. ERS is responsible for domestic demand and use of soybean meal and oil.

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2. Export Marketing Service<sup>1</sup> prepares estimates on exports of vegetable oils under Public Law 480.
3. Agricultural Stabilization and Conservation Service inputs information on farm programs.
4. Foreign Agricultural Service forecasts U.S. exports of soybeans (or meal equivalent) based on its determination of foreign demand.

Knowing supply; use of beans, meal, and oil; and prices; and using Commerce export figures as a guide, the Estimates Committee then estimates a carryover amount. Some Agriculture officials consider less than 100 million bushels a scant supply; 100 million to 150 million bushels a reasonable carryover at present use levels; and over 150 million bushels a surplus amount.

No commodity management program exists for insuring that the United States will always have adequate domestic supplies of soybeans and soybean meal. The Estimates Committee derives its carryover figure by subtracting the amount of soybeans projected for domestic use and export from the amount of estimated total production. In essence, Agriculture backs into the amount that could be considered as soybean reserves.

The estimates serve as the basis for published statements, material provided to the Congress, and testimony before congressional committees. In September 1973 the Estimates Committee issued the first in a series of monthly reports to make Agriculture's changing assessments of the commodity scene public as rapidly as possible.

Estimates agreed to by the Estimates Committee are official department estimates on the effects of program proposals and changes, but they do not restrict the formation of special study groups or the performance of duties of any of the department's agencies in their assigned responsibilities. The Estimates Committee is mandated to meet twice a year, but

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<sup>1</sup>In February, 1974 the Service was made a part of the Foreign Agricultural Service.

actually meets monthly, or more often as necessary. In addition, soybean seminars, essentially problem-solving sessions, are held about three times a year. Commerce representatives and meteorologists are sometimes present, plus various Agriculture officials, from the Assistant Secretary on down.

ERS also publishes the Fats and Oils Situation Report five times a year which reflects and uses material discussed at Committee meetings. These reports analyze supply and demand and price and outlook and frequently include relevant special studies.

Representatives of the soybean processing industry generally agree with Agriculture's supply estimates but tend to differ with export and consumption figures. Some feel that Agriculture's estimates are optimistic at current price levels and thus carryover will be greater.

The constrained supplies and high prices which developed in mid-1973 were forecast by the Estimates Committee in September 1972. Dairy and poultry industry representatives, as early as October 1972, asked for Government intervention in the form of price controls and/or export restrictions. Agriculture opposed such actions; officials said curtailing exports would encourage foreign buyers to seek alternate supply sources. With encouragement from CEA, CLC, and OMB Agriculture took many steps to increase domestic supplies of soybeans and other commodities, including formulating farm programs to bring about increased production. Nevertheless, the Secretary of Agriculture concurred in placing export controls on soybeans and soybean substitutes in June 1973 to insure adequate domestic supplies. Failure to act earlier was due, in part, to Agriculture's commodity management concept of minimizing involvement in a free market economy.

#### TIGHT-SUPPLY SITUATION

A tight world-supply situation and record-shattering demand for high-protein feedstuffs shot soybean prices and use to record levels in the 1972-73 soybean marketing year which ended August 31, 1973.

According to a report by the Chicago Board of Trade, the soybean price phenomenon actually began in the late 1960's, when a wave of prosperity swept Japan and Western Europe.

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Continual upgrading of diets, including meat, poultry, and eggs, led to an increase in their livestock production. This, in turn, necessitated increased imports of high-protein feed, mainly soybean meal from the United States, fishmeal from Peru, peanut meal from India and Africa, and sunflower meal from Russia.

U.S. soybean exports rose from 287 million bushels in 1968-69 to 417 million bushels in 1971-72. Simultaneously, 1969 carryover stocks of 327 million bushels were reduced to 230 million bushels in 1970 and to 99 million bushels by 1971 because of sharp increases in domestic consumption and exports and the Commodity Credit Corporation's reducing its holdings from 337 million in 1969 to 150 million in 1972 and to 2 million bushels in 1975.

Increases in U.S. soybean production slowed in 1968-69 and 1969-70 and decreased in 1970-71. Efforts to boost production in 1971-72 proved unsuccessful when farmers failed to plant the anticipated number of acres. Although production increased by 49 million bushels in 1972-73 reserves dropped to 60 million bushels.

At this same time, Peru, the world's largest producer and exporter of fishmeal, was sharply expanding its anchovy catch. In fact, expansion was so rapid that some marine biologists began to warn of the dangers of a possible "over-catch," which might eventually destroy or sharply reduce the future source of supply. Fishmeal is second to soybeans as the world's most important source of protein meal.

The Chicago Board of Trade report states that "world demand for meal and the world export supply of meal were by 1972 clearly on a collision course." ERS said it was apparent early in the season that the entire 1972 U.S. soybean crop would be used.

The Secretary of Agriculture stated that the 1973 spectacular rise in soybean prices was the product of worldwide shortages of protein, caused by major production declines coupled with a sharp rise in demand. Exports of Peruvian fishmeal and Indian and Senegalese peanut meal declined by the equivalent of 145 million bushels of soybeans, only 25 million bushels of which was offset by an increase in Brazilian soybean export availabilities. World import demand increased by the equivalent of 105 million bushels, made up of 40 million bushels in the Soviet Union and 65 million bushels among traditional importers.

As this massive deficit equivalent to 225 million bushels became apparent, foreign buyers dependent on protein meal imports looked to the United States to make up the difference. U.S. soybeans were able to meet almost half the imbalance existing in the rest of the world. The remaining gap, said the Secretary, was the reason for high soybean prices and aggressive foreign bidding.

Other factors influencing the rise in soybean prices were unfavorable weather, which delayed the U.S. 1972 harvest and 1973 spring plantings, devaluation of the dollar, and accelerating inflation. Also allegations were made that speculation caused higher soybean prices. However, the Commodity Exchange Authority, responsible for regulating futures markets, stated its belief that speculation in the soybean and grain markets was not a major factor in the rapid price increase.

Faced with the prospect of having commodities flow into international markets at the expense of American consumers, on June 13, 1973, the President announced the institution of a reporting system for agricultural commodities, including soybeans, cottonseed, and their related products. This reporting system, giving for the first time information on the volume of export contracts, showed exports of soybeans and soybean meal running 6 and 27 percent, respectively, above previous estimates for July and September 1973.

Agriculture determined the June 15, 1973, domestic supply of old-crop soybeans to be between 245 million and 265 million bushels. Commerce reported scheduled exports of 92 million bushels for July 15 to August 30, which left about 130 million bushels for domestic crushing and exports--about a month's total supply. Domestic prices for soybeans were more than 200 percent above those of June 1972; soybean meal prices had climbed 320 percent above the level a year earlier.

Under authority of the Export Administration Act of 1969, on June 27, 1973, the Secretary of Commerce imposed an embargo on the export of soybeans, cottonseed, and their oil and meal products because he determined that the supply was not adequate to meet the domestic requirements until the new crop of soybeans became available.

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The decision to impose export controls was made by an ad hoc cabinet level committee, composed of representatives from CLC, Treasury, State, Agriculture, Commerce, CIEP, National Security Council, and CEA, in consultation with the President. The liquidation of U.S. breeding stocks, due to increased meal prices (and ceilings on meat prices), would eventually result in curtailing supplies of meat, milk, and eggs and in higher prices for these items. Thus the export controls were imposed to protect both the American livestock producer and the American consumer.

On July 2, 1973, Commerce imposed controls on 41 other agricultural commodities because foreign demand for soybeans and cottonseeds could transfer to these commodities and foreign buyers were beginning to order large quantities of them from U.S. suppliers. After this, the administration closely followed the supply-demand situation in soybeans and related commodities and took various steps to liberalize export restrictions. Commerce removed the short-supply controls on exports of agricultural commodities on October 1, when the new crop came on the market.

The recent growth in agricultural trade has greatly benefited the United States. Fiscal year 1974 agricultural exports are expected to approach \$19 billion, nearly 50 percent above the previous fiscal year. During the last 10 years, export markets for U.S. agricultural products have been successfully developed. These markets support U.S. farm income and provide part of the foreign exchange earnings the United States needs to pay for its imports, including the large volume of foreign oil needed to satisfy U.S. energy requirements.

Retaining these export markets depends largely on whether the countries relying on imports of U.S. agricultural commodities to feed their people and livestock are confident that the United States will remain a reliable source of supply. If U.S. trading partners lose such confidence, they could seek to develop their own food production capability or to switch to another source of supply.

Export controls on old-crop soybeans have damaged the U.S. position as a dependable supplier for grains and oilseeds that are the raw materials for livestock production. France, for instance, has publicly stated that the Common Market must have an oilseed policy to protect itself in

periods of scarcity when it cannot depend on imports from the United States. Japan and Western Europe told the United States they had understood they would be free to bid on an equal basis with the United States and the rest of the world in periods of tight supplies. They were shocked by the soybean export controls and fearful of the controls being extended in the future. In its position as an exporter, the United States pays a high price for export controls.

The American Soybean Association is against export controls because they decrease production, and soybean farmers are against them because in 11 states they pay 1/2 cent a bushel to the association for foreign market development.

#### FUTURE PROSPECTS

The administration has stated that export controls would not be imposed again, short of some unforeseen disaster to 1973-74 growing crops, but that exports would continue to be reported. When the embargo on soybeans and related products was announced, prices declined sharply, only to be restored to preembargo levels when less restrictive export controls were announced a few days later.

After export controls were removed in October 1973, prices remained high and, although production has increased, foreign demand also remained high.

The administration's answer to food shortages is increased production. The U.S. farm policy presently is directed toward expanding production to meet growing demands at home and abroad.

Greater soybean production in 1973-74 is more than offsetting the reduction in beginning stocks. Despite strong demand forecasts, Agriculture believes there will be a sharp buildup in soybean stocks by September 1974, to an estimated 240 million bushels compared with 60 million bushels the year before.

The factors that influenced 1973's strong farm product demand may continue to do so in 1974--consumer affluence, increasing world livestock herds, Russian and People's Republic of China needs for U.S. products, continuing dollar devaluation, and world weather problems. The key factor that could stall continued growth in world farm product demand for 1974

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would be an oil-triggered recession in the United States or major markets like Japan.

Agriculture stated that the 1974 world outlook for oil-seeds and meals is for (1) some comeback by Peruvian fish-meal, (2) more normal peanut meal output from India, (3) recovery of Russian sunflower seed output, and (4) increased Brazilian soybean production.

The world oilseed meal supply is expected to exceed demand by about 4 percent in 1974. However, major problems, including optimistic Brazilian soybean production and pessimistic Peruvian fishmeal production, in the supply forecast could cause substantial changes. A major effort to rebuild stocks could also cause pressure on available supplies and could result in little or no downward price adjustment.

For the first time since 1958, soybean acreage is expected to decrease--from 57 million acres in 1973 to 55 million in 1974 because soybean prices are more than double those of corn, but, acre for acre, corn yields are triple those for soybeans. Soybean prices may decrease next year, whereas corn prices are strong. Rice acreage is expected to increase, since marketing quotas will not apply to rice for the first time in 20 years.

However, soybeans can be planted later than corn and cotton, so wet spring planting weather could shift prospective acreage from these crops back to soybeans. Also the possible shortage of fertilizer, particularly nitrogen fertilizer, may encourage soybean acreage. Fertilizer is more critical for good corn yields than for soybeans.

A possible hexane solvent shortage could affect the volume of soybeans processed in 1974-75. Nearly all U.S. soybeans are processed by the solvent-extraction technique, and no existing non-petroleum-based product could be readily substituted for extracting oil from soybeans.

ERS believes that, based on an increase in yield to 29 bushels an acre, 1974-75 soybean supplies (including the 1973 carryover) should be sufficient to meet all requirements.

Exports of U.S. soybeans and soybean products could be affected by shipping bottlenecks caused by fuel shortages and the movement of soybeans abroad due to ships operating at slower speeds to conserve oil.

If shortages of fuel or solvents develop in other countries which crush oilseeds, the potential foreign soybean crushings could be reduced, consequently reducing the demand for U.S. soybeans but boosting the demand for U.S. soybean meal and oil.

One of the most significant agricultural developments of the century is the trend to an animal agriculture based on mixed feeds. With heavy demand for meat and a shortage of feed grains, many countries are turning to the seas as a source of vital protein.

Fishmeal production in the 1970s is not expected to maintain the growth of the 1960s. Some experts say the maximum sustainable yield of presently acceptable fish may be reached as early as 1980. Others are more conservative but many agree that it will come before the turn of the century. Agriculture reports that:

"Although world fisheries are capable of some expansion and improvement in utilization, they constitute limited resources which will not solve worldwide protein hunger barring some dramatic breakthrough in aquaculture or in the use of plankton. At best, cooperation among nations will result in controlled catches and a limit to pollution which will allow for limited expansion of catch levels. In the absence of such cooperation, catches could fall and even heavier pressure could be exerted on protein supplies. In that event, current prices of both fish and red meat could look relatively cheap in the future."

Considerably expanded production and export of sunflower seed and rapeseed appears doubtful. The outlook for foreign peanut meal production is also less than dynamic. Thus the world feed industry will most likely look to soybean meal as a substitute to the extent possible.

Brazil expects to nearly triple her soybean export availabilities between 1972 and 1976. Agriculture reports that the United States has the potential to increase soybean production one-third by 1985.

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Yet the soybean is increasingly being viewed as a food in its own right, as well as a high-protein feed ingredient, because of worldwide concern over the inability of traditional industries to meet rapidly expanding protein needs. Demographers now expect world population to double over the next 10 years; Agriculture has stated that population is the key to whether or not the world will be wanting proteins.

Livestock production requires vast amounts of protein that might otherwise be consumed by humans. Current trade estimates indicate that U.S. soybeans used in products for human consumption are less than 3 percent of total U.S. soy protein produced; approximately 85 percent goes into animal feeds and 13 percent into industrial uses.

In 1971 Agriculture permitted using up to 30-percent soy extenders to meet the protein requirements of some school lunches. The extenders are also showing up in more restaurant and institution meals. Most analogs are slower in gaining acceptance. Although close to the flavor of the meats they imitate, these analogs are priced at about the same level of meat. Still, as meat becomes more scarce and its price goes up, consumers will search for ways to offset these factors.

As the Secretary of Agriculture stated before the World Soy Protein Conference in November 1973, the potential for direct human use of soybeans has hardly been scratched.

## WHEAT

BACKGROUND

Wheat is a major U.S. agricultural commodity and, with three-quarters of it being sold abroad, ranks highest among U.S. crops exported. It is used primarily for food purposes such as flour, secondarily for seed and feed, and negligibly for distilled spirits and beer.

World wheat production for the marketing year July 1972 through June 1973 reached an estimated 330.9 million metric tons (12.2 billion bushels). Major producing countries' shares were: Russia, 26 percent; United States, 13 percent; Canada, 4 percent; and Australia, 2 percent.

For the last decade world wheat consumption has increased only slightly faster than population growth. The developed regions' declining per capita use of wheat as food has generally been offset by its increased use as feed as incomes rise. Traditional major importers have been Japan, Europe, and the developing countries. Total consumption for 1973 amounted to 358.4 million metric tons (13.2 billion bushels), leaving world carryover stocks at 28.5 million metric tons (1.0 billion bushels), which represents the lowest world stock level in 20 years.

Wheat stocks in the four major exporting countries--the United States, Canada, Argentina, and Australia--on July 1, 1973, equaled 8 percent (or 1 month) of estimated world consumption. Carryover stocks in many other countries often account for 1 to 3 months of domestic consumption.

Several events combined to bring about this low stock level. In 1972 the world cereal grains harvests declined 3 percent, compared with a recent trend increase of 3 percent annually. Seldom in modern times had so many major producing countries had such poor crops at the same time. Due to a drastic falloff in crop production because of winterkill and then drought, Russia, in an unusual move, entered the U.S. wheat market and purchased 440 million bushels in July and August 1972. Drought reduced the crop in both Argentina and Australia.

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In 1972-73, production shortfall in the People's Republic of China caused that country to enter the U.S. market for wheat in addition to its traditional import sources. Australia restricted its wheat exports due to poor harvests. Argentine production was hampered by excessive rainfall. The apparent overestimation of the Argentine wheat crop and subsequent wheat purchases to fill export commitments added to mounting world concern.

Wheat consumption during 1972-73 increased particularly in Russia, the European Community, India, Bangladesh, and Pakistan. The European Community's increased wheat use was partly due to larger feed usage and increased consumption of pasta products to offset high meat prices. The increase in Russia, the People's Republic of China, India, and Bangladesh came as wheat was used to meet production shortfalls. According to Agriculture, currency realignments in relation to devaluation of the U.S. dollar made U.S. grains 13 to 20 percent more attractive to foreign buyers.

In anticipation of continued strong domestic and export demand, both Canada and the United States encouraged increased production. In its 1973 wheat program, the United States deleted its usual requirements that farmers set aside land from wheat production in order to qualify for Government price-support payments. During the same period Canadian farmers were assured by their Wheat Board that larger wheat deliveries would be accepted at higher initial prices than for the prior year. In the United States, the effect of the Government's move on 1972-73 wheat production came too late to affect significantly winter wheat sowings which normally account for 75 percent of the crop.

As a result of the weather-induced worldwide wheat shortage and devaluation many nations turned to the United States for supplies. U.S. production historically has exceeded consumption requirements, resulting in large surpluses. These surpluses have been stored at great expense by the Government or exported with a subsidy by Agriculture to bridge the gap between higher domestic prices and lower world prices. When increased world wheat prices followed the Russian grain purchases and world production problems, the United States in September 1972 reduced the wheat export subsidy to zero.

In a report in late 1973 sponsored by the tripartite European Community Institute for University Studies, Brussels; the Japan Economic Research Center, Tokyo; and the Brookings Institution, Washington, 14 world agricultural experts concluded that the massive subsidies received by the Soviet Union on its 1972 imports of wheat and other grains from world markets had greater consequences for the world than had other farm policies. These experts added that:

"The United States, Canada, Australia, and the European Community all had a share in this international beneficence. Each was so accustomed to worrying about what its competitors might do that none saw the fatuity of its subsidy policy. And this bargain for the USSR probably increased the volume of its purchases and thereby contributed to the subsequent skyrocketing of grain prices."

The past accumulation of surplus stocks in exporting countries arose largely as an unwelcome byproduct of government farm-support programs. Supply management policies by these same governments are partly responsible for the disappearance of large surplus stocks as a permanent feature of the world wheat economy, according to the United Nations Food and Agriculture Organization. Now that the stocks are reduced, these governments are determined to prevent the reemergence of such surpluses. In view of the residual nature of world wheat trade, the Organization believes that temporary surpluses are bound to reappear, but that they are likely to be erratic and less dependable than before as the world's basic food reserve.

The United States started the wheat year on July 1, 1972, with 863 million bushels. Farmers harvested 1,545 million bushels valued at \$2.7 billion, but domestic consumption receded, solely attributable to a reduction in feed usage caused by higher prices. Exports reached 1,184 million bushels, almost twice 1971-72 exports of 632 million bushels. The resulting July 1, 1973, carryover dipped to 438 million bushels, the lowest since 1967.

During the 1972-73 season the situation for most classes of wheat underwent a dramatic change. From an appearance of relative abundance over a year earlier, supplies for all

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classes had been sharply depleted by July 1, 1973. Thus, attention is being sharply focused on the prospective size of 1973-74 crops.

The radical change in the stock position is illustrated by the fact that, for the first time in 25 years, the U.S. Government owned only a nominal amount of wheat stocks on July 1, 1973. Most wheat acquired by the Commodity Credit Corporation through its price-support operations was disposed of in an attempt to meet demand, and about 6 million bushels were uncommitted at that date compared to 358 million bushels a year earlier. For the first time in 25 years, domestic and foreign buyers competed for available U.S. supplies in a free market. The Corporation established its loan rate at \$1.25 a bushel for the 1972-73 wheat crop and at \$1.37 for the 1973-74 crop, but there does not seem any prospect of market prices falling sufficiently to induce farmers to default to the Corporation at the loan rate.

According to Agriculture, the loan level is not designed to influence market price, but rather to enable farmers to borrow money on crop production to satisfy outstanding financial obligations while retaining title to the commodity for marketing at a more favorable price in a later period. This level will allow the marketplace to work successfully, rather than having another large build-up of Government stocks of wheat because of an unrealistically high loan level.

