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# NOTES FOR THE GOLD AND MONEY SESSION\* By P. R. Hines\*\*

The following article was intended to serve as a reference for those who attend the Gold and Money session of the forthcoming Pacific Northwest Metals and Minerals Conference. Because it is such a good short review, it is presented below, with the author's permission, in the belief that readers of The Ore.—Bin will find it of value in their approach to the problem of trying to revitalize the West's gold mines.

Mr. Hines, author of the review and chairman of the Gold and Money session, has obtained an outstanding group of experts for the daylong session. The speakers and panel members are:

Donald H. McLaughlin, President, Homestake Mining Company. M. A. Kriz, Associate Economist, First National City Bank of New York.

O.K.Burrell, Professor of Finance, University of Oregon.

Philip Cortney, President, Coty, Inc.

Oscar L. Altman, Advisor, Research and Statistics Department, International Monetary Fund.

V.C.Wansbrough, Managing Director, Canadian Metal Mining Association.

Panel moderator will be Evan Just, Head, Mineral Engineering Department, Stanford University.

Editor

## PURPOSE OF THE SESSION

The object of the Gold and Money session at the Pacific Northwest Metals and Minerals Conference is to bring together economists, bankers, and gold producers for an exchange of expert knowledge in each field. It is believed that a better understanding of these three widely separate fields may stimulate further cooperative effort and be of ultimate benefit to all. While apparently the participants may disagree violently, actually all are sincerely interested in the successful solution of how a sound and flourishing economy can be maintained.

In the paragraphs that follow, the various monetary systems and problems connected with them are reviewed. The subjects for the morning program of the Gold and Money session are then discussed, followed by an outline of the questions for the afternoon panel.

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#### MONETARY STANDARDS

The large outflow of gold from the United States in 1958 and 1959 has caused general attention to the insecurity of the United States' gold position and the threat to the soundness of the U.S.gold dollar. The inter-relations between domestic and international monetary policies are not well realized. No one is completely satisfied with the present situation and various monetary systems are proposed to right it. Moreover, the domestic monetary system of the United States is radically different from that used for the settlement of international trade balances and payments. The merits and faults of these various monetary systems will be argued at the session, and some of their basic differences are therefore reviewed in these notes.

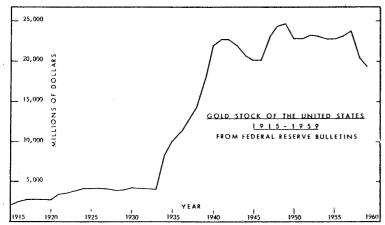
The monetary standards that will be most frequently mentioned on this program are: gold standard; gold coin standard; gold bullion standard; gold exchange standard; silver standard; bimetallic standard; and managed paper standard.

Gold Standard: A country, to be on the gold standard, must:

- (1) Establish a unit of account with a fixed weight of gold at a fixed fineness (purity). As an example, the U.S. gold dollar was fixed at 15 5/21 grains of gold 900 fine, by the President, January 31, 1934, under the authority given him by the Gold Reserve Act of January 30, 1934. Fifteen and 5/21 grains of gold at 900 fineness is exactly 1/35 of a troy ounce of pure gold which fixes the market price of gold at \$35.00 an ounce.
  - (2) The gold standard unit is declared by competent authority to be legal tender for all purposes.
- (3) All classes of money or currency in the monetary system must be convertible into gold or vice versa.
- (4) The government stands ready to buy or sell gold in an unlimited amount at the fixed market price of gold in both the home and world market, thus maintaining the fixed price of gold and the interchangeability of its standard gold unit with gold bullion.
- (5) The government must permit the free flow of gold in both domestic and foreign trade and unrestricted possession for private or personal use.

It has been generally recognized that the gold standard has a set of rules that cannot be substantially violated if the gold standard is to operate successfully. Generally these rules are designed to permit the rather free exchange of gold and goods. (A) The nation on a gold standard must refrain from more than a minimum of interference with the flow of foreign trade. Quotas, bounties, and high tariffs are fundamentally inconsistent with the smooth operation of the standard. (B) The nation on a gold standard must permit free international capital movements and a free foreign exchange market. (C) The nation on a gold standard must be willing to accept the discipline of a flexible internal price and wage structure not marked by either public or private efforts to administer either prices or wages.