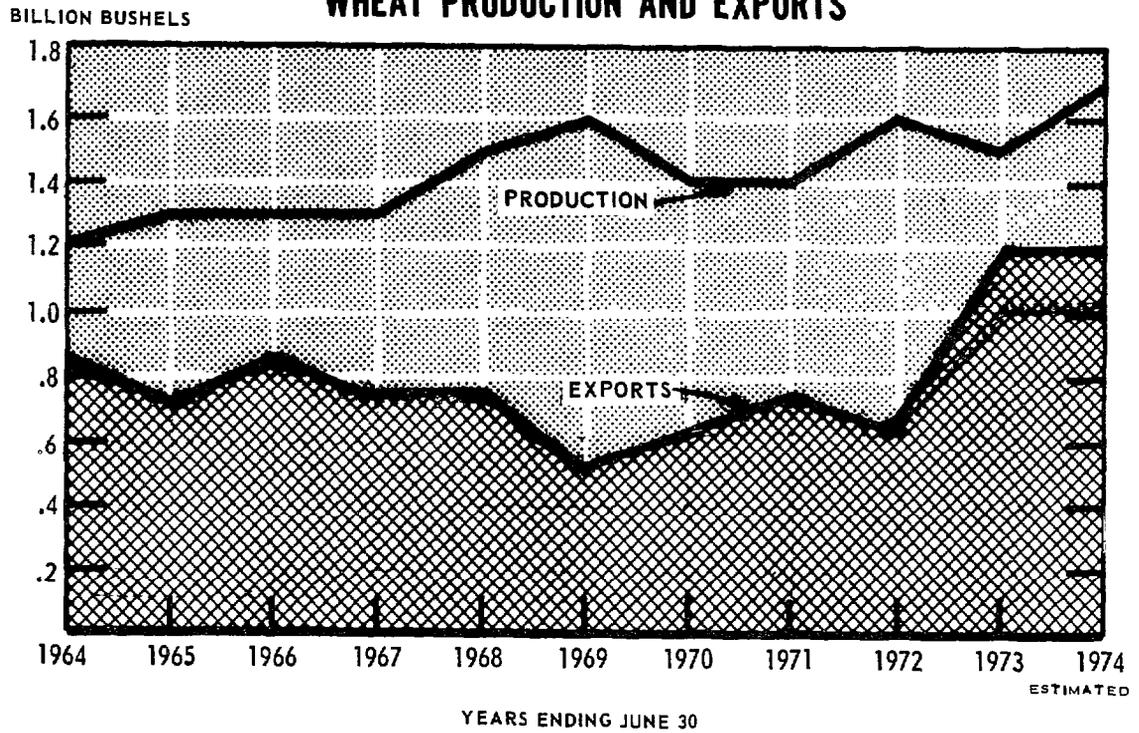
The average price received by U.S. farmers for all wheat during 1972-73 was \$1.76 a bushel with no price support payments. This average is more than twice the 1972 average of \$1.34 which was also supplemented with an average support payment of \$.55 per bushel.

Most critical in the U.S. wheat supply was the durum variety which is used for noodles and the like. The 1972-73 average durum price a bushel received by farmers was \$1.93 versus \$1.31 in 1972.

Graphs 3 and 4 illustrate the trends in U.S. wheat production, prices, and exports.

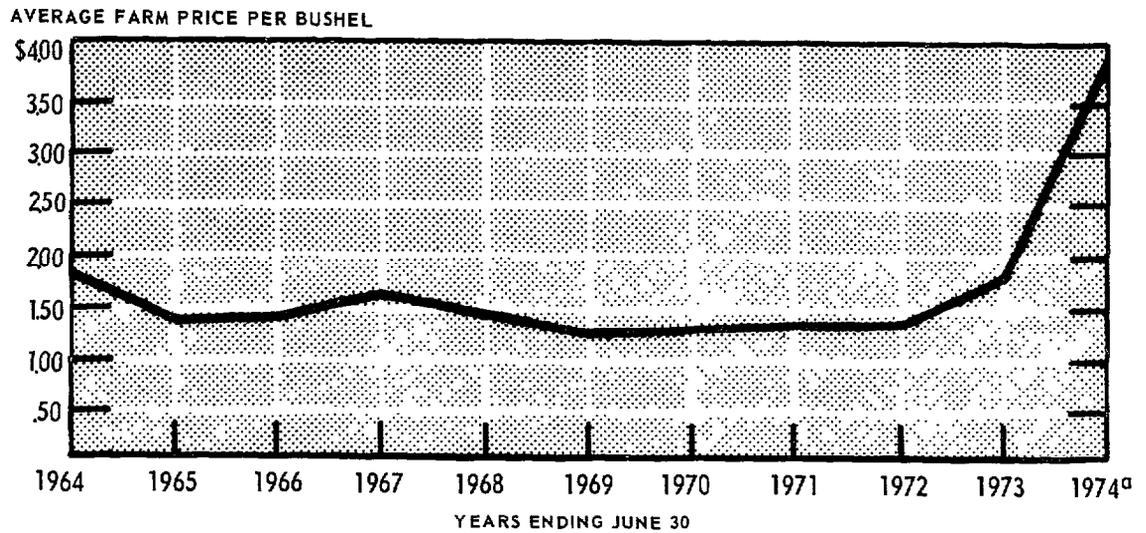
GRAPH 3

**WHEAT PRODUCTION AND EXPORTS**



GRAPH 4

**WHEAT PRICES**



<sup>a</sup>1974 PRICE AS OF DEC, 1973 PROJECTION

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### GATHERING INFORMATION AND MAKING FORECASTS

Agriculture maintains and analyzes wheat forecasting information. The Crop Reporting Board of the Statistical Reporting Service compiles production, stock (carryover), and farm price statistics through mail, field, and yield surveys. ERS records domestic consumption information. Commerce's Bureau of the Census compiles and provides statistics on imports and exports.

ERS issues wheat forecasts and analyses through its:

- Quarterly Wheat Situation report.
- Monthly Agricultural Outlook Digest.
- Agricultural Supply and Demand Estimates.
- Demand and Price, Marketing and Transportation, and World Agricultural Situations reports.
- Annual National Agricultural Outlook Conference.

The principal objective of this outlook work is to get out accurate facts and appraisals of the farmers' economic prospects. The situation reports are also designed to provide information that will be useful to farmers, farm product processors and marketing firms, farm-related business groups, and commodity investors.

Wheat supply and demand estimates are analyzed and coordinated by the Interagency Commodity Estimates Committee on Wheat before being presented to ERS's Outlook and Situation Board for its consideration and publication as official Agriculture estimates. The Committee consists of Agriculture agencies and is an economic analysis group responsible for inputs into policy decisionmaking, but with no official position itself. The purpose of its coordination work is to use the same figures throughout Agriculture. The Estimates Committee generally meets after production and planting intention reports have been issued and whenever a significant issue arises requiring its action. It forecasts wheat statistics for the current year and 1 year ahead.

For total world production and consumption information, Agriculture relies on its Foreign Agricultural Service and agricultural attaches in U.S. embassies. It also uses statistics prepared by the International Wheat Council, an organization of 53 nations interested in international cooperation in wheat matters. The Council publishes annual reports on world wheat statistics and monthly reports on trade, export and import prices, and ocean freight rates.

Using the various data sources, the Foreign Agricultural Service publishes a weekly magazine, Foreign Agriculture, assessing such situations as wheat production and consumption in specific countries or worldwide. It also issues current analyses and statistics of the world wheat situation in its Grains circular on a nonscheduled basis and frequently reviews the situation in its monthly statistical report, World Agricultural Production and Trade.

Agriculture's data is used by industry to supplement private information sources and its own intelligence network.

Although a number of impact and incremental analyses have been made in the wheat and grain area, no criteria or decision points flag possible short-supply situations at critical phases. According to Agriculture operations personnel, ERS makes forecasts and analyses. Decisionmaking for such matters as short supply and export controls is done at the Secretary level in consultation with Commerce, CLC, the CEA, and CIEP.

On June 13, 1973, in an effort to obtain current and accurate data on wheat exports due to increased pressure on diminished stocks, Commerce's Office of Export Administration began accumulating undelivered export sales data for 5 classes of wheat. This monitoring responsibility was transferred to Agriculture by the Agriculture and Consumer Protection Act of 1973, enacted in August 1973, and in October the Statistical Reporting Service began compiling export sales data. Export reports are issued weekly and contain undelivered export sales data as well as an accumulation of wheat exported for the year to date.

Agriculture has also begun pinpointing areas of the country having difficulty getting railcars to move grain to

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the marketplace. Such bottlenecks can create artificial grain scarcities and drive prices higher. Information received from operators of grain elevators is translated into computerized lists of railcar shortages and geographic areas of the country. These lists are sent to the Interstate Commerce Commission, Department of Transportation, and Association of American Railroads to assist in alleviating car shortages.

TIGHT-SUPPLY SITUATION

Agriculture has generally opposed export controls on wheat, preferring to let the market--through price--balance supply and demand. Both CIEP and CEA supported this position. Government control of U.S. wheat export quantities has been limited to the reporting systems established in 1973 for anticipated or outstanding export sales noted previously.

Alternatives to export controls for wheat were reviewed by CIEP, CEA and the Interagency Task Force on Food Export Controls. Alternatives studied were (1) a system of allocation, ranked by country and traditional market, then by contracts, (2) a worldwide auction market for allowable exports of wheat from the United States in 1974, (3) licensing export sales, and (4) encouraging use of long-term private contracts. In May 1973 CEA concluded that there was no critical wheat shortage and that, in any event, the wheat export controls must be decided in conjunction with the broader question of controlling all feed grains because of the short-run substitution effects involved.

Most key interest groups within the wheat industry have also opposed export controls. In 1973 export control hearings, the National Association of Wheat Growers strongly opposed export embargoes or any similar restraint on export sales of wheat, emphasizing that it was a grave mistake to base consideration of such action on price levels instead of the adequacy of supply.

The only major segment advocating controls was the baking industry, which asked the Congress to provide for orderly wheat export marketing by license to ensure that minimal adequate domestic needs would be met. With no export or price controls on wheat in the current period (1973-74) of tight-wheat supplies, the U.S. baking industry vigorously expressed displeasure over the increasing exports and rising prices. For example, unparalleled price increases highlighted the durum wheat market as the result of fear that apparent export demand was so strong that supplies for domestic milling could be inadequate. Prices on the commodity markets reached a high of \$9 a bushel in July and August 1973 and then fell back to \$5 to \$6 a bushel. Comparable prior year average prices for durum were \$1.93, 1972-73, and \$1.31, 1971-72.

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One large exporter, although favoring market incentives, concluded that a clearly defined backup strategy is desirable. It recommended that export controls be imposed if needed but provide for deferring some or all export shipments into the 1974-75 cropyear. This would allow for priorities, such as shipment in hardship cases, and would provide an orderly transition from short supplies to a more normal position.

Several U.S. wheat export-market developers have noted the continued adverse effect of the soybean embargo on the U.S. reputation as a dependable supplier. That embargo has caused major purchasers to encourage both grain production in other countries and substitution of locally produced foods.

Many alternatives to export controls have been suggested. In response to a request of the President, the U.S. Tariff Commission conducted hearings in January 1974 on the effect of suspending import quotas on wheat and milled wheat products. The Commission was expected to complete its work and report to the President by mid-February 1974 its determination whether suspending quotas would (1) render or tend to render the wheat program ineffective, (2) materially interfere with it, or (3) substantially reduce the amount of products processed from domestic wheat. Quotas limited annual imports to 800,000 bushels of wheat and 4 million pounds of milled wheat products.

As an interim step, since Agriculture considered interference was unlikely for the balance of the 1973-74 season and since imports may be needed to supplement supplies before the new harvests, the Commission recommended a temporary suspension of the quotas until June 30. Accordingly on January 25, 1974, the President suspended import quotas on wheat through June 30, 1974. The Commission has completed its review and reported its finding and recommendation to the President. The final report will not be released until the President so directs.

Import duties of 21 cents per bushel of wheat and 51 cents per hundred weight of flour will continue. With these duties still in effect, the tight wheat situation worldwide, and transportation complications, Agriculture expected very little wheat and milled wheat products would be imported. Agriculture also testified that it was doubtful that the quota would be needed in the foreseeable future; but any

material interference would, of course, be grounds for reinvoking the quotas.

While the bakers agreed that import quotas should be suspended, millers and wheat growers expressed contrasting views. The Millers National Federation called for separate examination of the suspension of import quotas on wheat and milled wheat products, stating it is of utmost importance that flour not be permitted to be imported under circumstances that would be considered "dumping." Since most foreign flour moves under some type of government monopoly or assistance, proof should be demanded that U.S. flour which receives no type of subsidy will not be replaced by unfair competition. In opposing lifting of wheat import quotas, the National Association of Wheat Growers warned that the present tight-supply situation is an abnormality and stocks will build up in 1974-75.

Major reasons for considering the removal of wheat import quotas were that this would ensure U.S. consumers of adequate supplies if the U.S. wheat supply is exhausted before next year's harvest and would be a demonstration of good faith in entering international trade negotiations to reduce agricultural trade barriers. Wheat import restrictions were imposed in 1941 to protect the domestic price support program under which the Government purchased and stored the surplus wheat produced.

Because the United States is also the only open market available among the wheat exporting nations, importing countries have increased their demands on U.S. supplies, forcing prices higher. Argentina, Australia, and the European Community have curtailed wheat exports. Canada, prior to knowledge as to the size of its fall 1973 harvest, gave priority to traditional customers. Therefore, the United States was for a time the only source of wheat for new-import purchasers. And, at the Food and Agriculture Organization grain meeting in September 1973, the United States invited all grain-producing nations to open their markets to all buyers to ease the supply-demand tension and to moderate prices.

The Director General of the Food and Agriculture Organization of the United Nations, the Overseas Development Council, and others have argued that allowing grain supplies to be left only to demand in a free market places an unfair burden on poor, grain-importing nations that can ill afford

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to pay the increasingly costlier prices for wheat. The Council stated in October 1973 congressional hearings that decisions on any system of food export controls need to consider the global food situation rather than unilateral short-term actions.

Another export control alternative considered is worldwide reserves. The United Nations Food and Agriculture Organization proposed an international undertaking on world food security in which member governments would:

- Follow national stock policies which, in combination, would maintain a minimum safe level of basic food stocks for the world as a whole.
- Ensure carryover stocks of cereals at the end of each marketing year to meet domestic requirements and, where appropriate, export requirements, including a security margin for emergency needs in cases of crop failure or natural disasters.
- Ensure replenishment of national stocks whenever below safe levels.

Member nations endorsed the basic principles and objectives for such actions at their November 1973 conference but decided to approach the matter in stages. A working party is currently revising the text. In addition, the Organization has noted that reliably evaluating the adequacy of basic food stocks would require a reliable and comprehensive food information system, covering national stock levels, programs, policies, and objectives; current crop conditions and prospects for coming harvests; and current and prospective cereal export availabilities and import requirements.

The United States supports such international reserves so long as they are maintained under national sovereignty. It also supports sound international efforts to improve supply-demand information.

One major U.S. export market developer summed up its industry positions on international wheat reserves as follows.

"From a humanitarian aspect, foodgrains reserves may be necessary. \* \* \* these reserves [should]

be held by the individual nations that need them. These nations should have the responsibility for holding a share of the world's foodgrain stocks. \* \* \*

"The United States has ample reserves in the additional acres that can be put into production, and even more important, in the increased production that can be obtained from the acres that are now farmed. This is being done through improved technology, including better use of fertilizer, irrigation, improved varieties, insect and weed control."

Another major U.S. wheat exporter based its case for a conscious reserves program on need, inevitability of some kind of food reserve, benefits to the United States, and benefits to the world. In a legislative proposal to the Congress, the exporter stated that carryover objectives should be established for (1) strategic reserves of basic commodities for use in periods of national emergency, (2) protection to domestic consumers against short supplies and unduly high prices in years of low yields or unforeseen demands, (3) protection to reliable foreign customers against restricted shipments in periods of unforeseen export demand, (4) a reservoir of basic commodities to help meet humanitarian needs, and (5) protection to producers against inadequate markets and unduly low prices in years of high yields or restricted markets. Similar legislation was proposed by several congressmen.

The tight wheat situation illustrates both the benefits of having a reserve policy and the difficulty of implementing one in the next few years without the Government's entering the market at very high prices. If the United States or any other government were to stockpile from domestic crops during the next 2 years, it could put even a greater strain on supplies for current use and greater upward pressure on prices.

In the late 1973 tripartite report, "Toward the Integration of World Agriculture," 14 experts in world agriculture called for reserves to be held as an international responsibility, with their costs shared, and control subject to multilateral understandings. Groups such as the Overseas Development Council support this proposal.

Another alternative to export control is international commodity agreements, which have existed for wheat for several

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years but not without some problems. The International Wheat Council has sponsored the International Wheat Agreement since 1949. While delegates to its November 1973 renewal conference indicated support for continuing cooperation, controversy arose over extending the Food Aid pact in the agreement. The majority believed that extending the Food Aid and Wheat Trade conventions should be considered together but, since differing country viewpoints did not permit such action, it was decided that the subject of extending the agreement by protocol should be taken up again in early 1974.

Within the United States, the National Association of Wheat Growers has stated that it does not support an international agreement on wheat as a substitute for an international agreement liberalizing agricultural trade. The Association believes that cooperation in harmonizing national agricultural policies must come before there can be any meaningful organization of world markets. In recent years it has been impossible for members of the International Wheat Agreement to adjust to the pressures created by changing national policies.

Another U.S. wheat export market developer states its position on international agreements as follows:

"\* \* \* We are in favor of international agreements, primarily as a forum for presenting information and discussing importers' needs and exporters' stocks. We do not believe that price maximums or minimums can work to the advantage of the United States. Such agreements tend actually to divide the world market among the major exporters. This freezes production patterns and limits future adjustments and growth. Past international agreements worked to the disadvantage of the United States when this country held the 'target price wheats' for other exporting nations to maneuver against."

At a January 1974 conference on national food policy, the National Farmers Union presented a 6-point program that included a return to reliance on international grain cooperation. The Union considered an agreement both a practical and a realistic goal.

According to Foreign Agricultural Service officials, the most important alternative to export controls is the liberalization of trade barriers. The chief cause of extreme fluctuation in world grain price levels is the inability of market forces to operate because of trade barriers by both importing and exporting countries. A large part of the world's grain is now used for animal feed, and in this sector usage can, if allowed, respond very significantly to change in price. If more countries would allow market forces to work, the quantity of grain used would be moderated in both over-supply and short-supply situations, and export controls would not be needed.

Tighter control of futures market activity was called for in recent congressional hearings to prevent possible manipulation of the commodities market. Because of a time-lag in reporting requirements, it is considered easy for a company with a big foreign sale to speculate to the full extent of its outstanding sales position rather than only to the 2 million bushel speculative limit. Generally, large sales of wheat to foreign sources are covered by simultaneous purchases in the futures market to hedge their positions. As hedges, it appears that demand has increased tremendously and a boom market will soon be underway. The foreign customer may accept full delivery, partial delivery and resell the balance of the contract, or resell the entire contract. The latter actions could distort the whole market mechanism. Prevention of this type of activity was advocated as preferable to export controls.

#### FUTURE PROSPECTS

Agriculture expects the wheat situation to remain tight through 1974, with possible surpluses to build up in 1975 and 1976. The United States started the 1973-74 wheat year with a carryover of 438 million bushels, and production is estimated at a record 1,711 million bushels. The value of this crop is estimated at \$6.5 billion versus \$2.7 billion for the prior year. Domestic consumption is expected to drop again because high prices are cutting into wheat feeding. Exports are estimated at 1,200 million bushels, just above 1973's record high of 1,184 million bushels. The resulting carryover on July 1, 1974, is expected to dip to a low of 180 million bushels, the lowest since 1948.

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According to Agriculture, this level indicates an extremely tight supply situation until new crop wheat becomes available. Normally by July 1 a substantial portion of the new winter wheat crop in the Southern Plains and the Southeast is available for marketing. However, new crop supplies of white wheat in the Northwest and spring wheat are usually not available until August.

Durum supplies continued to be the most critical. The apparent early season tightness of supplies skyrocketed durum prices to \$9 a bushel in July and August 1973, then receded to \$5 to \$6 a bushel in the following months. Supplies have been buffeted by both a strong world import demand and by increasing domestic consumption as consumers substitute noodles and pasta products for more expensive foods. If demand expectations materialize, durum stocks could reach minimum level by summer 1974. According to Agriculture's January 1974 crop production report, farmers' prospective plantings of durum wheat increased 47 percent over 1973 acreage. The 1973-74 average durum price per bushel received by farmers is projected at \$5.79 versus \$1.93 a year earlier.

Agriculture has projected the 1973-74 average price received by U.S. farmers for all wheat at \$3.82 a bushel with no price support payments. The actual year end average price is expected to be higher as Agriculture's mid-month index of prices received by farmers has risen from \$2.47 a bushel in July 1973 to \$5.29 a bushel in January 1974 and \$5.52 a bushel in February 1974.

Heavy early season export sales, processor demand, and transportation bottlenecks which still restrict potential marketable supplies were responsible for the rapid price rise. Prices are expected to remain high for the remainder of the year. In addition, fuel shortages caused vessels to lie idle because of a shortage of bunker oil needed for ocean transportation.

Spurred by the massive Russian grain purchases, world prices of wheat have also continued to climb even during 1973-74 record harvests. Perhaps the main reason for the unusual market behavior has been the uncertainty surrounding world production coupled with low grain stocks. Higher prices alone made the world picture especially difficult to assess, and major currency realignments within the past year further

increase the problem. In addition, a very tight world rice supply has added to the demand for wheat.

World wheat supplies for the 1973-74 season depended almost entirely on the 1973 harvests and were thus vulnerable to the uncertainty of one season's weather. Although measures have been taken to expand output, demand remains strong, and it will probably take more than one season with favorable weather to replenish world stocks to adequate levels. Wet weather and flooding in the United States delayed planting of spring crops for 1973-74 harvests. A decline is expected in Australia's 1973-74 wheat crop due to rust damage. As noted earlier, several wheat exporting countries curtailed wheat exports.

The large 1973-74 import requirements are due to many factors, including (1) lower grain production in North Africa, Central Africa, and West Asia, mostly because of drought, (2) growing demand for wheat in Japan, South Korea, and other countries where higher incomes and a desire to substitute wheat for rice or corn have been coupled with an inability to produce wheat, (3) the immediate needs of Asian countries, especially India and Bangladesh, for wheat to make up for last season's poor rice and coarse-grain crops, and this year's harvest, and (4) continued large imports by Russia and the People's Republic of China. China is expected to import 4 million tons of wheat from the United States during the 1973-74 crop year.

With world import requirements for the 1973-74 marketing year expected to remain strong, demand led to phenomenal early season sales and shipments of U.S. wheat. Undelivered export sales reflected this and markets became extremely bullish. Exports totaled over 600 million bushels from July through November, and as of February 3, 1974, had accumulated to 814.7 million bushels.

Despite considerable controversy during January 1974 over Agriculture's wheat projection figures, only nominal changes have been made in revised projections. Export figures published on January 17, 1974, were revised upward by 25 million bushels in the January 23, 1974 Agricultural Supply and Demand Estimates because shipments from other exporting countries dropped, indicating a slightly smaller outgo for the year from those origins and, hence, a somewhat larger requirement for U.S. wheat.

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Controversy over Agriculture projections arose because of an early January 1974 statement by the American Bakers Association predicting a shortage of wheat supplies. The Association predicted that this, in turn, would cause bread to disappear from grocery shelves or to sell for as much as \$1 for a 1-1/2 pound loaf by late spring. The Association called for export controls until the new wheat crop is harvested beginning in July. In presenting their position, the bakers emphasized that they operate on a low profit margin, making it unrealistic to expect American bakers to compete for wheat by bidding against foreign governments and cartels.

Agriculture countered the Bakers Association statement as an irresponsible scare tactic. In his rebuttal, the Secretary of Agriculture stated that wheat prices would need to rise to \$33 per bushel (six times higher than current prices) in order for the cost of wheat in a 1-1/2 pound loaf to be responsible for a retail price of \$1. Agriculture cited the farm value of wheat in this size loaf to be just over 7 cents with other costs and profits accounting for the remainder of the prevailing 47 to 52 cents retail price of the 1-1/2 pound loaf. He also pointed out that the milling and baking industries must assume responsibility for assuring their own supplies of raw materials as other industries do, instead of relying on Government-held grain surpluses at rock-bottom prices.

The February 1974 Wheat Situation report noted that over the past year retail bread prices have increased about 28 percent. The sharp price rise occurred as (1) the economy entered Phase IV of the Economic Stabilization Program which permitted cost passthroughs and (2) farm prices of wheat and other bread ingredients increased significantly. Thus, both farm value and marketing price spread widened at every stage in the marketing process. The resultant baker-wholesaler's price spread, probably most affected by controls, widened only from the 13.8 cents annual average in 1972 to 13.9 cents in 1973.

In the meantime, Agriculture has continued to discount any need or likelihood of export controls on wheat. Instead, it emphasizes the current suspension of wheat import quotas, efforts to persuade foreign buyers to defer delivery until the new crop is harvested, and efforts to persuade the Canadians and Europeans to move some of their wheat supplies

into the present marketing season. Results, except for an approximate 40 million bushel deferment by Russia, have been nominal.

Agriculture officials point out that a large portion of undelivered export sales reported weekly to Agriculture are for "unknown destinations." These officials further note that such contracts have not been sold to an end user and are still for sale to the highest bidder. During the first three weeks of February 1974, outstanding export sales reports showed that unknown destinations for the current year ending June 30, 1974, were averaging 27 percent of total undelivered export sales. For the week ending March 3, 1974, unknown destinations represented 16 percent of undelivered export sales. Similar bookings in the 1974-75 marketing year have been averaging 5 percent.

Agriculture officials suspect that talk about imposition of export limitations on wheat resulted in exporters purchasing futures contracts greater than their needs. If export commitments were then scaled back, such contracts, even though cut in volume, would be valuable. In addition, Agriculture notes that traditionally the fact that the price for a distant future contract is well below the nearby option indicates that the trade does not believe all reported sales will be made.

To meet both domestic and foreign demand while protecting record-high farm income, Agriculture states that the 1974 U.S. wheat program is designed to attract increased production of wheat. The program gives farmers flexibility to adjust their production to meet market demands. This allows farmers to respond to market signals that indicate current consumer demand through price and guarantees \$2.05 a bushel on wheat grown from the acreage allotment through the 1974 and 1975 crops.

The allotment is set at 55 million acres which Agriculture believes is the number of harvested acres of wheat, based on estimated average yield, necessary to provide production equal to estimated domestic and export demands in the 1974-75 marketing year. It is approximately three times as large as the 18.7 million acre 1973 domestic wheat allotment. No acreage set-aside is required during the 1974 wheat program, although the provision remains in the current legislative authority covering 1974-77.

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Agriculture's Extension Service held outlook meetings in August 1973 with the National Association of Wheat Growers, state wheat grower associations, and state extension services to provide facts on wheat production and demand in 1974. Information from these meetings was, in turn, disseminated to farmers through the state cooperative extension services to help farmers understand the wheat situation and evaluate their farm business in terms of alternatives available in 1974.

At the National Agriculture Outlook Conference in December 1973, the Administrator of the Federal Energy Office promised farmers they would get all the fuel they needed for food production. Consequently, the current energy crisis is not expected to have much effect on wheat production.

Agriculture's outlook for the 1974-75 cropyear is cautiously optimistic. Current high wheat prices, prospects for strong demand, and no planting restrictions are expected to result in expanded U.S. production of 2,060 million bushels. Wet weather in the Plains delayed plantings and necessitated some reseeding of Winter wheat. The delayed seeding and the inability to use sufficient fertilizer may tend to lower yields. Although the Government's price deregulation of fertilizer came too late to affect fall wheat planting, the most significant yield improvements directly attributable to the deregulation should be felt in the spring of 1974.

Assuming world grain supplies return to more normal levels, total U.S. wheat consumption in 1974-75 could be down substantially. Projected exports of 1,000 million bushels, down 20 percent from the previous year, and domestic consumption are expected to fall short of production resulting in an approximate 300 million bushel increase on the July 1, 1975, carryover, thus rebuilding stocks modestly to 494 million bushels. Should this occur, prices would likely soften considerably but still remain quite high compared with the early 1970s.

Given the incentives and provided that farmers can command the fuel, fertilizer, and other inputs they require, Agriculture's ERS has calculated that U.S. farmers could produce 2,300 million bushels of wheat by 1985--more through yield improvements than through use of added land. This projection assumes favorable incentive prices for farm products, no farm program restrictions on use of land, and

generally normal growing conditions, but it does not account for a variety of uncertain factors that might influence yields. On a worldwide projection, ERS forecasts that grain production in the developing countries in 1985 would still be less than the average yields in the developed countries in the early 1970s. Thus the technological problem for the developing countries is how to adapt and apply the existing technology which enables higher yields in developed countries.

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### COTTON

#### BACKGROUND

Cotton is the major fiber produced by U.S. farmers. It is a relatively high valued commodity, ranking 9th among U.S. export crops as a percentage of farm sales for the year ended June 30, 1973. Because of changing fashions and growing population, world consumption increased about 1.6 million bales during this season compared with annual increases ranging from 400,000 to 1.2 million bales during the preceding 4 years. The bulk of the increase is in blended fabrics, but the largest market is still for all-cotton goods, such as cotton sheeting.

World production reached an estimated 59.3 million bales for the crop year August 1972 through July 1973, and consumption totaled 56.7 million bales. Although global carryover stocks on August 1, 1973, were up 10 percent from a year earlier, this is considered below the minimum desirable level. The overall global carryover is equivalent to a 4.6-month supply. In 1972 members of the International Cotton Advisory Committee generally agreed that a 5-month supply was a reasonable level. The major buildup of stocks is occurring in non-Communist importing countries, whose carryover rose 16 percent while aggregate consumption rose less than 2 percent during 1972-73.

Major cotton-producing countries are the United States with 22 percent of world output, the Soviet Union with 18.8 percent, and the People's Republic of China with 11 percent. Major exporting countries are the United States with 25.6 percent of the export market in 1972-73 (up from 18.5 percent in 1971-72) and Russia with 14.5 percent. Among the importing nations, Japan purchased 19 percent in 1973, down 0.3 percent from 1972, and the People's Republic of China doubled its purchases to 7.8 percent.

The United States harvested an estimated 13.6 million bales in the 1972-73 crop year. This is the largest harvest since 1965. Exports during 1972-73 reached 5.3 million bales, a 55.8-percent increase from the previous year. These exports and domestic consumption of 7.7 million bales allowed a buildup of cotton stocks to 4 million bales. This was the first significant increase in the carryover since 1965-66. The carryover at the beginning of the year, 3.2 million

bales, represented a 23.8-percent decline from a year earlier and was the lowest stock level since 1951.

Raw cotton, in its usual marketing form, consists of masses of fibers 13/16 of an inch to 1-3/4 inches long. These fibers are packaged in bales for convenient handling. The U.S. official standard-weight bale is 480 pounds.

In the United States, the upland variety of cotton accounted for 99 percent of 1973 production. The raw cotton industry in the United States includes seven sectors: producers (farmers or growers), ginners, warehousemen, merchants (shippers or exporters), seed crushers, cooperatives, and manufacturers (spinners).

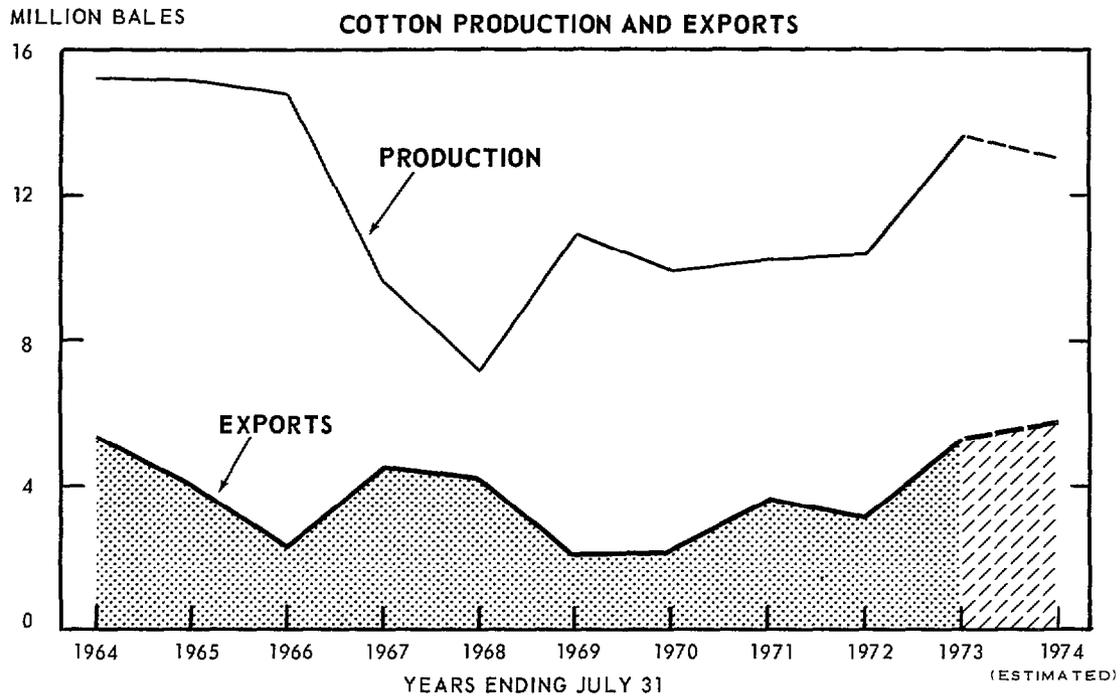
Graphs 5 and 6 illustrate recent trends in U.S. cotton production, prices, and exports.

Although consumption is rising because of increasing textile demand and scarce manmade fiber supplies, competition from other crops is eroding cotton acreage worldwide. The scarcity of manmade fibers is due to the shortage of petrochemical intermediates caused by the energy crisis. The energy crisis also affects the cotton industry but to a lesser extent. Other reasons for tight world cotton supplies are:

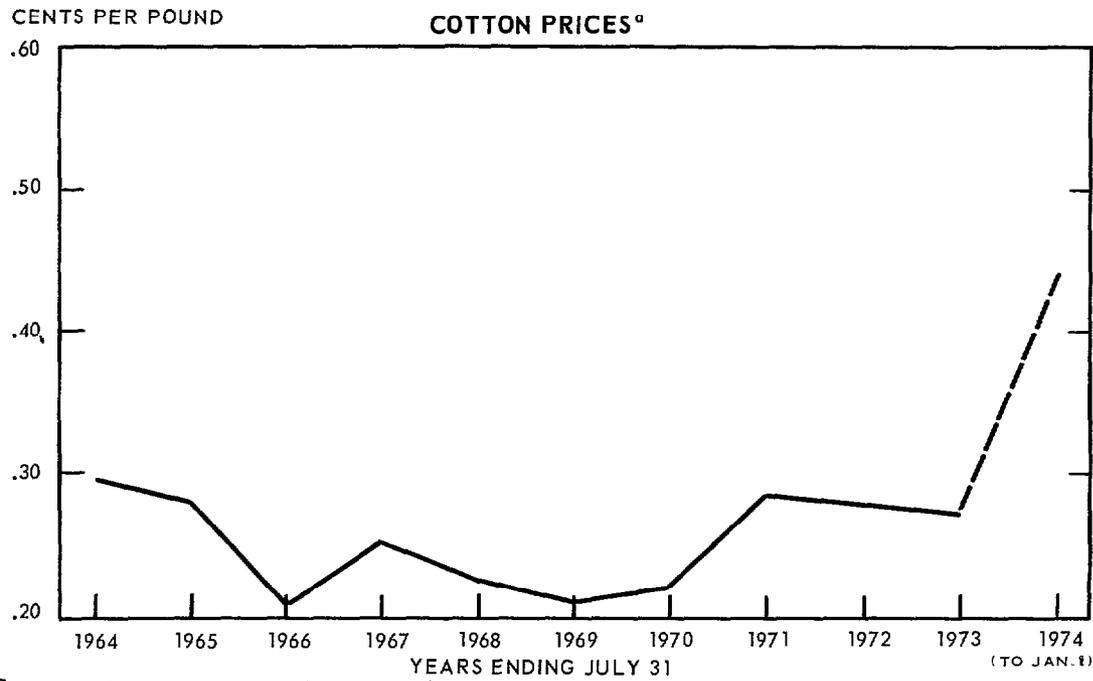
1. After the spring 1973 flood in the U.S. delta, acreage was switched from cotton to soybeans.
2. Drought in the Sudan, floods in Pakistan, and hurricanes in Mexico.
3. Major purchases beyond normal level by the People's Republic of China to offset the shortfall in indigenous production. Other countries followed suit.
4. Stockbuilding, which added 800,000 bales to demand over and above needs according to the International Cotton Advisory Committee. Japan showed the largest single increase, nearly 400,000 bales above the prior year. Its August 1, 1973, stocks of nearly 2 billion bales were adequate to meet more than half a year's needs.

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GRAPH 5



GRAPH 6



<sup>a</sup> Average farm price per pound - net weight  
(Before 1972, price was based on gross weight).

5. Devaluation of the dollar, in general, improved the U.S. competitive position.
6. Uncertainty over export control policies in several major producing countries.

This strong demand came at a time when U.S. supplies of medium and longer staples (1" to longer than 1-3/32") were already relatively tight because of reduced delta production. This, in turn, exerted pressure on mills, as such staples account for over four-fifths of domestic cotton use. Consequently, prices and exports increased sharply, despite increased world production and increasing world stocks. The result was a very "bullish" market for cotton.

A major highlight of cotton marketing in 1973 was increased forward contracting. Producers reported contracting about 50 percent of their 1972-73 cotton acreage compared with 33-1/3 percent in 1972 and 10 percent in 1970.

#### GATHERING INFORMATION AND MAKING FORECASTS

Agriculture compiles production data, and Commerce's Bureau of the Census compiles official consumption (or ginning) figures, export, import, and carryover stock data. Commerce was made responsible for compiling most cotton statistics. Agriculture uses the Commerce data but notes slight annual differences in carryover stocks, which it attributes to mill reporting errors.

The ERS Commodity Economics Division estimates that, to produce situation and outlook statistics for the fibers--cotton, wool, other fibers, and products--takes 3.2 professional man-years and 4.9 nonprofessional man-years. The number of persons throughout the Government involved in gathering statistics and making forecasts for fibers is difficult to determine accurately.

Agriculture analysts review all this information, and Agriculture issues forecasts in a series of publications--Agricultural Outlook Digest (monthly), The Farm Index, Cotton Situation report (five times a year), and several interrelated situation reports, such as Demand and Price Situation, Marketing and Transportation Situation, and World Agricultural Situation. In addition, annual outlook conferences give farmers and farm suppliers planning information.

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Agriculture's Outlook and Situation Board meets frequently to consider supply and demand estimates (published monthly if estimates change significantly) submitted by various commodity estimates committees. The Interagency Commodity Estimates Committee on Cotton (an economic analysis, not decisionmaking, group) coordinates and analyzes supply and demand estimates from four Agriculture agencies. The purpose of such coordination is to use the same set of figures Agriculture-wide. Cotton statistics are forecast for the current year and 1 year ahead but are not published before the marketing season due to legal prohibition. The Committee meets after production and planting intention reports for cotton have been issued and whenever a significant issue arises requiring its action.

Agriculture has drafted legislation to remove the prohibition against publishing cotton forecasts. The Congress passed the prohibitions in reaction to cotton forecasting problems in 1951. That year adverse harvesting conditions caused a sharp drop below forecast estimates. Agriculture operations officials believe that these statistics should be published and that users would acknowledge the assumptions of such projections.

The principal objective of Agriculture's outlook work is to get out accurate facts and appraisals of the farmers' economic prospects. The situation reports, noted above, are designed to do this directly by providing information

- useful to the farmer in production and marketing,
- about the supply and demand situation for people in the business of processing and marketing farm products to use in their planning and operations, and
- to people who deal with farmers--such as suppliers of fertilizer, feed, and credit--and to commodity investors.

Forecasting models do exist for cotton, but actual forecasts are not published ahead of the marketing season. The major set of cotton models was revised in late 1973.

Although a number of impact and incremental analyses have been made, we found no criteria or decision points at which to flag short-supply situations at critical phases.

Decisionmaking for such matters is done at a high operating level within the Department and not by analysts.

Agriculture also uses statistics prepared by the International Cotton Advisory Committee and the Liverpool Cotton Service Limited. The Committee, an association of governments, collects timely statistics on world cotton production, trade, consumption, stocks, and prices and disseminates them through a quarterly bulletin, Cotton-World Statistics, and a monthly review, Cotton. The Liverpool Cotton Services publishes weekly quotations in its Cotton Outlook to indicate the competitive level of offering prices from reliable suppliers for certain qualities of cotton. These prices, according to the Services, provide a fairly clear indication of the basis for each type. When a staple length is selling freely at the Services price indication, it is considered closely in line with the trading price but mills would usually expect to succeed with bids that were slightly cheaper.

#### TIGHT-SUPPLY SITUATION

Agriculture has generally opposed export controls on cotton. Both CIEP and CEA oppose export controls, promoting instead free market mechanisms.