Gold Coin and Gold Bullion Standards: The principal difference between the gold coin and gold bullion standards is the free coinage of gold in the former and its use in coins as small as \$10 and \$20.



The gold bullion standard retains the unit of account fixed by weight and fineness of gold but the gold is no longer coined; instead the smallest unit is a bar weighing close to 400 ounces (approximately 27 lb. avoirdupois) or about \$14,000.

Gold Exchange Standard: The gold exchange standard is a compromise frequently made in the hope that the gold coin standard will be adopted later. The re-

ly made in the hope that the gold coin standard will be adopted later. The reserves of the government or central bank may be largely in foreign exchange or notes of gold standard countries. The unit of account is not directly convertible into gold but instead into the currency of a standard country and add

country having the gold standard. This standard economizes in the use of gold. The reserves may be gold deposited abroad as a working balance or exchange in terms of a currency based on gold, or interest-bearing short-time assets, readily convertible into gold such as short-term obligations of the U.S.Treasury.

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Silver Standard: The silver standard operates the same as the gold standard, except that silver is the backing in place of gold. It is not in use at present anywhere.

Bimetallic Standard: The bimetallic standard is based interchangeably upon both gold and silver with a fixed ratio of the weight of each in a dollar. The silver dollar contains approximately 0.77 ounces of silver, which would require a market price of \$1.29 an ounce for silver. Silver dollars, silver certificates, and subsidiary silver coin amount to 11-12 percent of the U.S. currency in circulation. The monetary value of the silver certificates rests more upon the credit of the United States than the silver reserve. Roughly two billion dollars of silver certificates are in circulation. The bimetallic standard of the United States, as such, has been allowed to lapse and has been overwhelmed by the size of the gold reserves and gold purchases.

Managed Paper Standard: The managed paper standard is printed paper money which is not convertible into gold or silver. Its value rests upon the strength of the government treasury issuing it. The word "managed" has attached itself to this type, although many authorities say all monetary systems have to be managed. Possibly a better word would be "regulated," as applied to the volume of money and the ease of obtaining it. Despite the paper standard having been involved in some grave national bankruptcies, it is the standard most governments use today.

#### WAGES

The influence of wages upon inflation, currently, is being studied and analyzed. It has so far not been completely isolated from many other factors. Governmental policy of maintaining full employment introduces a new element. Productivity and new technical discoveries also enter.

Where a country is dependent upon imported raw materials and food, as in the case of Great Britain, any increase in the cost of imports will increase the cost of living and, in turn, set off demands for wage increases. The devaluation of the pound in 1949 did increase the cost of imports. The equalization of agricultural prices with industrial prices by means of subsidies also acts similarly. So the primary cause of wage increases may have several origins.

If wage rates continue to ascend at a faster rate than the increase in productivity per man-hour, there is no end in sight to higher and higher living costs and commodity prices. As yet, no satisfactory brake has been found.

#### UNITED STATES MONETARY POLICY

The United States has two monetary standards—a paper standard for domestic use and a gold bullion standard for settling international accounts. The monetary policy is administered by three independent agencies: (1) the Federal Reserve System, created by acts of Congress which define its intent and powers; (2) the United States Treasury, which is a part of the administrative branch of the U.S. Government; and (3) the International Monetary Fund, which is an agreement among sixty-eight nations, of which the United States is a member. The voting power is determined by the amount of the member's contribution to the Fund's assets and, as the largest subscriber, the United States has the largest vote.

These three institutions, although independent, have to consult with each other and respect the aims and purposes of the others and avoid conflicting policies. Their respective fields and functions are briefly reviewed herewith:

FEDERAL RESERVE SYSTEM. -- The Federal Reserve System was created by an act of Congress as a central bank. Instead of a single bank it was divided into twelve Reserve Districts, each having a District Bank with branches. The whole is controlled by a board of governors located in Washington, D.C. Each district is managed by a president and a board of directors.