Government control of cotton exports has been limited to the reporting systems established in 1973. Four types of upland cotton have been subject to export-reporting requirements of the Agriculture and Consumer Protection Act of 1973, administered by the Statistical Reporting Service. The Service issues weekly outstanding export sales reports. Until revision in February 1974, the reports' summary tables did not contain an accumulation of cotton exports for the year to date. The cumulative figure was included instead on an adjacent page under a grain table and was not footnoted or tied into the summary table.

Key interest groups within the cotton industry have expressed opposing viewpoints on export controls. The American Textile Manufacturers Institute Inc. recommended an export licensing system to Agriculture. Cotton Incorporated, a producer organization doing research and promotion work in the United States, concluded in a September 1973 study that export controls mask underlying problems and prolong shortage situations. Its analysis indicated that an embargo might

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reduce prices to a point where competition from other high-priced crops would kill the incentive for American farmers to expand cotton production. The International Cotton Advisory Committee does not have a recent position on export controls.

A legal point arising from the 1973 jump in cotton prices involved the efforts of some cotton producers to break their forward contracts as well as to go to court to back out of contracts, especially those made at lower prices. Cotton merchants, in turn, initiated legal action against the producers, and recent cases have been decided in favor of the buyers of forward and futures contracts.

With no export or price controls on raw cotton, the U.S. textile industry was displeased with exports, related tightening of supplies in medium and longer staple cottons, and resultant higher prices. Textile manufacturers have been concerned with the uncontrolled price of raw cotton, because it raised costs rapidly while Phase IV price controls held down selling prices and profits by prohibiting them from passing on the increased costs.

Under Phase IV, increased raw material prices can only be passed on within 30 days from the material's purchase date. If the ginner cannot use the raw product within the 30 days, he cannot pass the price increase on to the next processor. In the textile industry this is a monumental problem because it takes 6 to 9 months to process textile products and get them to the consumer market.

Tightening of medium and longer staple cottons has also caused concern because, through the years, U.S. mills have changed over to longer staple cottons. According to the American Textile Manufacturers Institute, it is considered a setback for them to revert to shorter lengths. Although costly, both Agriculture and certain segments of the cotton industry other than textile manufacturers note that historically, in times of scarcity of one staple length and surplus of another, the mills have eventually made the change.

Because of this "crunch," U.S. mills have been unwilling to bid on large military orders. Consequently, the Defense Department asked Commerce to use the Defense Production Act to force mills to fill military orders. The act empowers Defense to place "rated" orders which the mills must fill unless they qualify under one of the exceptions. If that

procedure fails, Commerce can order the mills to turn out the requested goods.

Various alternatives to export controls for cotton have been suggested. In November 1973 the President asked the U.S. Tariff Commission to review import quotas on cotton to determine whether they could be suspended without interfering with domestic cotton programs. Current quotas permit importation of 125,360 bales of various raw cotton lengths. Such imports from 1969 through 1973 ranged from 15 percent to 42 percent of the annual quota. The Commission held hearings in February 1974. Agriculture testified that, because of high world market prices and strong world demand for cotton, it seemed reasonable to conclude that suspension of cotton import quotas would not result in the Government's acquiring stocks and incurring related costs. Further, the requested suspension would not be likely to render or tend to render ineffective or materially interfere with Agriculture's price-support program for cotton or reduce substantially the amount of products processed in the United States from domestically produced cotton.

The National Cotton Council stated its support for a temporary suspension--not to exceed 1 year--of quotas for those qualities in short supply. This position was supported to some extent by some producer groups, while other producer representatives testified against the proposed suspension, largely on the basis that increased imports would have a negative effect on prices received by U.S. cotton farmers.

According to the Liverpool Cotton Outlook, however, this suspension move struck foreign observers as an inept action at this "bearish" juncture since such action would greatly increase the attraction of New York as an international marketplace for cotton futures transactions.

According to Agriculture personnel, import restrictions on cotton were imposed as early as 1939 to protect the Department's price support and other stabilization programs from interference by imports, i.e., to ensure that imports do not create additional costs under price support operations. It is not legislation for the benefit or protection of cotton producers. The American Textile Manufacturers Institute, however, observed that import quotas on raw cotton were designed to preserve and protect U.S. cotton production.

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In another marketing aspect, testimony provided congressional hearings in 1973 alleged that one trader on the New York Cotton Exchange held 67 percent of all cotton futures contracts calling for October 1973 delivery. Several congressional committees held hearings to strengthen and revise laws for commodities markets, especially to avoid any possible manipulation.

Another alternative to export controls would be to set up worldwide cotton reserves. The International Cotton Advisory Committee stated that it has never succeeded in making such reserve arrangements. The Committee has only the right of suggestion to its member governments. On two occasions, once in the mid-1950s and again in the late 1960s, members discussed and rejected commodity agreements to stabilize world cotton prices. The proposals floundered because of the wide variety of staples; the difficulty in finding a price range at which cotton could remain competitive with synthetics; and the difficulties of accepting import commitments, controlling production, and financing. According to the United Nations Food and Agriculture Organization, a buffer stock scheme, financed by importing as well as exporting countries with stock distributed among the main producing and consuming countries, yet coordinated by a control body, might achieve price stability at competitive levels.

In October 1973 the Committee planned to suggest to its members that, in light of shortfalls and tightening supplies, a review of marketing access and pricing policies of some members' exporting actions be undertaken in response to a request from the Secretary General of the United Nations Conference on Trade and Development to arrange for intensive intergovernment consultations on these issues. Due to unrelated political problems, however, the Committee's meeting was canceled, and no action could be taken.

One segment of the U.S. cotton industry, the American Cotton Shippers Association, has stated its position against reserves. The Association stated:

"The establishment of surpluses under the guise of buffer stocks or reserve stocks as price stabilizers will adversely affect the market place. Past experience has clearly shown that surpluses over and above the domestic and export needs will tend to depress prices and interfere

with normal marketing mechanisms regardless of how well and by whom the surpluses are administered. We oppose the establishment of a strategic cotton reserve, national cotton reserve or buffer stock."

Agriculture's alternative to export controls is to increase production. Agriculture has promoted this position through outlook conferences and through its 1974 farm programs. A National Agricultural Outlook Conference was held in Washington, D.C., from December 17 to 19, 1973--2 months earlier than usual--to give farmers and farm suppliers more time to plan for 1974 food and fiber production. The 1974 upland cotton program, like the 1973 program, calls for no marketing quotas or set-asides. There is no limit on planted acreage during the 1974-77 period covered by the current Agriculture and Consumer Protection Act.

Cotton Incorporated has suggested that a complementary strategy would be to argue against restrictions on the basis of total world stocks and to develop an organized effort to increase 1973-74 U.S. production.

#### FUTURE PROSPECTS

The outlook for cotton is mixed. Despite the attractiveness of higher prices, the 1974 cotton production level will depend, in great measure, on adequate fuel and fertilizer supplies plus less competition for acreage use from high-priced, strong-demand food crops such as soybeans. The demand for raw cotton benefits from energy crisis limitations on the production of manmade fibers. According to industry groups, it takes about five times as much energy to produce 1 pound of synthetics as it does to produce 1 pound of cotton. The production of both raw cotton and cotton textile products are also subject to restrictions caused by fuel and fertilizer shortages.

Agriculture forecasts U.S. cotton production for 1973-74 at 13 million bales and world production at 60 million bales. Severe flooding in Pakistan and indications that mainland China was unlikely to recover to the extent expected had threatened a world decline of 1 million bales from the 1973 figures, but partial recovery was made in both countries. Significant declines were also expected in Mexico and Turkey because cotton acreage was shifted to other crops. In

## APPENDIX I

Australia floods are expected to decrease this year's crop to the point that export markets established over the past several years will not be supplied and imports may be needed to cover domestic requirements. World production is now expected to approximate only 600,000 to 700,000 bales above that of 1973.

Prospects are that consumption will continue at a high level during 1973-74 in spite of high prices, anti-inflation measures, and stockbuilding. Agriculture forecasts domestic consumption will decrease to 7.5 million bales while world consumption will increase to 58.3 million bales.

Using 1967 as the base year, the price index for all cotton prices received by farmers reached 213 percent for December 1973. Prices for cotton products are expected to rise in the spring of 1974 and again in the fall. Recent reports from trade sources anticipate changing clothing-purchase patterns as a result of fuel cutbacks.

Raw cotton spot (cash) market prices for the upland varieties rose from an average of 28 cents a pound in 1971-72 and 27.3 cents a pound in 1972-73 to 44.6 cents a pound in September 1973 and 47.9 cents a pound in December 1973. At the end of January, futures prices for the 1974 crop months (October and December 1974: March and May 1975) ranged from about 62 to almost 67 cents per pound for Strict Low Middling 1-1/16 inches cotton. While no precise figures are available, forward crop contracts for 1974 were generally reported to be at levels well above 50 cents per pound.

U.S. cotton exports during 1973-74 are expected to reach about 5.7 million bales. As of late January 1974, U.S. cotton exporters had already reported undelivered export sales of 4.5 million bales for delivery through July 1974, in addition to 2.2 million bales already sold and shipped. Agriculture expects that overloaded transportation and merchandising facilities along with the fuel shortages slowing ocean shipping will limit actual shipments to the forecast of approximately 5.7 million bales. Only the United States is expected to show reduced stocks on August 1, 1974, because of its large volume of exports. Agriculture projects the U.S. carry-over will decrease to 3.7 million bales while global carry-over stocks will rise to 24.3 million bales, up 1 million bales over the previous year.

To help expand production, Agriculture's Extension Service held a series of meetings in January 1974 to provide facts on 1974 cotton production and demand. The Service drew on the resources of the Cooperative Extension Services in major cotton-producing states, the local land-grant universities, cotton industry organizations, and Agriculture agencies. Information from these meetings was disseminated to farmers through state Cooperative Extension Services to help farmers understand the cotton situation and evaluate their farm business in terms of alternatives available to them in their 1974 operations.

Forward contracting is considered the key to cotton's future. Trade sources indicate that approximately 75 percent of the 1973-74 crop has been contracted. This reflects greater reliance on the market and less Government involvement in cotton producing and marketing. "Locking in" a price at an early date can give cotton farmers a tremendous advantage in planning production and securing loans to cover expenses. Contracting is also considered clearly beneficial to the mills which purchase the raw product 6 to 9 months before completion of the end product.

At the December 1973 National Agriculture Outlook Conference, the Administrator of the Federal Energy Office promised farmers they would get all the fuel they needed.

Agriculture calculates that farmers could produce over 16 million bales of cotton by 1985, given adequate fuel, fertilizer, and other inputs. These projections assume favorable incentive prices for farm products, no land-use restrictions, and generally normal growing conditions but do not account for a variety of uncertain factors that might influence yields.

## APPENDIX I

### FERTILIZER

#### BACKGROUND

The CLC Director has stated that a return to relative food price stability in the United States hinges on farmers' ability to significantly expand their output in 1974. An integral element in crop expansion is an ample supply of fertilizer. Nearly 30 percent of U.S. food grain output is directly due to fertilizers, and the final effect of a fertilizer shortage would be borne by the consumer in increased prices at the supermarket.

World interest in fertilizer has intensified as crop yields have increased through its use. Developing countries need fertilizer to increase food production, and developed countries use it to produce surplus food which can be shared with developing countries.

World consumption totaled 75.2 million tons of primary plant nutrients in 1971, more than double the level of 1962. By 1975, world consumption is expected to be about 95 million. Phosphate rock, urea, concentrated superphosphates, and ammoniated phosphates are the four most important fertilizer products in international trade.

Fertilizer consists chiefly of a wide assortment of chemical compounds, containing one or more of the three primary plant nutrients--nitrogen, phosphate, and potassium. Lesser tonnages of materials containing secondary nutrients (calcium, magnesium, sulfur) and micronutrients (boron, copper, zinc, manganese, iron, molybdenum, chlorine) are also marketed.

Each of the primary plant nutrients has specific production characteristics. Nitrogenous fertilizers, such as ammonium sulfate, ammonium nitrate, and urea, are obtained from anhydrous ammonia, which, in turn, is produced from natural gas. Phosphate fertilizers, such as diammonium phosphate and superphosphate, are made by chemically treating mined phosphate rock. Potash is mined. In the form of sulfuric acid, sulfur is extensively used by the fertilizer industry, mainly in manufacturing phosphatic fertilizers and ammonium sulfate.

Domestic production of primary fertilizer plant nutrients in 1972-73 was estimated at 18.7 million tons. In 1972 farmers spent \$2.5 billion for an estimated 41.2 million tons of manufactured fertilizer, and tonnage was expected to increase to 42.5 million tons in 1973 and to 60 million tons by 1980. Fertilizer accounts for 5 percent of total farm-production expenditures. Over 96 percent of corn acreage, 77 percent of cotton acreage, and 63 percent of wheat acreage were fertilized in 1972, compared with only 31 percent of the soybean acreage.

Worldwide, in the 1970-71 crop season the United States ranked first in total use of each primary plant nutrient and in producing nitrogen and phosphate and fourth in producing potash. It produced 24 percent of the world's plant nutrients and used 23 percent of them.

U.S. imports of fertilizer increased during 1969-72 from \$192 million to \$232 million and increased further in 1973. For the first 7 months of 1973, imports were \$161 million, up 10 percent over the same period in 1972.

The United States is a net exporter (exports exceed imports) of nitrogen and phosphates, but a net importer (imports exceed exports) of potash. It will become more dependent on Canadian potash and foreign nitrogenous fertilizers in the future.

U.S. fertilizer exports including phosphate rock, rose 17 percent in dollar value to \$339 million during fiscal year 1972, and rose another 38 percent to \$468 million in fiscal year 1973. During the first 8 months of 1973, exports of nitrogenous fertilizer and materials increased to \$55 million, 42 percent above the same period in 1972, and exports of phosphatic fertilizers and materials increased 55 percent, to \$166 million.

A large part of commercial export sales of fertilizer are made through the Domestic International Sales Corporation, an income tax deferral incentive to encourage exports. In addition, phosphate-rock, potash, and sulfur Webb-Pomerene Associations permit U.S. companies to compete more effectively in foreign markets and to receive qualified exemptions from prosecution under U.S. antitrust laws.

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Graphs 7 through 10 show recent trends of U.S. fertilizer production, exports (excluding phosphate rock), and prices.

### GATHERING INFORMATION AND MAKING FORECASTS

Many organizations collect data and prepare analyses on the fertilizer situation.

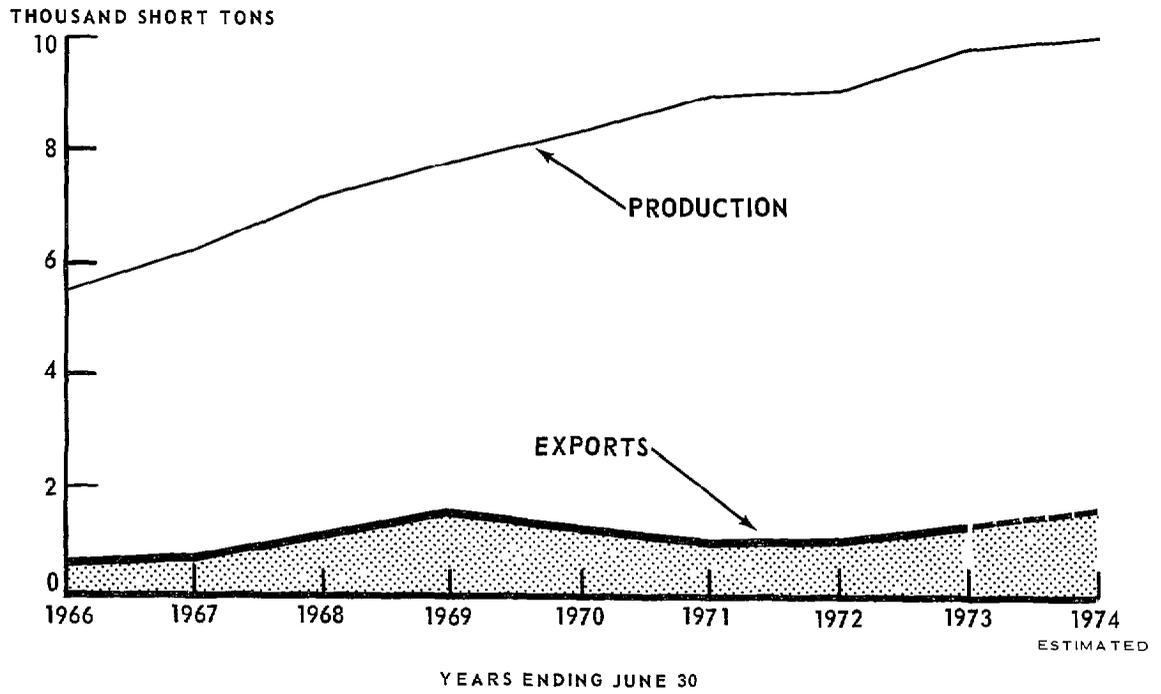
- The Food and Agriculture Organization of the United Nations publishes The Annual Fertilizer Review, a comprehensive statistical summary of world production, consumption, imports, and exports of fertilizer materials by country.
- The National Fertilizer Development Center of the Tennessee Valley Authority reviews the world fertilizer market situation and forecasts the supply and demand situation every 2 years for the Agency for International Development.
- Industry, the Bureaus of the Census and of Mines, and the Tariff Commission have production data available.
- Agriculture's Statistical Reporting Service prepares data on domestic fertilizer consumption.
- The Bureau of the Census releases import and export statistics for fertilizer materials.

Commerce, Agriculture, and Interior are the primary Government agencies which prepare analyses on fertilizer and fertilizer materials. Commerce monitors industrial chemicals and issues a weekly report on business conditions highlighting current events for these commodities.

Agriculture recognizes fertilizer as a farm input and publishes an annual outlook report on the fertilizer situation as it applies to agricultural production, prepares special analyses, and reports annually in The Fertilizer Supply. Agriculture is responsible for programs distributing commercial fertilizers domestically in a national emergency and for making emergency loans to mixers and distributors of fertilizer.

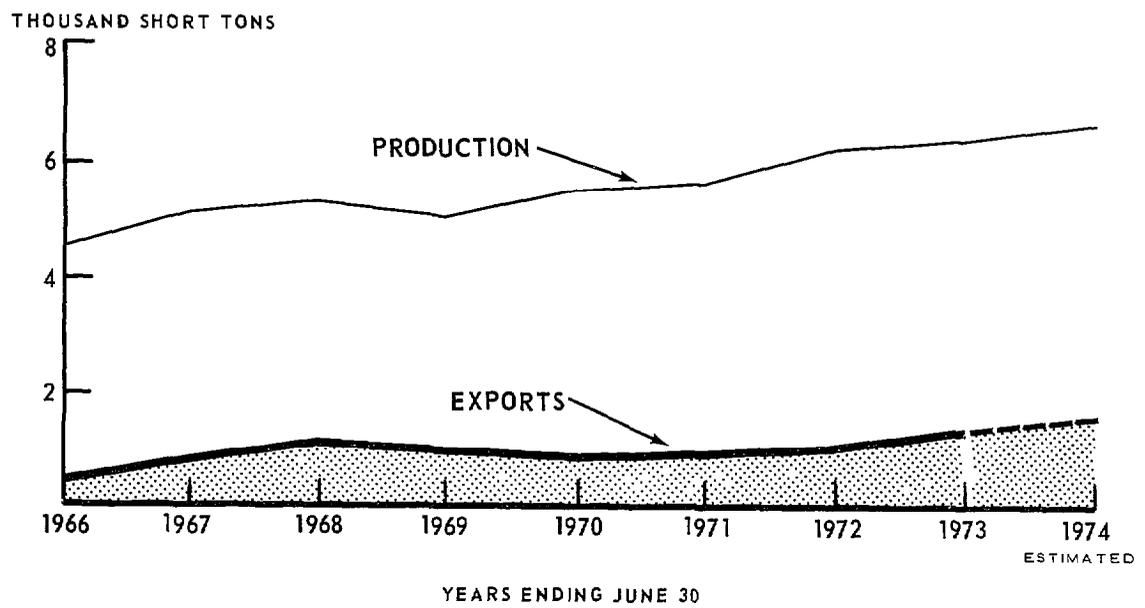
GRAPH 7

**NITROGEN PRODUCTION AND EXPORTS**



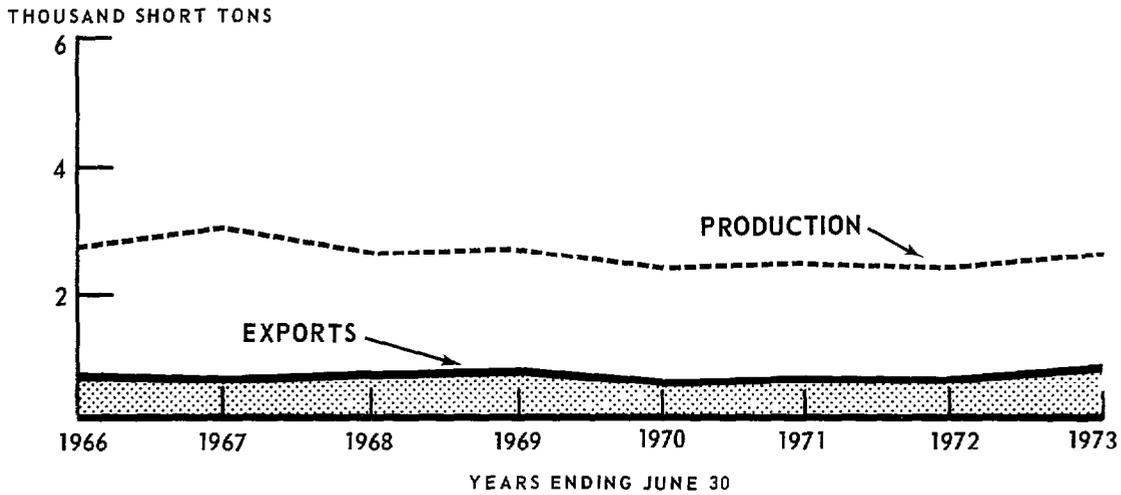
GRAPH 8

**PHOSPHATE PRODUCTION AND EXPORTS**

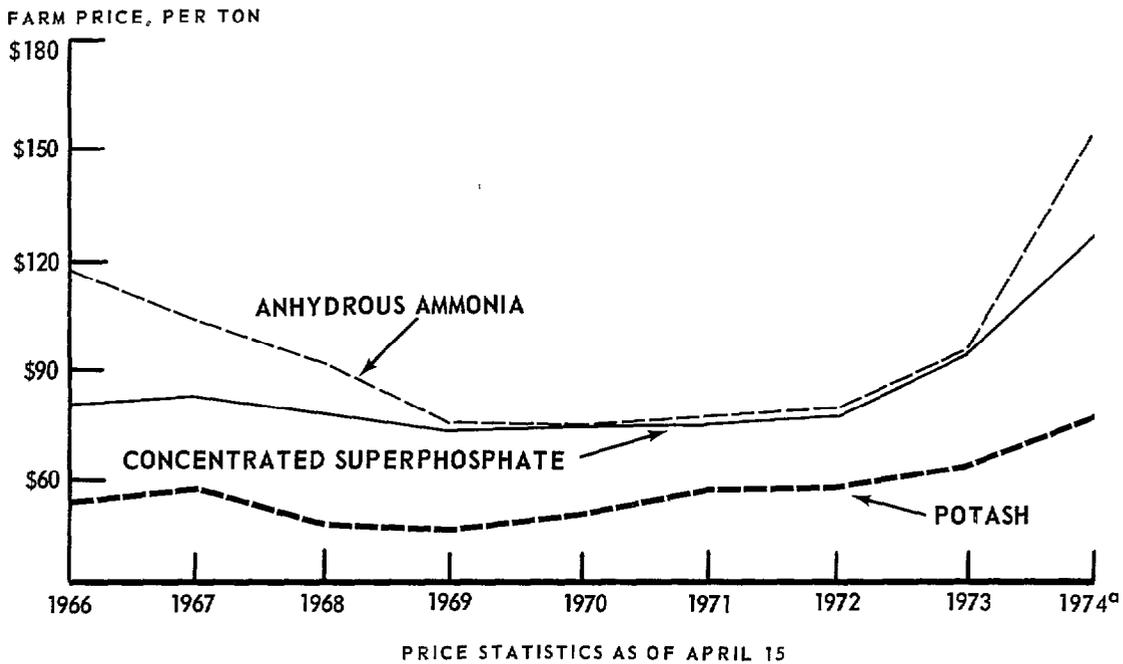


GRAPH 9

POTASH PRODUCTION AND EXPORTS



GRAPH 10  
PRICES



<sup>a</sup>1974 PRICE AS OF DEC. 10, 1973

The limited accuracy of recent forecasts in light of the fertilizer situation is discussed in the context of the tight-supply situation in the following section.

#### TIGHT-SUPPLY SITUATION

For the past 2 years, there has been real concern that adequate domestic fertilizer supplies would not be available. However, except for localized difficulties caused by logistics problems, demand has been satisfied each year.

For many years the fertilizer industry experienced overcapacity and low prices until late in 1971, when international supplies of several fertilizer materials fell short of increased demand levels. Export prices rose, but domestic fertilizer prices were frozen under Phase I of the Economic Stabilization Program in August 1971. The industry had been operating at a loss during the preceding 3 years, and, although prices increased in 1971, domestic prices were frozen at low levels. Thus, a great disparity arose between world and domestic prices and many producers preferred to increase their exports and receive the higher export prices.

The consequence of strong demand and high export prices led to increased output of domestic phosphate materials. Ammonia manufacturers, however, have been unwilling to invest in production facilities because of curtailments of natural gas and increasing difficulties in obtaining gas contracts. Some 36,000 cubic feet of natural gas are required to make a ton of ammonia in a modern efficient plant. And, as the price of gas rises, so may the price of its substitutes. All fertilizers containing nitrogen, therefore, are affected by price increases for ammonia.

In 1971 U.S. demands for natural gas were unsatisfied for the first time. The natural gas deficit is expected to grow from 1971's 0.9 trillion feet to 17.1 trillion feet by 1990. These deficits compare with estimated annual consumption ranging from 23.7 trillion cubic feet in 1971 to 29.3 trillion cubic feet in 1990.

The fertilizer industry, through its national Fertilizer Institute, was denied exemption from price controls by CLC early in 1972. The Price Commission granted relief on a company-by-company basis. In the spring of 1972, domestic cooperatives (who, as manufacturers, supply domestic

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members before foreign customers) charged that price controls were creating domestic shortages of phosphate fertilizer.

Agriculture studied the supply and demand situation and concluded that the anticipated increased world demand was temporary because foreign firms were importing fertilizer to develop markets for their products until new plants were constructed. The study indicated that, overall, fertilizer supplies were relatively stabilized and should, in fact, improve.

This conclusion was supplemented by a Tennessee Valley Authority announcement in August 1972 that, based on plant capacities and production estimates, ample amounts of most fertilizer materials from world suppliers should continue to be available through 1975.

In August 1973, however, Agriculture found that farmers were having difficulties obtaining specific types of fertilizer and that supplies of some nitrogen and phosphate materials would be short of demand by spring 1974.

Several factors have been responsible for the tight supply and demand balance of nitrogen and phosphate fertilizers. High grain prices prompted the release of nearly 62 million acres of U.S. cropland that had been diverted from production prior to 1972. Exports of U.S. fertilizers increased greatly as foreign buyers were able to pay more than domestic ceiling prices while getting discounts through dollar devaluation.

In September 1973 The Fertilizer Institute again petitioned CLC to remove price controls. CLC asked ERS to analyze prospective economic developments in the industry to determine whether continued controls would cause serious shortages in the coming year. Projected nitrogen shortages were placed at 1 million tons and phosphate shortages at 700,000 tons, or 4 million tons of manufactured fertilizers. The Secretary of Agriculture, in transmitting the requested analysis to CLC, stated:

"The analysis indicates the need for prompt action on our part to remove price ceilings now applying to the fertilizer industry. At the very time that we are taking every possible course of action to encourage American farmers to increase production of food and fiber, we are confronting a potentially

serious domestic shortage of fertilizer, particularly nitrogen and phosphate. World prices of fertilizer are now far above ceiling prices imposed on domestic sales, thereby threatening to further exacerbate what will be at best a very tight supply situation later this year and in the spring of 1974.

"Immediate removal of fertilizer price ceilings will permit our farmers to bid against users elsewhere in the world for available supplies, encourage our fertilizer industry to utilize their plants at maximum capacity, and make further investments in new plant capacity to insure adequate fertilizer and food supplies in the future. I fear that crop yields and production will be reduced in 1974 relative to that which is needed, thereby contributing to continued pressures on domestic food prices."

At this same time, the Assistant Secretary of Commerce for Domestic and International Business recommended relaxing price controls on nitrogenous and phosphate materials to stimulate additional production and to minimize the incentive for exporting them. He recommended an export monitoring system to assess the need for export controls and urged the Federal Power Commission to give priority to natural gas requirements for all anhydrous ammonia production. No critical problems were cited for potash. Studies made by Agriculture and Commerce showed export embargo and increased production were alternatives to decontrolling prices to increase domestic fertilizer supplies.

The Commerce report stated that the estimated nitrogen shortage could be more than covered by reducing exports of nitrogenous materials to about 50 percent of the total exported in the 1972-73 crop year, assuming that imports remained the same, and that the phosphate shortage could be covered by reducing the 1972-73 level of phosphate exports by 30 percent. The report also stated that export controls, if used, should reflect the historic pattern of exports, not current orders on the books, and that great restraint should be exercised in imposing them on phosphate materials because of the importance of phosphate rock and phosphate exports to the U.S. balance of trade.

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The Fertilizer Institute said that embargo was not the answer because of the possibility of retaliation. The United States imports 60 percent of all its potash from Canada and exports 3 million tons of phosphate rock to Canada. U.S. urea imports were 700,000 tons in 1972; however, it exported considerable amounts of phosphate materials to these urea-source countries.

The Agency for International Development sponsored about 11 percent of exports of all fertilizers in 1972-73, and the Commerce study stated that an all-out embargo would run counter to Government policy for the Agency's programs. To insure continuation of the programs, it was suggested that allocations would have to consider the country of destination. The Agency agreed not to ship fertilizer from February to May 1974, when approximately 70 percent of U.S. fertilizer is applied, except in emergencies.

The Agency pointed out that financing one ton of fertilizer can increase food grain production by five tons. Thus the Agency noted that it made economic sense to finance the fertilizer at existing prices, rather than to subsequently finance larger amounts of food grains.

At a hearing of the Subcommittee on Department Operations of the House Committee on Agriculture on the fertilizer shortage in October 1973, CLC said it was trying to find a delicate balance between increasing prices to encourage adequate supplies of fertilizer for farmers' needs in the short run while avoiding significant upward price pressures in agriculture and other sectors of the economy.

On October 25, 1973, CLC exempted the fertilizer industry from Phase IV controls but stated that the fertilizer industry's problems went far beyond any dislocations that might result from price controls. A Government task force of CLC, Agriculture, Commerce, and CEA representatives addressed these problems with a coordinating group named by the fertilizer industry. The fertilizer industry indicated it would make an all-out effort to provide adequate fertilizer supplies to U.S. farmers and would divert tonnage from exports to the domestic market, operate marginally productive plants, reopen closed plants, and construct new production facilities. CLC decided, on the basis of these industry commitments, not to call for export controls.

To insure adequate domestic supplies, the Government task force planned to (1) work with the Department of Transportation to eliminate shipping bottlenecks and improve transportation availability, (2) institute a monitoring system for fertilizer exports contracted for shipment in 1973 and 1974, (3) advise farmers on minimum fertilizer requirements through the Extension Service of Agriculture, (4) establish weekly reporting of average prices by manufacturers, traders, and brokers, and (5) work with the Fertilizer Institute and the National Fertilizer Solutions Association to seek additional opportunities for insuring supplies of fertilizer for U.S. farmers.

The CLC Director stated that CLC's actions affirmed its commitment to the administration's goal of significantly expanding agricultural output and thereby stabilizing food prices. It is anticipated that, without price controls, needed fertilizer supplies will return to the domestic market instead of being exported.

CLC also exempted from controls fertilizer nutrient material used in producing explosives to allow other producers to remain competitive for raw materials with fertilizer producers. Ammonium nitrate continues to be in short supply due to the increased demand for fertilizer materials, explosives used in coal strip mining, and other uses. The shortages of coal and ammonium nitrate are related. Lack of available coal precludes utilities' or industries' changing from natural gas to coal as the President's recent energy message urged. This limits the availability of natural gas for making the ammonia which is the source of ammonium nitrate.

CLC also exempted from controls the sale of ammonia, urea, phosphate, and potash used in manufacturing plastics, synthetic fibers, animal feeds, and other products to maintain the competitive balance between the various bidders for fertilizer materials. If domestic prices increase substantially, small amounts of ammonia for nonfertilizer uses, including fibers, plastics, and explosives, might be retained for fertilizer purposes.

One unknown is the extent of domestic demand for urea for animal feed. The cost saving of using urea as a protein substitute for oil meals is great enough to attract a substantially larger tonnage into animal feed. ERS estimates that as much as 800,000 tons of urea may now be going into animal feeds each year.

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In November 1973 the sulfur industry petitioned CLC to decontrol the price of sulfur with the other fertilizer materials to encourage expanding sulfur production and sales to the domestic market and to prevent greater exports. The industry points out that new phosphate fertilizer plants cannot operate without an assured sulfur supply and that sulfur is currently in tight supply in many areas of the world, including the United States. The sulfur industry further stated that drastic price declines, due to an over-supply period from 1968-72, forced some U.S. sulfur plants to close because their operation was no longer economical. However, a government analyst observed that these plants were closed because of imports from Canada and Mexico, and because of short gas supplies. The analyst also noted that Canada has a 10-million-ton stockpile and the United States about 4 million tons.

About half the sulfur used in the United States goes into producing fertilizers, and the other half is spread throughout industry. Sulfur, or its acid, is used in almost every industrial process. For this reason, and because sulfur is in the hands of a strong oligopoly, CLC would be reluctant to remove or significantly increase sulfur price ceilings.

### FUTURE PROSPECTS

Exempting fertilizer from price ceilings allowed prices to rise sharply. Major fertilizer producers increased wholesale prices 30 to 60 percent during the week following decontrol. By December 10, 1973, retail prices for nitrogen, phosphate, and potash fertilizers had increased about 50, 35, and 15 percent, respectively. These domestic price increases eliminated much of the incentive for exporting fertilizer, and plants are producing more.

Price decontrol and increased production should increase available domestic fertilizer, and the depressing effect of higher prices on demand should ease the severity of the fertilizer problem. The Fertilizer Institute has pointed out that, even if the cost of anhydrous ammonia rose 75 percent and diammonium phosphate rose 25 percent, costs would increase less than 7 cents a bushel for corn, 9 cents a bushel of wheat, and 1 cent a pound for cotton. An industry spokesman said in December 1973 that price decontrol came too late to affect winter wheat plantings in the Plains States. However, the expanding supply did reach the Midwest States in time to

have a good impact on the November 1973 "plowdown." The most significant yield improvements directly attributable to price decontrol should be felt in the spring of 1974.

New plants and interim revival of some older plants will add about 750,000 tons of ammonia to U.S. annual production capacity and about 1 million tons of phosphate during 1974. Potential capacity for phosphate production is expected to be about 1 million tons in 1975. But the Fertilizer Institute estimates that, if all the acreage projected by Agriculture actually goes into crops in 1974, the U.S. farmer will still probably lack 2 million tons of manufactured fertilizer.

Energy in all forms is essential to producing all fertilizers, including sulfur to make phosphate materials, and it is probable that the output of most fertilizers will be curtailed to some extent by the short supply of energy. The Fertilizer Institute has reported that 41.6 percent of the Nation's nitrogen-fertilizer-producing plants have low-priority, interruptable gas contracts.

Nitrogen fertilizer manufacturers need 43 billion cubic feet of gas (which is used both as a fuel and feedstock) to produce an extra million tons. This makes their total natural gas demand for fertilizer 470 billion cubic feet--2 percent of the Nation's total annual consumption. The Federal Power Commission has no jurisdiction over intrastate supplies. It currently deals with an industry's gas priority on an ad hoc basis as curtailment becomes necessary, not on a national policy basis.

Phosphate rock mining may be slowed by reduced electric power in Florida. The phosphate mines account for about 10 percent of the electric power used in Florida, and demand can exceed generating capacity in the summer months. A shortage of sulfur could limit the production of phosphatic fertilizers and natural gas is also used in producing sulphur and potash.

The major unknowns for the fertilizer situation are the (1) level of natural gas curtailments to ammonia producers and (2) logistics problems. Even though rail companies are adding to their railcar fleets daily, the fertilizer industry reported that shippers were getting only about 50 percent of the cars they ordered in fall 1973. Some spot shortages are

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expected, particularly as record grain and other cargo shipments compete for limited transportation capacity. However, if these possible shortages are evenly distributed among farmers, Agriculture feels crop yields should not be affected significantly.

Moderate reductions in phosphate application rates this year may have little effect on yields because phosphates have been applied at buildup rates for years. The impact of reducing nitrogen application rates would be greater, as nitrogen is not retained in the soil. Yet, many farmers are applying nitrogen at high levels which give only limited yield response and their yields would not be much reduced by lesser quantities of nitrogen fertilizers. Other farmers who apply lower levels of nitrogen may realize sharper declines.

If demand continues strong in the immediate future, nitrogen fertilizers will be in tight supply for several years. The squeeze on phosphates could ease by the end of 1974, with supply equal to demand in 1975. Potash production capacity in North America is considerably above demand, and additional capacity is probably being considered.

CATTLEHIDESBACKGROUND

Cattlehides are a byproduct of the meat-slaughtering industry, and the supply is based on the demand for meat. Hides from death losses are small and are not always of tanning quality, often ending up as fertilizer or glue stock. Major hide producers are the large meat-packing companies which sell the rawhides to dealers, brokers, or tanners. The tanners process the hides to make leather, and the principal purchaser of the leather is the shoe industry.

The United States is the leading free-world producer and exporter of cattlehides. Argentina was the second-largest exporter until 1971. The leading hide-importing nations are Japan and Italy, and the United States supplies them with about 80 percent and 10 percent of their requirements respectively.

Foreign countries, such as Argentina and Brazil, have limited their exports of raw cattlehides in recent years in an effort to export more finished leather and leather products.

Argentina drastically reduced its hide exports from 7.5 million in 1970 to 3.4 million in 1971. In 1972 few hides were exported from Argentina or Brazil. A major purchasing shift was thrown upon the remaining hide-exporting countries, and importers of Argentine hides turned to the United States as the leading producer and exporter.

To insure an adequate supply of hides to meet its demand, Japan made long-term contracts with American meat-packers at prices ranging from 1 to 2-1/2 cents a pound above ceiling prices to domestic tanners.

Fearing that foreign demand would drive prices up sharply and disturb the domestic and export trade balances, on May 7, 1971, a U.S. leather industry association asked Commerce to restrict U.S. exports to the 1970 level. Many congressmen supported this request.

In the first part of 1972, the U.S. tanning industry experienced its most difficult situation in many years. The

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rapid and explosive advances in world hide prices in 1972 required greatly increased outlays of operating capital which seriously strained tanners' resources. Manufacturers and retailers of shoes and other leather products found it difficult to adjust prices to keep up with the sharp rise in raw material costs.

Domestic leather industries, and ultimately the American consumer, were at a disadvantage because of Phase II price controls. Although the price freeze was modified to permit a "pass through" of increased hide costs on a dollar-for-dollar basis, the Price Commission limited shoe manufacturers' price increases to the actual increase in leather cost, without a margin.

When a request for controls is made, Commerce's Bureau of Domestic Commerce is requested to compile data on commodity price, supply, and demand. Not all the basic data needed on cattlehides was available during the 1972 short-supply situation, so the Bureau of the Census made a special survey in April and May 1972. By the time the survey was completed, indicating the true situation, it was too late to take alternative measures to correct the situation. Therefore, export controls were imposed.

Traditionally, composite hide prices averaged 14 cents a pound during 1953-71. Survey statistics show that prices started increasing during 1971, and, by the time the Census survey began, prices had almost doubled. Cattle slaughter increased about 1 million in 1968, remained at about the same level for the next 2 years, increased in 1971 about 1 million, held steady in 1972, and decreased by about 2.5 million in 1973. Exports were 12.9 million hides in 1968 and continued to increase by about 1 million each year until 1972, when they increased 1.6 million, resulting in exports of 17.6 million hides. Exports for 1973 were 16.9 million. Thus, slaughter was not keeping pace with increasing exports after the late 1960s.

On July 16, 1972, Commerce imposed export controls, requiring a valid license to export raw cattlehides and establishing a quota based on the previous year's shipments. This was the second time such controls had been established for hides. In 1966 controls were in effect for 8 months before being removed by an act of Congress which prohibited

Commerce from using appropriated funds to administer the export control program on hides.