The first District Bank opened in September, 1914, at the beginning of World War I. The Reserve System has operated through World War I, the boom of the 1920's, the Depression and the New Deal of the 1930's, World War II, the post-war period of reconstruction, the fighting in Korea, and now into a new era. The Federal Reserve System's functions and authority have been increased and broadened by acts of Congress as knowledge and experience have shown the way.

A Federal Reserve Bank's capital is subscribed by its members. The amount is 6 percent of a member's capital and reserves of which only half has been paid in. The Federal Reserve's greatest power

is its authority to issue Federal Reserve notes, the security for which is now 25 percent in gold certificates issued to it by the U.S.Treasury for gold held by the Treasury, and the balance in qualified commercial paper and government securities. There were \$28,557,000,000 Federal Reserve notes outstanding as of October 31, 1959.

Member banks are required to deposit with the Reserve Bank definite reserves in prescribed ratios according to two major classifications: the first depending upon whether the member bank is a Central Reserve City Bank, a Reserve City, or a Country Bank; the second, whether the deposits are demand or time deposits. These several reserve ratios are determined by the board of governors.

MEMBER E		SERVE I	-	MENTS	*
	Net d	emand de	Time deposits		
Effective date of change	Central reserve city banks	Reserve city banks	Coun- try banks	Central reserve and reserve city banks	Coun- try banks
1917—June 21	13	10	7	3	3
1936—Aug. 16 1937—Mar. 1 May 1 1938—Apr. 16	191/2 223/4 26 223/4	15 171/2 20 171/2	101/4 121/4 14 12	41/4 51/4 6 5	41/4 51/4 6 5
1941—Nov. 1	26 24 22 20	20	14	6	6
1948—Feb. 27	22 24 26 24 23 23 22 23 22 23 24 22 22 23 24 22 22 23 24 23 24 23 22 23 24 23 24 26 26 27 20 20 20 20 20 20 20 20 20 20 20 20 20	22 21 20 19½ 19 18½ 18 19 20 19	16 15 14 13 12 13 14 13	71/2 7 6 5 5	7½ 7 6 5
1958—Feb. 27, Mar. 1. Mar. 20, Apr. 1. Apr. 17 Apr. 24	191/2 19 181/2 18	17½ 17 16½	111/2		
In effect Dec. 1, 1959	18	161/2	11	5	5
Present legal require- ments: Minimum Maximum	10 22	10 22	7	3 6	3 6

The relation between the member banks and the Federal Reserve Banks is that of customer and banker. A member can borrow from a Federal Reserve Bank. A member bank can discount its customers' commercial paper at a higher rate than the Federal Bank's rate and, in turn, discount it at a profit at the Federal Reserve Bank, although the Federal Bank does not have to accept all paper offered. The latest general policy has been stated as follows: "There has been a strengthening of the view that the Federal Reserve, through wise and timely action, may not only exert a stabilizing influence on business conditions but control price level as well."

Harrod says of the Federal Reserve System, "In 1922 they inaugurated what should be called the system of 'managed currency,' and to this they have adhered. It is totally different from the gold standard system, as previously interpreted by Britain and other gold standard countries. This American departure was of supreme importance as an example to other countries and in its influence on thinking since that time. It should be noted that it was the United States that was the inventor and originator of this far reaching development." The United States was still on the gold standard in 1922, and was just emerging from the requirements of World War I and free to operate normally as first conceived.

The Federal Reserve System may exert its influence upon the trend of business by the following:

(1) The discount or interest rate. The board of governors of the Federal Reserve System raises or lowers the discount rate for the Reserve districts and

interest rates for all other types of securities and obligations follow in proportion to their grades. Money is easy or dear to obtain.

- (2) Open market operations by buying and selling securities. The Federal Reserve puts money into circulation when it buys securities and withdraws money when it sells.
- (3) The board of governors has the power to raise or lower the ratios of reserves deposited with it, to the deposits of the member banks, thus expanding or contracting the loaning capacity of the member banks.