The 1972 controls were short-lived. About 6 weeks after they went into effect, the section of the Export Administration Act under which they were imposed was amended to provide that short-supply controls could not be imposed on cattlehides if the Secretary of Agriculture determined supply was in excess of domestic demands. An amendment was also included which retroactively terminated any controls on agricultural commodities, including hides, which had been imposed after July 1, 1972.

Graphs 11 and 12 show recent total slaughter, cattlehide export, and cattlehide price trends.

#### GATHERING INFORMATION AND MAKING FORECASTS

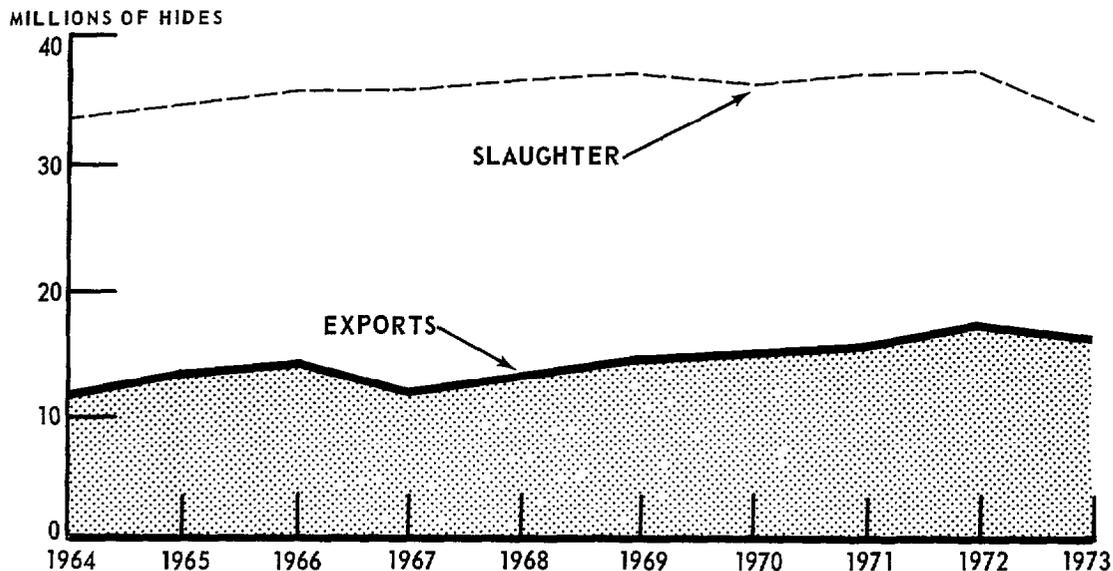
Commerce's OBRA began gathering data on the cattlehide situation during the second quarter of 1971, after it was learned that Argentina planned a low export quota on cattlehides. It gathered price data daily from various trade papers, and Agriculture gave it actual slaughter data monthly and estimates for the next years' slaughter. The Census Bureau provided export data, and the State Department contacted Embassies to obtain information on the foreign hide situation. The General Counsel of Commerce went to Argentina and Brazil to learn more about their embargoes on hide exports.

Because sufficient basic data was still not available for the Secretary to decide on export controls, the Bureau of the Census made a special study in April and May 1972 to acquire data on the domestic and foreign supply and demand outlook. From the data gathered before the survey, several situation papers were written on cattlehides for Commerce officials and other interested groups and agencies. The survey revealed that the major factors underlying the sharp increase in price were (1) increasing demands for hide use in the United States, (2) seriously depleted domestic hide and leather inventories, and (3) high foreign demand.

In addition to the data gathered at Commerce, Agriculture's ERS and Foreign Agricultural Service were also collecting data and making studies on the cattlehide situation.

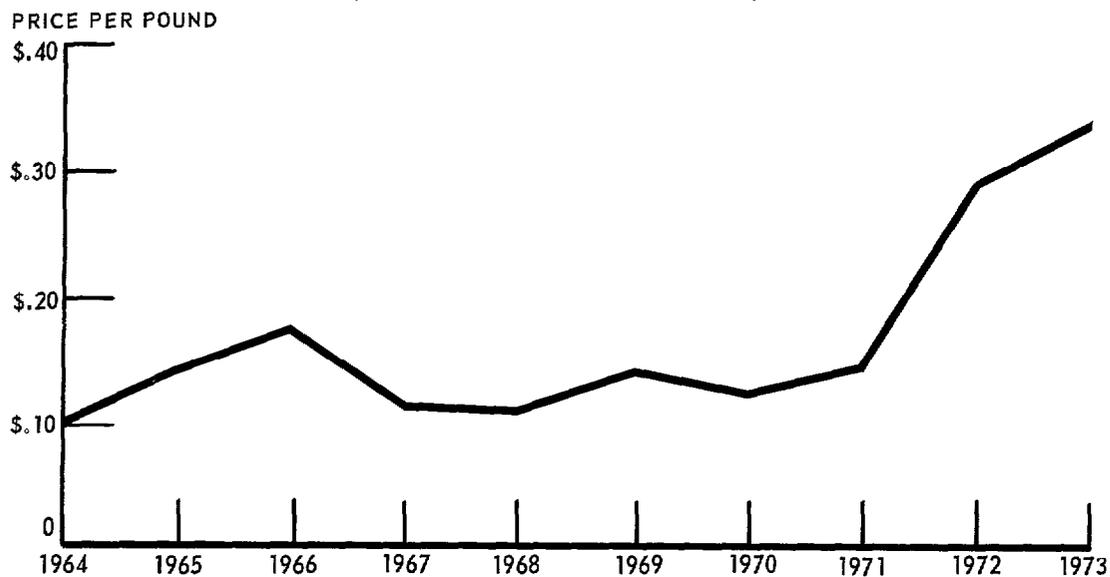
GRAPH 11

**CATTLEHIDE SLAUGHTER AND EXPORTS**



GRAPH 12

**CATTLEHIDE PRICES  
(HEAVY NATIVE STEER HIDES)**



The data compiled and the papers prepared by both Commerce and Agriculture analyzed historical and current material. No specific forecasts of export control situations were made.

#### TIGHT-SUPPLY SITUATION

During 1972, when hide export controls were being considered, public meetings were held with representatives of the hide industry, which included cattle producers, meat packers, farmers, shoe and leather manufacturers, labor unions, and exporters. The key interest groups favoring export controls were the tanners and the footwear associations. Opposing controls were various meat packers' associations, a cattlemen's association, a hide association, and exporters.

The Operating Committee on Export Controls, composed of Commerce, State, Treasury, and Agriculture and others, reviewed the situation and Commerce also consulted CEA, CLC, CIEP, and the Office of the Special Trade Representative. The Committee primarily reviews commodities under the national security aspect of the Export Administration Act and is rarely used on matters of short supply. However, in March 1972 the Committee was asked to review Commerce's recommendation to require a valid license for cattlehide exports so export shipments could be monitored. The Committee disagreed with this approach and suggested using the Shippers' Export Declaration, which must be filed with the Bureau of Customs for all exports. Commerce agreed, and the recommendation for export licensing was not passed on to the Advisory Committee on Export Policy, which resolves any appeals made by an agency which disagrees with the decision of the Operating Committee.

The Secretary of Commerce reviewed the cattlehide situation upon completion of the Bureau of the Census study, set export levels at the previous year's shipment levels, which were high because of the midyear shift in buying to the U.S. market resulting from Argentina's export restriction, and instituted a system under which "export tickets" would be sold and have value as long as the prevailing conditions existed. The Secretary selected this option rather than disrupting export markets. As soon as market conditions warranted, Commerce expected to lift this temporary control.

## APPENDIX I

Export controls on cattlehides became effective July 16, 1972. The reasons given for meeting the criteria for short-supply export controls were:

- Prices had climbed to record highs.
- Cattlehides and leather inventories were at very low levels.
- Domestic supplies were not increasing fast enough to meet demands.
- Domestic demand was projected to increase.
- Exports had increased over the past few years and were projected to increase to record levels during the remainder of the year.

Commerce's Office of Export Administration is responsible for implementing export controls. No written procedures have been established, but the initial steps involve notifying Commerce field offices, the Bureau of Customs, and the applicable industry and then distributing regulations. Later, the Office is responsible for issuing licenses and insuring industry compliance with the regulations.

The 1972 export controls on cattlehides required that a valid license be obtained for exporting hides and established a quota for each exporter based on 1971 shipments. A quota of about 2 million hides was established for July 16 through August 31, 1972, called the transition period, to allow the Office of Export Administration time to distribute export tickets to the hide producers. The export tickets were designed to prevent windfall profits for exporters or foreign producers and to pass the increased revenue along, either to cattlemen or to consumers, in the form of lower meat prices. However, before any tickets were issued, the controls were removed.

Since the controls were in effect such a short time, the price or amount of cattlehide exports did not decrease appreciably. Neither Agriculture nor Commerce are working intensively on the cattlehide situation, and there are no plans to reimpose export controls at this time or in the near future.

FUTURE PROSPECTS

Although there are no controls on cattlehides at the present time, other factors, including a change in trade policy by foreign producers and the practice of using man-made materials in lieu of leather, are having an impact. Domestic tanners must compete with foreign buyers, which results in higher prices and uncertain supply. This competition has decreased domestic tanners' production, increased unemployment, and, in some cases, forced tanning companies out of business. The industry estimates that the use of synthetic materials for shoe uppers, shoe linings, and other leather-goods components doubled in 1973.

Although hide prices in the first part of 1973 were more stable, there were many anxious moments for the tanners, such as the establishment of ceiling prices on meat and the consumers' boycott and the resultant drop in slaughter and hide production.

Meanwhile, meat packers are getting more revenue from their slaughters because of the increased price of hides; but they contend that, if the price of hides had not risen, the increase in the cost of beef would have been higher for consumers.

Various groups commented on the effect increased hide costs could have on leather shoes. In August 1972, ERS said the increase in the price of leather in a pair of men's oxford shoes would be 66 to 75 cents, or 5 to 7 percent of the factory selling price. According to Commerce, the cost of leather before price increases was about 15 percent of the manufacturer's selling price but increased to 21 percent in June 1972.

The American Footwear Industries Association claims the hide price increases in 1972 caused a rise of \$1.12 for a typical pair of men's shoes and \$2.41 for a typical pair of women's boots. The price situation on hides is causing a switch from leather to synthetics in American-made shoes, which association officials believe will cause a decrease in the proportion of leather shoe uppers from 70 percent in 1972 to about 50 percent by 1975.

The American National Cattlemen's Association, however, stated that there is no shortage of hides and that exports

## APPENDIX I

of hides are needed to prevent a glut on the domestic market. They also stated that excessive quantities of leather footwear imports are causing difficulty for domestic tanners and a reasonable quota should be imposed on such imports. In addition, the hide association claims that shoe manufacturers are importing shoes to supplement their own production.

In 1966 and 1972, when export controls were imposed on cattleskins, the Congress removed them. This has made Commerce reluctant to consider future controls on this commodity. Commerce's present position is to let Agriculture make the first move toward any possible future controls, since the Secretary of Agriculture must first determine that domestic demand exceeds supply before short-supply controls may be imposed.

The United States received \$339 million for its 1973 rawhide exports. According to the tanners' council, importing countries process these hides and export them back to the United States as leather and leather products. This created a deficit in our balance of payments of nearly \$1 billion in 1972, and the deficit is expected to increase to \$1.1 billion for 1973. Japan, the leading importer of U.S. rawhides, does not restrict these imports but does restrict imports of leather and leather products.

Suggested alternatives to export controls on cattleskins have been (1) an import quota on excess quantities of leather footwear, (2) freezing hide prices for sales to domestic tanners and export markets at a reasonable level, (3) an appeal by the President or CLC to cattleskin producers to voluntarily allocate their 1971 and 1972 supplies between domestic tanners and exports in an amount at least equal to their 1970 purchases, and (4) negotiation with Japan to voluntarily restrict its import of U.S. rawhides to 6.5 million during 1973. Japan failed to restrict imports to the hoped for amount of 6.7 million hides for 1972. Negotiations were conducted with Japan to encourage importing of processed hides, and, if it does not agree to shift to processed hides, the United States intends to insist that it remove its quota import restrictions on leather and leather products.

Steadily rising imports during the past 10 years have increased industry pressure on the Congress and the Administration for quotas for footwear, based on current import

figures, and for increased duties on all shoe imports in excess of those quotas. In July 1970 the Administration asked the Tariff Commission to investigate, under the escape clause provisions of the Trade Expansion Act of 1962, the impact of increased imports on the leather footwear industry. Decision on the Commission's 1971 report on the escape clause investigation has been delayed while the Administration discusses the footwear problem with other countries.

American footwear manufacturers and their suppliers have continued efforts to obtain some relief from imports. The industry feels strongly that the general provisions of the Administration's trade proposal will not provide such relief, and it has therefore requested immediate congressional action to stem the flow of imported footwear, expressing strong support for legislation which would limit such imports by countries and by footwear category to the average quantities imported in the 1970-72 period.

The primary reason advanced for cattlehide export controls has been to control rising domestic prices, not short supply. If enough pressure is brought upon Commerce by certain segments of the industry and their congressional representatives, Commerce takes steps to analyze the situation and determine whether to establish controls or not.

According to Commerce's U.S. "Industrial Outlook" for 1974, the best economic use for hides is to produce leather. Any slack in the use of leather by shoe manufacturers will be taken up primarily by upholstery for automobiles and leather apparel.

In appraising the outlook for 1980, Commerce has stated that the tanning industry's future depends primarily on the availability of adequate U.S. supplies of raw materials and achievement on fair treatment in foreign trade. Domestic raw material prospects are favorable. The sizes of cattle herds and slaughters are expected to continue increasing until 1980, though at a slower rate than in the previous decade.

Shoe workers and firms continue to petition the Tariff Commission for adjustment assistance under the provisions of the Trade Expansion Act of 1962. By June 1, 1973, worker

## APPENDIX I

groups at 89 shoe plants had applied for adjustment assistance. Thirty-one of these groups were declared eligible to apply to the Department of Labor for trade readjustment allowances, relocation allowances, and retraining.

FERROUS SCRAPBACKGROUND

Ferrous scrap is a byproduct generated from (1) the production of iron and steel (home scrap), (2) the fabrication of mill products into consumer and industrial products (prompt industrial scrap) by the metalworking industries, and (3) discarded ferrous items (obsolescent scrap). The latter two types are collectively known as purchased scrap as they are collected and processed, externally to the iron and steel producer, by the ferrous scrap industry. The industry sells to both domestic and export markets.

Ferrous scrap consumers are steel mills and ferrous foundries which use about 80 percent and 20 percent, respectively, of ferrous scrap supplies. Iron and steel scrap represents approximately 50 percent of the raw material input for the production of iron and steel, with natural resources comprising the remainder.

In 1972 the three largest worldwide raw steel producers and their shares of the market were the Soviet Union, 20 percent; United States, 19.2 percent; and Japan, 15.5 percent. The Soviet Union became the leading producer in 1971. The United States is the world's largest producer of ferrous scrap and the largest exporter. The major worldwide consumers of ferrous scrap are the United States and Japan which imports more than 50 percent of its total requirements from the United States.

Requests for export controls on ferrous scrap were made in 1956-57 and 1969-70 because of high export levels and high prices, but controls were never established. In November 1970 Commerce did establish a regular reporting system for scrap exporters, but it was discontinued in January 1972 because of an easing supply and demand situation and a substantial decline in exports.

In late 1972 and early 1973, the American Iron and Steel Institute, representing the steel mills and various groups in the foundry industry, requested that Commerce impose export controls on ferrous scrap because increased domestic and foreign demands were causing rising prices and because export prices were exempt from U.S. price controls,

## APPENDIX I

giving a further incentive to exports. The Institute requested that licenses be required for exports and that a 7-million-ton export quota be imposed for 1973. Export controls were imposed for the first time on July 2, 1973, and are being continued through June 30, 1974.

Graphs 13 and 14 show ferrous scrap purchase, export, and price trends for the past several years.

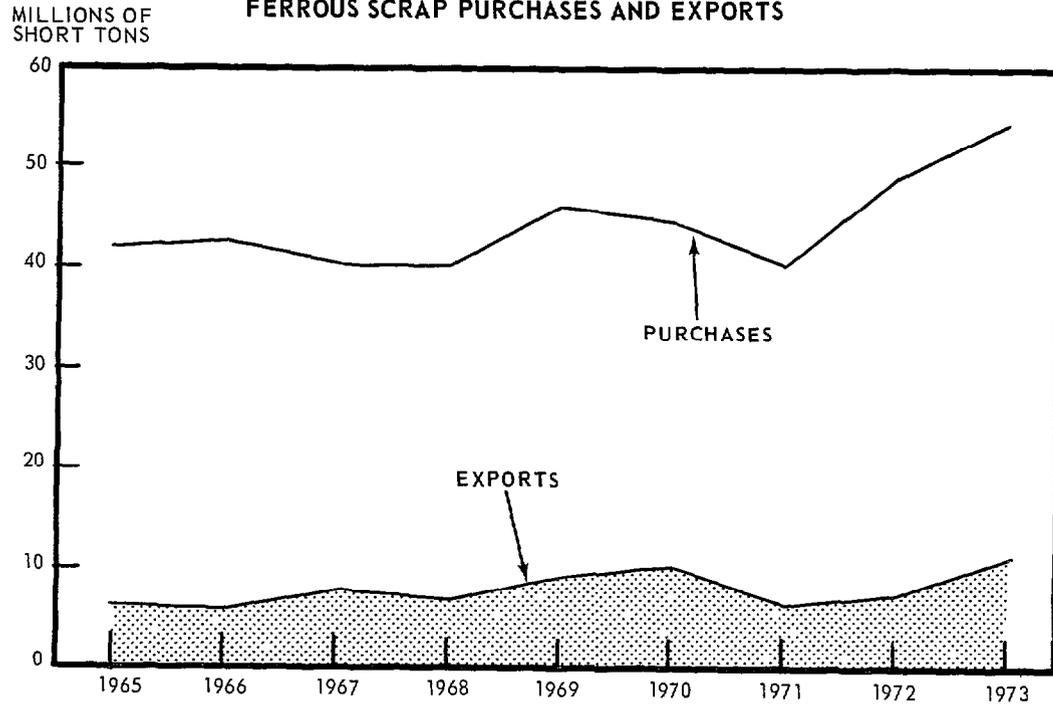
### GATHERING INFORMATION AND MAKING FORECASTS

OBRA's Materials Division analyzes and documents pertinent data on ferrous scrap. The Division began watching the scrap situation closely about December 1972. It kept in direct contact with domestic industries, reviewed trade publications, and obtained (1) export data from the Bureau of the Census (usually available only about 2 months after shipments were made), (2) data from Interior's Bureau of Mines' mineral industry surveys on purchased scrap receipts, production, consumption, shipments, and stock (published 1-1/2 to 2 months after the month being reported), and (3) data from the State Department, U.S. Embassies, and domestic industries involved. The Interior Department report, derived from Census statistics, also indicates U.S. exports by country and type of scrap.

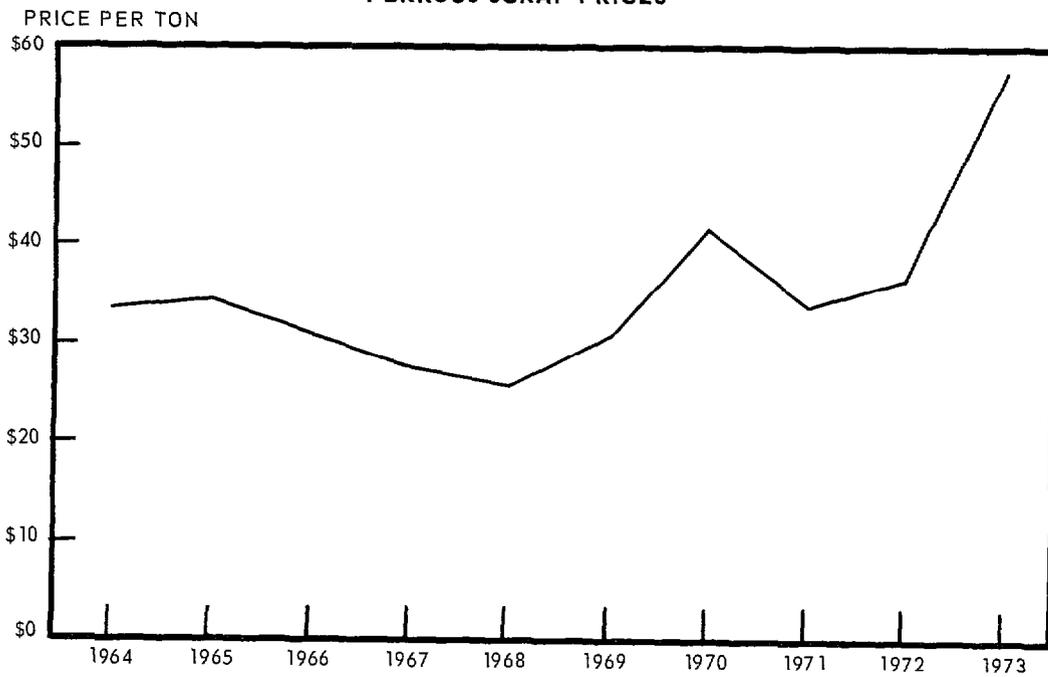
From this accumulation of data, various reports and papers were prepared to keep Commerce officials informed of the situation. However, Commerce had little information on existing export contracts and none on orders placed for delivery in the future. To obtain data on foreign demand and actual exports, a system of reporting was established on May 22, 1973, for U.S. exporters. From this reporting, it was learned that exports of ferrous scrap in 1973 were expected to be about 12.4 million tons.

In early 1973 the domestic demand was estimated by the American Iron and Steel Institute at 100 million net tons for 1973, based on an 8-percent increase in raw steel output by the steel mills and foundries. This estimate was later revised upward to 103.7 million net tons. Commerce, however, estimated only 94 million tons would be needed, later revising its estimate upward to 96 million tons.

**GRAPH 13**  
**FERROUS SCRAP PURCHASES AND EXPORTS**



**GRAPH 14**  
**FERROUS SCRAP PRICES <sup>a</sup>**



<sup>a</sup> AVERAGE COMPOSITE PRICE, NO. 1 HEAVY MELTING SCRAP.

## APPENDIX I

For 1974 the Institute projected 104.5 million net tons would be needed domestically. Of this amount 57.5 million would be home scrap and the remaining 47 million purchased scrap. However, the 47 million net tons is a high estimate when compared to the 43.2 million short tons projected by a forecasting service.

To determine foreign demand, Commerce through U.S. Embassies contacted major importers of U.S. scrap to obtain their 1974 estimates and learned that about 18 million short tons would be needed. Commerce felt that the estimates given were overstated in an effort to secure an adequate supply. The amount projected by the forecasting service cited above is 13 million short tons, an increase of about 2 million above 1973 exports.

Other than the estimated demand projection, Commerce makes limited estimates of future ferrous scrap supply and demand requirements.

### TIGHT-SUPPLY SITUATION

Data was gathered early in 1973 after a request for controls by the industry involved and congressional interest in the commodity increased. Before establishing controls, Commerce received over 300 congressional inquiries on scrap, along with an equal amount from other sources, with most favoring export controls. Meetings were held with representatives of the American Iron and Steel Institute, and the Institute of Scrap Iron and Steel, Inc., which represent the exporters, the shipbreaking industry, members of the New York Commodity Exchange, and other interested persons. CLC, the Office of the Special Trade Representative, CEA, CIEP, State, and Treasury were also consulted.

After the meetings and consultations, the Secretary of Commerce determined to establish export controls. The following conditions met the criteria of the Export Administration Act.

- The composite price of No. 1 heavy melting scrap metal had been relatively low during past years but climbed sharply from \$35 to \$55 a short ton during the first 6 months of 1973. No. 1 heavy melting steel scrap is the type preferred by the steel industry.

--The monitoring of scrap exports begun in May 1973 indicated that exports would reach 12.4 million tons for 1973 compared with a previous export high of 10.4 million tons in 1970.

--Increased foreign and domestic demand and high prices indicated that a scrap metal shortage was near.

The Office of Export Administration is responsible for implementing export controls. The initial steps include notifying Commerce field offices, the applicable industry, and the Bureau of Customs and then distributing regulations. This is followed by reviewing license applications, issuing licenses, and checking to determine compliance with regulations.

Since the 1973 monitoring indicated that exports would reach a record high, the export controls imposed on July 2, 1973, required a valid license for exporting ferrous scrap to foreign destinations. Licenses were issued only for orders accepted on or before July 1 for shipments of 500 short tons or more scheduled for delivery during 1973. Shipments less than 500 short tons were not subject to the July 1 order date. However, on September 10, 1973, because of a distinct increase in small shipments, no more licenses were issued for orders accepted after that date except to Canada and Mexico and for stainless steel scrap.

Licenses were issued for the fourth quarter of 1973 for shipments under 500 short tons in the amount of 75,000 short tons a month, of which 60,000 were for export to Canada and 15,000 for export to Mexico. Shipments were permitted to these two countries and not to other countries because of historical trading patterns. This involved many exports of less than 500 short tons and, according to Commerce, to deny these small volume shipments would be inequitable. Quotas were assigned to exporters in proportion to their participation in exports to these countries during fiscal year 1973.

For the first and second quarters of 1974, a quota of 2,100,000 short tons for each quarter was established on a country-by-country basis for all ferrous scrap except stainless steel, with 100,000 short tons set aside for hardship cases and new scrap exporters. This quota was to be distributed according to the share of exports to specific countries during the period July, 1970, through June 30, 1973.

## APPENDIX I

A special rule to encourage increased production was made in Commerce regulations to allow any exporter engaged in shipbreaking activities to apply for a license in excess of his quota. Excess granted for the first and second quarters of 1974 was allowed up to 50 percent of the increase of such an exporter's domestic production over that of 1973.

Japan does not have export controls on ferrous scrap, but some countries do. Mexico has had licensing requirements covering the entire country with the exception of two zones which were exempt. However, on April 5, 1973, these zones became subject to the requirements because of rapidly expanding Japanese purchases. On July 16, 1973, Canada modified its policy, which required licensing but had no tonnage limitation, to establish a quota of 250,000 tons for the last 5 months of 1973. The European Economic Community countries of France, West Germany, Italy, Belgium, the Netherlands, and Luxembourg have no limitations among member countries, but half-year quotas have been in existence since 1971 for exports to other countries, with 178,000 tons set for the first half of 1973. All exports were banned late in 1973.

Compliance monitoring for export controls primarily relies on complaints made by other exporters because of the many locations from which scrap can be shipped out of the country, the small number of Government personnel available for enforcement, and insufficient funds to provide proper enforcement. Under a previous agreement, Commerce had reimbursed the Bureau of Customs for providing manpower to help enforce export controls, but this agreement ended in July 1972. Customs is now reimbursed only for sending a copy of the Shipper's Export Declaration, which is used in enforcing compliance.

Government inspectors are able to provide only a cursory review of scrap export transactions. Several exporters were exporting without a valid license, using a valid license on which the order had already been filled as authority for additional shipments, and making shipments in excess of the 5-percent tolerance limitations. Fines of \$500 have been assessed, and warning letters have been issued.

Establishing the export monitoring system in May 1973 gave ferrous scrap exporters advance warning of a possible

export control situation and allowed them sufficient time to obtain backlogs of firm orders for shipment before the July 1 cutoff date. If the export controls had not been established, the orders could have been renegotiated or canceled.

#### FUTURE PROSPECTS

Export controls have not been successful in reducing the price of ferrous scrap. In fact, the composite price of No. 1 heavy melting steel scrap has continued to rise and reached a record high of about \$97 a gross ton on January 30, 1974, and \$142 on April 1, 1974, compared with the previous high of \$65 in 1956.

Many alternative actions have been recommended by industry and Government as possible solutions to the current ferrous scrap short-supply situation.

- Urge the Maritime Administration and Defense Supply Agency to maximize the disposal of surplus merchant and naval ships, because such ships accounted for 300,000 to 500,000 tons a year of exports during the last several years. An interagency task force has been established for this purpose.
- Continue efforts to obtain a national detitling law for junk cars.
- Seek more equitable scrap freight rates, since the rail freight rate on iron ore is about \$1.50 less a ton than that for scrap. A shortage of railroad cars used to transport scrap also exists and is further compounded by competition from massive grain exports.
- Establish a futures market as a hedge against fluctuating scrap prices. This, however, appears impractical because of the many grades and the varying quality of ferrous scrap. Commerce has met with the New York Commodity Exchange on this subject several times.
- Seek mandatory price controls from CLC, since the majority of scrap processors, due to their small size, are not subject to current price controls and exports are not subject to price controls.

## APPENDIX I

- Request foreign purchasers not to buy for stockpiling purposes, to buy various grades of scrap, and buy from various U.S. geographical locations. This applies mainly to Japan, with whom Commerce, State, and the Office of Special Trade Representative have held discussions.
- Export only lower grades of scrap, since junk-car scrap accounts for about 35 percent of scrap exports but only 6 percent of domestic use. The United Kingdom exports only the lowest grades of scrap and has banned other exports since February 1973.
- Encourage domestic users to buy scrap on long-term contracts rather than on the usual 30-day basis.
- Promote worldwide expansion of prerduced iron pellets which can be used as a substitute for scrap. This process requires considerable amounts of natural gas, so current expansion possibilities are limited.
- Provide scrap subsidies or tax incentives to offset depletion allowances given to virgin materials, such as iron ore, and provide better depreciation allowances on investment tax credits for scrap-processing facilities.
- Establish an economic stockpile of scrap financed and managed by the Government or a Government incentive for scrap consumers to hold larger-than-normal inventories.
- Promote Government and industry research and development for low-grade scrap.
- Impose quantitative quotas on exports, as has now been done for the first half of 1974.

Continuing debate over the impact of export controls and the future ferrous scrap situation is illustrated by the positions of the major export control proponents--the American Iron and Steel Institute--and the major export control opponents--the Institute of Scrap Iron and Steel.

The American Iron and Steel Institute is dissatisfied with Commerce's procedures in establishing short-supply

export controls because Commerce did not act to impose them in 1970 and was reluctant to impose such controls in 1973. An estimated 55 million tons of purchased scrap--43 million for domestic use and 12 million for foreign use--were needed in 1973, and the Institute concluded there would be a 5-million-ton shortfall, despite an anticipated decrease of 1.5 million tons in industry inventories which reduced them to unworkably low levels.

The Institute believes this short-supply situation was evident in late 1972 because of the sharp increase in prices and the difficulties encountered by domestic consumers in obtaining scrap supplies. Although it has been said that increased domestic demand is as much responsible for price rises as foreign demand, the Institute has stated that the facts and figures do not support this analysis. A \$2 billion deficit existed in the 1972 U.S. balance of payments for the steel trade. Continued exportation of scrap in 1973 could have adversely affected iron and steel products in this country and further lessened U.S. ability to compete with foreign producers, not only in 1973 but for years to come. Also, according to the Institute, the deficit balance of payments is increased because the United States has been selling scrap at \$40 to \$50 a ton to essentially the same countries that sell finished steel products to the United States in far greater volume at \$161 a ton.

In a recent Institute survey, many companies stated that grades and qualities needed for inventory balancing are not presently available at any price. Consequently, mills have been forced to use lower quality grades of scrap than normally used. The Institute believes current conditions call for mandatory restrictions of a much stronger type than those in effect during 1973.

The Institute of Scrap Iron and Steel, Inc., on the other hand, claims there is no shortage of ferrous scrap as long as the steel industry is willing to pay the going price and no mill or foundry has been unable to obtain all the scrap it desires. An investigation by the Institute into alleged shortages disclosed that consumers are not willing to pay the going market price or substitute one grade of scrap for another. What the domestic consumers are seeking is price controls through export limitations.

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The Institute contends there are millions of tons of scrap on the West Coast and in New England for which there is no conceivable demand. In addition, because of the geographical location of most scrap consumers in relation to scrap processors, the majority of the export-oriented scrap-processing firms are unable to sell their scrap to domestic consumers. Meanwhile, mills are selling home scrap for export and are cancelling orders of purchased scrap.

A study by the Battelle Memorial Institute for the Environmental Protection Agency in 1970 found that 750 million tons of obsolescent scrap was available for recycling at the end of 1969.

The price of scrap is the real problem, according to the Institute, not the supply. Scrap prices are volatile and are affected by the short-term--usually 30 days--purchasing practices of the steel mills and foundries. These practices involve maintaining low inventories and this is the cause of rising prices, not exports. The Institute believes prices of obsolescent scrap must remain high enough to encourage scrap collectors and processors to handle it or there will be a reduction in scrap collection which will add solid waste disposal problems. Scrap exports also make a positive contribution to the U.S. balance of payments, amounting to about \$500 million annually.

Export controls were established for ferrous scrap in one year but not in another, even though circumstances were very similar. In addition, after nearly 6 months of watching the scrap situation, an export reporting system had to be initiated before the foreign demand was known in terms of orders placed.

The primary reason for imposing controls seems to have been the rising price. Although this is one of the established criteria for imposing controls, a short-supply situation must also exist. Total supply of ferrous scrap is still unknown, particularly the supply of obsolescent scrap. Consequently, that a short-supply situation actually exists is uncertain.

Too much reliance has been placed on historical data on ferrous scrap with limited estimates of possible future short-supply situations. If forecasts had been made,

recommendations to correct the situation could have been initiated sooner, with a greater possibility of averting an export control situation.

APPENDIX II

COMMODITIES SUBJECT

TO SHORT-SUPPLY EXPORT CONTROLS AND EXPORT

MONITORING, JUNE 1973 THROUGH JANUARY 1974

COMMODITIES SUBJECT TO SHORT-SUPPLY QUOTA CONTROLS:

Corn gluten feed  
Cottonseed oilcake and meal  
Soybean oilcake and meal  
Linseed oilcake and meal  
Sunflower and safflower oilcake and meal  
Peanut meal  
Peanut oilcake  
Meat meal and tankage  
Fish meal  
Feather meal  
Poultry feeds, prepared  
Dairy cattle feeds, prepared  
Livestock feeds (except dairy cattle) including  
supplements, prepared  
Alfalfa meal, dehydrated  
Alfalfa meal, sun-cured  
Lard and other rendered pig fat, except grease  
Choice white grease  
Safflowerseed  
Sunflowerseed  
Peanuts (groundnuts), shelled, green  
Peanuts (groundnuts), unshelled, green  
Soybeans  
Flaxseed (linseed)  
Cottonseed  
Bone meal  
Blood flour and blood meal  
Tallow, edible  
Tallow, inedible  
Soybean oil, crude, including degummed  
Soybean oil, once-refined  
Soybean salad oil, refined and further processed  
Cottonseed oil, crude  
Cottonseed oil, once-refined  
Cottonseed salad oil, refined and further processed  
Peanut oil, crude  
Peanut oil, except crude or hydrogenated  
Sunflowerseed oil, crude

Sunflowerseed oil, once-refined  
Sunflowerseed oil, including all mixed or blended  
soft salad oils  
Linseed oil, raw  
Corn oil  
Safflowerseed oil, fixed  
Linseed oil, boiled, oxidized, dehydrated, sulphurized,  
blown, or polymerized  
Soybean oil, hydrogenated  
Cottonseed oil, hydrogenated  
Cottonseed and soybean oil mixture, hydrogenated  
Corn oil, hydrogenated  
Fish oil, hydrogenated  
Maize oil, hydrogenated  
Peanut oil, hydrogenated  
Soybean lecithin

No. 1 heavy-melting steel scrap, except stainless  
No. 2 heavy-melting steel scrap, except stainless  
No. 1 bundles steel scrap, except stainless  
No. 2 bundles steel scrap, except stainless  
Borings, shovelings and turnings, iron or steel,  
except stainless  
Stainless steel scrap  
Shredded steel scrap  
Other steel scrap, including tin-plated and terne-plate  
Iron scrap, except borings, shovelings and turnings  
Rerolling material of iron or steel

Crude petroleum  
Petroleum partly refined for further refining  
Aviation gasoline, 100 octane and over  
Aviation gasoline, less than 100 octane  
Gasoline, not elsewhere classified  
Gasoline blending agents, hydrocarbon compounds  
only, not elsewhere classified  
Kerosene, except kerosene-type jet fuel  
Jet fuel  
Distillate fuel oils  
Residual fuel oils  
Butane  
Propane  
Natural gas liquids, not elsewhere classified  
Carbon black feedstock oil

APPENDIX II

COMMODITIES SUBJECT TO MONITORING:

Wheat (5 types)  
Rice (14 types)  
Barley, unmilled  
Corn, except seed, unmilled  
Rye, unmilled  
Oats, unmilled  
Grain sorghums, unmilled  
Soybean and soybean products (7 types)  
Cottonseed and cottonseed products (6 types)  
Cotton (10 types)  
Ferrous scrap (10 types)  
Fertilizer materials (10 types)  
Petroleum commodities (41 types)  
Flaxseed  
Linseed oil

## THE WHITE HOUSE

WASHINGTON

March 27, 1974

Dear Elmer:

The report, "Coping with Commodity Shortages:", is a comprehensive and useful survey of the problems which arose last year when various products came into short supply and the difficulties which occurred as the government reacted to those problems. The lesson it brings home most strongly is that government efforts to intervene in the working out, through the market system, of supply/demand imbalances produce a chain reaction of effects throughout the market which can frustrate the efforts and exacerbate the problem. Thus, while public policy may sometimes require such intervention, our experience of 1973 should convince us that such action should be taken only when necessary for the most compelling reasons and not as a routine tool of economic management.

Much of the report deals with issues which arise when export controls are contemplated or imposed. One of the main reasons why export controls should be seen as a policy option of last resort is that, beyond the adverse foreign policy implications -- which are very keenly understood and appreciated within the Administration -- they have serious and long-lasting adverse effects on the nation's domestic economy.

While they may be seen by some as helping alleviate an unbalanced situation in the short-term, those who advocate their use on a widespread basis seriously underestimate their disadvantages. Producers of those commodities which are surplus to our domestic needs -- and these include much of our agricultural output -- are penalized. Moreover, their efforts to build and maintain the foreign markets which are essential to their future prosperity are compromised.

In addition, frequent use of export controls would encourage other countries to adopt the same policies on products we need from them. As we have seen in the case of oil, such policies can pose serious dangers for our domestic economic stability. In this connection, the report tends to suggest conclusions about problems which might arise regarding commodities in which we depend upon imports for much of our supply. There is currently a

### APPENDIX III

study underway within the Executive Branch on the prospects for the creation by foreign suppliers of artificial shortages of various raw materials. I believe we should withhold any judgment on this issue before we finish that study.

The report speaks of a "crisis management" approach to the control policies which were implemented last summer and suggests the need to evaluate a more organized and structured system of planning and resource allocation by the government.

The government does, of course, have a responsibility under various statutes to monitor a developing situation of short supply as closely as possible. Conditions sometimes arise that justify government actions to prevent a situation from developing into a crisis. The Administration has learned the importance of sound policy-making procedures in carrying out this responsibility. The draft report which we reviewed did not give adequate attention to the measures, both organizational and operational, which have been taken since last summer in response to the emerging shortages of various specific commodities. I understand that some of these were discussed informally with your staff by members of the staff of the Council on International Economic Policy.

While we accept the validity of the statement that the export control policies of last summer were developed in a "crisis" atmosphere, the only alternative would have been to have had in place a mechanism to anticipate such shortages on all major commodities. The report implies that the existence of an elaborate, centralized system of data collection and analysis, covering both the domestic and international economies, supplementing what was being done in the responsible agencies, would have alerted policy-makers to the situation earlier and have permitted a policy response less disruptive than that which was implemented.

On this point, I would make two comments: First, even with such a system, there would have been no guarantee that it would have accurately forecast every situation significantly in advance of our regular services. Second, such a mechanism, to have covered every contingency, would presumably have to have been in place for some time, despite the fact that short-supply problems had not developed to any major degree in the past. In that regard, the report contains no estimate of the costs of having such a system over, say, the last 20 years or of the trade-offs implicit

in those costs in terms of competing demands on government resources for other services during such a period.

Several of the organizational matters discussed in the report are, however, germane to this Administration's proposals for a Department of Energy and Natural Resources and a Department of Economic Affairs. Rather than create a new structure on top of the existing agencies, we believe many of the organizational problems raised in the report could be dealt with through Congressional action on the Administration's proposals.

More important, the basic premise of a government-managed system of resource allocation to deal with both actual and potential shortages needs to be clearly understood. Adoption of such an approach would constitute a fundamental change in the economic philosophy of this nation. It implies that an economy in which supply and demand are determined in a free, competitive and open market is less desirable than one in which government is relied upon to make the essential decisions concerning availability, allocation and prices. We do not believe this is true and we do not believe that the American people, given a clear understanding of the implications and consequences, would think so either.

Sincerely yours,



George P. Shultz  
Assistant to the President

The Honorable  
Elmer B. Staats  
Comptroller General of the United States  
Washington, D.C. 20548



ASSISTANT SECRETARY

TREASURY DEPARTMENT

WASHINGTON, D.C. 20220

MAR 29 1974

Dear Mr. Fasick:

Your letter of February 28, 1974, to Secretary Shultz enclosed copies of the draft of your proposed report to the Congress assessing the present U. S. Government system for commodity and resource analysis and policy formulation.