UNITED STATES TREASURY.--The U.S. Treasury is part of the administrative branch of the Federal Government, headed by the President. The Secretary of the Treasury is a member of the President's cabinet. The Secretary supervises the collection of the billions of taxes and revenues of the Federal Government and disburses them according to acts of Congress.

The Secretary's toughest job is the management of the national debt of 290 billion dollars and

<sup>1.</sup> Harrod, Sir Roy F., Policy against inflation, St. Martin's Press, 1958.

the refunding of these obligations when they become due. He also handles the national budget of more than 70 billion dollars, borrowing if the receipts do not cover the disbursements or, if the opposite, using the surplus to the best advantage. The direction and placement of these billions, whether to the U.S.Treasury, the Federal Reserve Banks, member banks, or the non-banking public, exert an enormous influence upon the credit system and the national economy.

The Secretary of the Treasury is authorized, under the Gold Reserve Act, to buy and sell gold at rates that are most advantageous to the public interest. This same act also authorized the President to fix the weight and fineness of the U.S. gold dollar, which he did at the corresponding price of \$35.00 an ounce; but the President's authority to make further change has expired.

The United States obligated itself to maintain the weight and fineness of the U.S. gold dollar at the corresponding price of \$35.00 an ounce and also promised to make no change except under an act of Congress when it signed the Bretton Woods agreement. The Treasury maintains the gold price of \$35.00 an ounce by buying or selling unlimited amounts to foreign governments and central banks--i.e., at a 1/4 percent premium when selling and a discount of 1/4 percent when buying.

Kind of currency		Held in the Treasury			H. d. La	Currency in circulation		
	Total out- standing Oct. 31, 1959	As security against gold and silver certificates	Treasury cash	For F. R. Banks and agents	Held by F, R, Banks and agents	Oct. 31, 1959	Sept. 30, 1959	Oct. 31, 1958
Jold. Gold certificates - caleral Reserve notes. - reasury currency—total	28, 557	19,321 2,411	265 88 43	16,474	2,816 1,455 394	31 27,013 4,861	31 26,952 4,866	31 26,569 4,785
Standard silver dollars Silver bullion Silver certificates and Treasury notes of 1890. Subsidiary silver coin Minor coin United States notes Federal Reserve Bank notes. National Bank notes.	540 347	160 2,251	27 9 2 5		8 299 52 8 26 1	293 2,113 1,447 529 316 106 57	292 2,128 1,441 526 315 108 57	274 2,154 1,371 496 315 117 59
Fotal—Oct. 31, 1959 Sept. 30, 1959 Oct. 31, 1958		21,732 21,648 22,558	396 377 674	16,474 16,387 17,290	4,665 4,738 4,580	31,905		31.386

The Treasury has two controls upon gold reserves—it can require a gold export license; it can also "neutralize" a gold purchase by carrying it as a debit on its books, in which case the purchase is financed by tax collections or selling securities rather than the normal way of issuing a "gold certificate" to the Federal Reserve Bank and thus becoming a part of the gold reserves.

One of the biggest responsibilities of the Treasury is keeping the interest rate on the national debt at the lowest possible point. The "open market" operations of the Federal Reserve System conflict with the Treasury's intentions, and during World War II the Federal Reserve's market operations were directed toward supporting the price of U.S.bonds. The Federal Reserve resumed its independent action from that of the Treasury in 1951 under a mutual understanding.

The Secretary of the Treasury was asked to send a representative to the Gold and Money session in order to state the official view upon some of the problems, but the request was refused. Under the circumstances the next best thing is to give the Secretary's views and opinions, as reported recently in the press, and summarized as follows:

- (1) The Secretary stated the gold reserve is safely above the legal reserve requirement of twenty-five percent.
- (2) The Secretary's motive behind his battle for a balanced 1960 budget is his conviction that a stable U.S.dollar is necessary to the economic health of the entire free world. The United States has become the world's banker. Preserving the stability of the dollar is a basic obligation to the free world on America's part, just as important as helping underdeveloped countries with foreign aid.
- (3) The Secretary has no intention of advocating an increase in the price of gold as this would be inflationary and would shake the faith of the world in United States money.