The Secretary, in his capacity as Assistant to the President, has sent his views on this report to the Comptroller General and we have nothing of substance to add to that reply.

Sincerely yours,

A handwritten signature in cursive script, reading "Howard L. Worthington".

Howard L. Worthington  
Acting Assistant Secretary

Mr. J. K. Fasick  
Director, International Division  
U. S. General Accounting Office  
Washington, D. C. 20548



## DEPARTMENT OF STATE

Washington, D.C. 20520

April 2, 1974

Mr. J. Kenneth Fasick  
Director  
International Division  
U.S. General Accounting Office  
Washington, D. C. 20548

Dear Mr. Fasick:

I am replying to your letter of February 28, 1974, which enclosed a copy of the draft GAO Report: "Coping with Commodity Shortages: An Assessment of U.S. Policies and Reactions" and requested the Department's comments. As you will note from the enclosed comments, the Department considers the report to be well-researched and a good assessment of current procedures for dealing with commodity shortages. However, the Department believes there is limited utility in econometric projections for predicting short-term supply-demand developments and questions the feasibility of the suggested governmental intervention.

The Department believes there has been a misunderstanding of its role in the commodity field. The Department assesses the foreign policy implications of U.S. commodity policies and actions and conducts intergovernmental discussions or negotiations as needed. The Department draws from other U.S. agencies, the international organizations, trade associations, and other sources, analytical commodity information needed to make such assessments and conduct discussions.

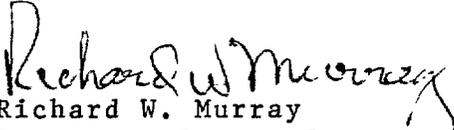
The report suggests that Congress consider enacting legislation to establish responsibility for commodity analysis and forecasting in a single group in each Department and that such groups be given improved access for policy-making levels. Within the Department the Deputy Assistant Secretary for International Resources and Food Policy in the Bureau of Economic and Business Affairs long has been charged with such responsibility and has functioned effectively in this role.

APPENDIX V

The Department believes that the current inter-agency studies of access to foreign minerals supply meets the report's recommendation. The suggestion of an agreement with Interior to improve the quality, training, guidance and number of minerals attaches is under discussion with the appropriate agencies and offices.

I wish to thank you for the opportunity to review and comment on this report.

Sincerely yours,

  
Richard W. Murray  
Deputy Assistant Secretary  
for Budget and Finance

Enclosure:

As stated.

General Observations

This report is a well-researched and generally good assessment of existing U.S. Government machinery for dealing with commodity shortage problems as they may appear to be developing and as Government action may be called for to cope with real shortages which may materialize. The report quite properly suggests that the Government's machinery might be improved and greater coordination be achieved in the gathering, analysis and use of commodity supply and demand data to permit better policy formulation and decisions. In fact, numerous steps along these lines have already been initiated, as the report notes, and further measures are under study. But in suggesting that the Government undertake to "administer" short supply situations or plan and control supply and demand for commodities and materials generally, the report appears to depart from practical and political realities.

Despite the current preoccupation with and concern over "commodity shortages" and "short-supply," shortages are, in the final analysis, relative and with respect to agricultural products are, by their very nature, short-term. In a free market economy such as has generally prevailed with respect to most commodities, anticipated supply and anticipated demand tend to come into balance at a price. Whatever may be the practical difficulties of forecasting actual production and consumption of a given commodity, other things being equal, the forecasting of market psychology is much more perilous. But even with respect to actual supply and demand one must recognize the impossibility of predicting climatic or weather abnormalities, political upheavals or policy changes, labor disputes, monetary policy changes, investment decisions, exploration successes or failure, technological changes, etc. All of these have played a role in one or another of the materials shortages experienced over the past year or two.

In the past, the more common problem besetting the U.S. domestically and the world generally has been

## APPENDIX V

that of over-production or surpluses, with relatively depressed prices, in the commodity field. Efforts by governments to cope with such situations have generally aimed at curtailing production or preventing some of the supply from reaching the market (by production controls, trade barriers, taxes, duties, international arrangements, or other measures). Such governmental intervention has met with limited short-term success. But when market expectations lead to demand out-running supply, rising prices tend to curtail demand and provide incentives for expanded production, provided governments refrain from intervening with control measures (e.g., on prices or exports) which thwart the operations of these normal market forces and thereby prolong or exacerbate the supply-demand imbalance. Public expectation of or fear of governmental intervention will itself cause uncertainty in the market and may exacerbate normal market movements (e.g., stimulate hoarding, exaggerated ordering, etc.).

Experience has demonstrated the limited utility of econometric projections for predicting supply-demand developments, particularly in the short term, in the commodity field, mainly because of the large number of variables involved and the important role which unpredictable market psychology plays in commodity markets. Consequently, the extent to which it is reasonable or practical for the Government to invest more extensive resources in efforts at commodity forecasting rather than relying on careful and experienced observation of market trends (and general political and economic factors affecting the markets) is questionable. Can the U.S. Government, or any government in a relatively free society, with whatever resources it might muster hope to out-predict or out-guess the multitude of buyers, sellers, producers and consumers who, with extensive and specialized experience and information pit their conflicting judgments on future supply-demand relationships against one another in quest of gain?

The report seems to suggest, implicitly, if not clearly explicitly, that the Government, with an extensive monitoring system, might somehow control or administer the supply and demand for commodities. However questionable might be the feasibility of such intervention, its acceptability from a political, social

or philosophical viewpoint in our traditional free-market society would appear to be very limited if not nil.

For longer-range planning, an improved system for gathering and analyzing commodity data could probably be very useful.

#### The Role of the Department of State

The report points out the limited resources devoted by State to "monitoring and analyzing commodity information," that its officers "do no commodity forecasting or primary economic research", and that they "focus on the political consequences of economic changes rather than analyzing the changes." This seems to indicate a misunderstanding of the role of State in the commodity field. State endeavors to foresee the foreign policy implications of commodity developments, both here and abroad, to assess in advance the foreign policy impact of U.S. commodity policies and actions, and to conduct such intergovernmental discussions or negotiations as are appropriate or necessary with respect to commodity policies or actions. For technical and analytical commodity information, forecasts, etc. State draws on the resources of other U.S. Government agencies (e.g., Agriculture, Commerce, Interior, CIA, etc.), the numerous international organizations concerned with commodities (e.g., FAO, UNCTAD, International Rubber Study Group, International Coffee Organization, International Sugar Council, International Wheat Council, IMF, IBRD, IDB), trade associations, market research groups, extensive contacts with private trade and industry, and foreign government data. State has not tried to supplant these diverse sources by establishing a massive commodity research and analysis bureaucracy of its own, and does not believe such an operation necessary to enable State to carry out its role in connection with the foreign relations aspects of commodity policy developments and actions.

A different sort of problem results from commodity actions or policy decisions taken by other U.S. Government agencies without consultation with State or without an opportunity for State to exercise a voice concerning the sometimes serious foreign relations impacts or implications. A case in point, as noted in the report, was the decision to impose controls on soybean exports

APPENDIX V

without any input from State. The report further notes that State "has advocated greater consideration of foreign policy impacts in export control decisions" and seems to support this argument.

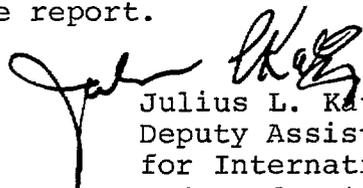
Among matters which the report suggests might be considered by the Congress is the proposal that State (and other Departments) "establish responsibility for commodity analysis and forecasting in a single designated group in each Department and provide such groups with a clear statement of purpose, research autonomy, and improved access for policy-making levels." Within the Department's Bureau of Economic and Business Affairs, the Deputy Assistant Secretary for International Resources and Food Policy has long been established with primary responsibility for looking after the foreign policy aspects of commodity developments and U.S. commodity policy. As described above, this unit has functioned effectively in its designated role although there have been occasional problems arising out of commodity policy decisions (e.g., export controls and some stockpile policy matters) taken elsewhere within the Government without State participation.

The report's recommendation for "a broad inter-agency study of access to foreign minerals supply, with attention to possible methods of securing further access..." appears to be fully met by the current inter-agency studies initiated earlier this year.

Similarly, the suggestion of "agreement between State and Interior on improving the quality, training and guidance, and increasing the number of U.S. minerals attaches," is under active consideration in State and Interior. Steps have already been taken to improve guidance to minerals reporting officers in our posts abroad and arrangements for improved training are under discussion. Expansion of the number of U.S. minerals attaches is also under discussion, together with the related problems of budget and manpower ceilings.

Comments on technical details have been dealt with through informal discussions with GAO representatives concerned with the report.

Approved by:



Julius L. Katz  
Deputy Assistant Secretary  
for International Resources  
and Food Policy

3/27/74



## United States Department of the Interior

OFFICE OF THE SECRETARY  
WASHINGTON, D.C. 20240

MAR 25 1974

Mr. Henry Eschwege, Director  
Resources and Economic Development  
Division  
U. S. General Accounting Office  
Washington, D. C. 20548

Dear Mr. Eschwege:

This letter is in response to your request for comments from the Department of the Interior on the GAO draft report, "Coping with Commodity Shortages: An Assessment of U. S. Policies and Practices".

The Department of the Interior has become increasingly concerned in the past year that its system for planning, analysis, and policy formulation for the various mineral commodities has not been adequate. Actions are being considered to materially remedy the overall deficiency as far as the mineral commodities are concerned. The Department has taken a number of preliminary steps (some of which have been complicated by the energy crisis and the development of the Federal Energy Office) and has under consideration several significant additional steps that are specifically intended to correct some of the deficiencies identified in the report, in particular, data collection, analysis, and policy development.

Thus, there is no fundamental disagreement with the report's basic conclusions insofar as they affect the Department. We will defer to the Office of Management and Budget on those aspects of the draft report that relate to organizational matters.

Some specific comments on technical details and factual errors in the draft report were discussed with GAO officials and we understand that appropriate changes will be made in the process of finalizing the report.

Sincerely,

Allan L. Reynolds  
Director of Audit  
and Investigation

APPENDIX VII



DEPARTMENT OF AGRICULTURE  
OFFICE OF THE SECRETARY  
WASHINGTON, D. C. 20250

March 20 1974

Mr. Henry Eschwege, Director  
Resources and Economic Development Division  
United States General Accounting Office  
Washington, D.C.

Dear Mr. Eschwege:

We appreciate the opportunity to comment on the draft report "Coping with Commodity Shortages: An Assessment of U.S. Policies and Practices." In general, the report appears to be a reasonably balanced presentation of the facts. However, we have several observations that should be considered by GAO.

A major underlying premise of the draft report seems to be that the free market is peculiarly conducive to commodity shortages. However, it seems to us that past and present experience amply demonstrates commodity shortages are much more prevalent and persistent in economies that are controlled by highly centralized planning systems. Improved analytical capability which provides basic economic projections and analyses of alternative policies for adjusting to changing commodity conditions (surpluses as well as shortages) is a major need of policy-makers, given the complexity of the market system. However, we question the implication in the GAO draft report that a single highly centralized analytical system would improve the decision-making process.

The draft report notes the diversity of opinions in economic projections, analyses, and policies, both among and within executive branch agencies. The draft report implies that this is an undesirable situation and is counterproductive to effective policy formulation and implementation. However, we strongly believe that a diversity of views is not a source of weakness or a symptom of a deficient policy-making process. Quite the contrary, a healthy policy-making process must encourage expression of diverse viewpoints.

The draft report appropriately recognizes the efforts being made by the Economic Research Service (ERS) to improve its analytical capability. This is one way in which we are responding to the demand for better analytical inputs into policy-making. However, the GAO report fails to note that the Foreign Agricultural Service (FAS) is also undergoing reorganization designed to improve their analyses and forecasting. In view of FAS's responsibility for analysis and forecasts of U.S. agricultural trade and of foreign commodity supply and demand, this should be recognized as another important step being taken to improve the Department's analytical capability.

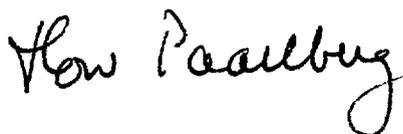
Henry Eschwege

The draft report indicates that ERS and FAS have different "positions" on the question of reserve stocks. This is an inaccurate statement. FAS and ERS are agencies responsible for objective analytical inputs into policy decision-making, they have no official "positions" per se.

We do not agree with the draft's contention that commodity analysts should become involved in the decision-making process. We believe that their appropriate role is to provide professional and objective analytical inputs to policy-makers.

The draft report does note the Department's recent initiative to make available to the public additional information concerning supply and demand estimates for major commodities in order to inform the public as quickly as possible whenever new market information is available and to encourage discussion and exchange of views between trade analysts, public users and USDA. The GAO draft report, however, did not comment on the fact that we are prohibited by law from publishing forecasts of cotton production prior to the marketing year. Congress could act to remove this legal barrier, and GAO may wish to include this in its comments.

Since GAO has not made specific recommendations, we have no comments on the matters suggested for consideration by Congress. (See GAO note.)



Don Paarlberg, Director  
Agricultural Economics

GAO note: The report has been revised and now includes recommendations to the executive agencies.



**UNITED STATES DEPARTMENT OF COMMERCE**  
**The Assistant Secretary for Domestic**  
**and International Business**  
Washington, D.C. 20230

April 18, 1974

Mr. J. K. Fasick  
Director  
International Division  
U. S. General Accounting Office  
Washington, D. C. 20548

Dear Mr. Fasick:

We have reviewed your draft "Coping With Commodity Shortages: An Assessment of U. S. Policy and Practices" and submit the following general comments.

There was a crisis atmosphere when short supply decisions were taken last summer. And, there was little opportunity for the Office of Export Administration to staff properly to meet the challenge. However, co-ordination between the Departments of Commerce, State and Agriculture generally was better than is indicated in the draft.

Specifically, beginning on page 52 of the report, it is stressed that the State Department was not substantively involved in the decision making process for soybean and ferrous scrap export controls with resulting governmental decisions which did not take cognizance of their impact on foreign relations. High level representatives of State did, in fact, participate in the interagency meetings which formulated the licensing system and the basis for quota allocations for these commodities. There is no question that these measures were resented by trading partners with a consequent adverse impact on export markets. The extreme hardship which shortages were causing to the domestic economy and American consumers should also be noted. Beginning on page 72 of the report, the adverse reaction from foreign nations is presented in dramatic fashion. Similar quotes could be obtained for the situation at home.

There are honest differences of opinion between Agriculture and Commerce concerning the seriousness of the soybean shortages of last summer. However, the inference that the data obtained by Commerce through its weekly reporting system differed markedly from the data available to

Agriculture is erroneous. In fact, after certain initial difficulties, the information obtained by Commerce proved reliable. When Agriculture assumed responsibility in October 1973, it adopted virtually the same questionnaire developed by the Commerce Department over the preceding months.

Beginning on page 109 of the report, the Administration's "failure" to recognize commodity shortages as long term problems is indicated. The report does not mention measures taken to avoid repetition of the crisis atmosphere of last summer. There is no mention of the Administration's efforts to resolve shortages of energy products through international consultation. Proposals by the Bureau of the Census to develop a data collection system to permit governmental decisions in short supply situations based on accurate and timely trade data are ignored. The statement on page 111 that the expectations expressed by the Senate Banking, Housing and Urban Affairs Committee in its Report of December 7 have not been fulfilled is somewhat misleading in that it fails to mention amendments to the Export Administration Act proposed by Secretary Dent in his testimony of April 5, 1974, before that committee. These amendments are designed to enable the Administration to anticipate developing short supply situations and deal with them effectively.

The report implies that short supply decisions were made without seeking the expertise available government wide. Emphasis is placed on the informal manner in which interagency consultations took place. Representatives of agencies participating were of cabinet and sub-cabinet rank and brought to meetings the sum of the expertise available within their agencies. The chart contained on page 35 of the report which sets out the major elements of the executive branch short supply export controls decision making system generally reflects the agencies that were consulted before export control decisions were reached. Further, the report does not reflect extensive consultations with industry representatives during the course of revising and refining export controls.

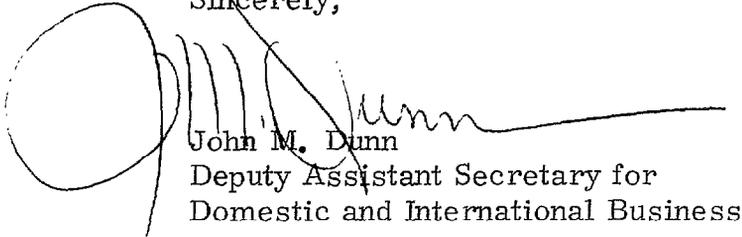
In short, the degree of interagency differences has been somewhat overstated. The extent of interagency consultations and of consultations

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with industry has been downplayed. Intense pressures on the government to impose export controls on many additional commodities are not disclosed. There was, for example, considerable pressure from industry to impose export controls on wheat and cotton.

With regard to specific points, I enclose annotated and corrected appendix sections covering ferrous scrap, cattlehides and fertilizer. I understand that members of the Office of Export Administration have been in direct contact with your staff to provide certain changes to their portions of this draft.

Sincerely,

A handwritten signature in black ink, appearing to read "John M. Dunn", is written over the typed name. The signature is fluid and cursive, with a long horizontal stroke extending to the right.

John M. Dunn  
Deputy Assistant Secretary for  
Domestic and International Business

Enclosure

PRINCIPAL OFFICIALS  
RESPONSIBLE FOR ADMINISTRATION OF  
ACTIVITIES DISCUSSED IN THIS REPORT

	Tenure of office	
	From	To
<u>DEPARTMENT OF STATE</u>		
SECRETARY OF STATE:		
Henry A. Kissinger	Sept. 1973	Present
William P. Rogers	Jan. 1969	Sept. 1973
<u>AGENCY FOR INTERNATIONAL DEVELOPMENT</u>		
ADMINISTRATOR:		
Daniel Parker	Oct. 1973	Present
Maurice J. Williams (acting)	Oct. 1973	Oct. 1973
John A. Hannah	Apr. 1969	Sept. 1973
<u>DEPARTMENT OF THE TREASURY</u>		
SECRETARY OF THE TREASURY:		
George P. Shultz	Jan. 1970	Present
<u>DEPARTMENT OF THE INTERIOR</u>		
SECRETARY OF THE INTERIOR:		
Rogers C. B. Morton	Jan. 1971	Present
<u>DEPARTMENT OF COMMERCE</u>		
SECRETARY OF COMMERCE:		
Frederick B. Dent	Feb. 1973	Present
Peter G. Peterson	Feb. 1972	Jan. 1973
<u>DEPARTMENT OF AGRICULTURE</u>		
SECRETARY OF AGRICULTURE:		
Earl L. Butz	Dec. 1971	Present

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	<u>Tenure of office</u>	
	<u>From</u>	<u>To</u>
<u>OFFICE OF MANAGEMENT AND BUDGET</u>		
DIRECTOR:		
Roy L. Ash	Feb. 1973	Present
Caspar W. Weinberger	June 1972	Feb. 1973

	<u>Effective date of appointment</u>	
	<u>From</u>	<u>To</u>
<u>OFFICE OF THE SPECIAL REPRESENTATIVE</u>		
<u>FOR TRADE NEGOTIATIONS</u>		
SPECIAL REPRESENTATIVE FOR TRADE NEGOTIATIONS:		
William D. Eberle	Nov. 1971	Present

<u>COUNCIL OF ECONOMIC ADVISERS</u>		
CHAIRMAN:		
Herbert Stein	Jan. 1972	Present

<u>NATIONAL SECURITY COUNCIL</u>		
ASSISTANT TO THE PRESIDENT FOR NATIONAL SECURITY AFFAIRS:		
Henry A. Kissinger	Jan. 1969	Present

<u>DOMESTIC COUNCIL</u>		
EXECUTIVE DIRECTOR (note a):		
Kenneth R. Cole, Jr.	Dec. 1972	Present

<sup>a</sup>Appointed Assistant to the President for Domestic Affairs Jan. 1974.

Effective date  
of appointment

From                      To

COUNCIL ON INTERNATIONAL ECONOMIC POLICY

EXECUTIVE DIRECTOR:

Peter M. Flanigan                      Jan. 1972      Present

COUNCIL ON ECONOMIC POLICY

EXECUTIVE DIRECTOR:

Ronald B. Brooks                      Jan. 1974      Present

Kenneth W. Dam                      Feb. 1973      Dec. 1973

COST OF LIVING COUNCIL

DIRECTOR:

Dr. John T. Dunlop                      Feb. 1973      Present

Donald Rumsfeld                      Nov. 1971      Feb. 1973

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