INTERNATIONAL MONETARY FUND. — The International Monetary Fund is an international exchange bank "to promote exchange stability, to maintain orderly exchange arrangements among members, and to avoid competitive exchange depreciation." It is not a lending bank, but a pool of international reserves for converting national currencies. Members of the Fund may draw currencies of other countries in exchange for their own. The Fund is essentially a dealer in exchange, selling the currencies of countries whose money is in demand and accepting payment in either gold or currency of the buyer.

Both the International Monetary Fund and the International Bank for Reconstruction and Development were the outcome of the Bretton Woods conference in 1944. The International Bank of Reconstruction and Development was formed to make long-term capital loans to rebuild industry destroyed by the war.

Sixty-eight countries are members of the International Monetary Fund. Each member subscribes the quota assigned to it under the articles of agreement. The subscription is required to be 25 percent in gold, or 10 percent of its net official gold holdings plus United States dollars, whichever is smaller; the balance is payable either in gold or its own currency in the form of a deposit to the credit of the Fund with the member's central bank. A member's voting power in the Fund's administration is roughly proportional to its quota. The subscriptions were raised approximately 50 percent last year, and now the United States has contributed about one-third of the total.

Gold bullion and the U.S.gold dollar were selected as the monetary standards of the Fund; the par value of the other currencies is referred to the U.S.dollar in effect July 1, 1945--i.e., 15 5/21 grains, 900 fine of gold, corresponding to \$35.00 an ounce. The United States agreed to maintain the par value of the U.S.dollar by buying all gold offered at \$35.00 minus 1/4 percent an ounce and selling to other governments and their central banks all gold required at \$35.00 plus 1/4 percent an ounce. It was fur ther agreed the par value of the U.S.dollar could only be changed by the U.S.Congress.

Bretton Woods Agreement: The Bretton Woods agreement of 1944 and the act of July 31, 1945, confirming the United States agreement to it, are frequently mentioned. Often the Bretton Woods agreement is quoted as binding the United States irrevocably to the present par value of the U.S. gold dollar. The Fund does permit a change in parity whenever it is necessary to correct a fundamental disequilibrium, and it has already done so in a number of cases.

The significant fact in the Bretton Woods agreement is the recognition of the gold bullion standard for the settlement of international transactions, which has committed the United States to the gold bullion standard in foreign transactions but not at home. Moreover, the Fund's monetary standard has become a kind of "international dollar-gold standard."

The U.S.gold dollar can be devalued—some countries are urging the United States to do so—but the question is whether it is advisable to do so.

## DISCUSSION OF THE GOLD AND MONEY SESSION PROGRAM

The dominant thought back of this program is the wide gap in knowledge of each other's problems: the gold mining industry on one side and the group of bankers, economists, and government officials who manage the monetary systems on the other.

The books on banking, money, and inflation contain little on gold mining except for some statistics and some generalities concerning the lag in gold production behind the growth of trade and commerce.

The valuation of a gold mine depends upon the future monetary standards in use in international trade and payments, and the domestic standards for internal use by various governments. Even a mining engineer who is a student of the present monetary systems must have remarkable foresight to set a definite value for a gold mine today; and if he does, it is with the hope he will not be confronted with his recommendations later if they prove wrong.

THE QUANTITY OF THE WORLD'S MINED GOLD SUPPLY TODAY IS DEPENDENT UPON THE JUDGMENT OF THE SECRETARY OF THE U.S. TREASURY AND UPON THE POLITICAL PRESSURES TO WHICH THE U.S. CONGRESS WILL RESPOND.

One of the current disputes about gold is whether the gold reserves and the newly mined gold supply are adequate. The gold mining industry's condition is growing worse and, unless the rise in costs of labor and supplies are compensated for, the production of newly mined gold will rapidly decline except for by-product gold coming from copper, lead, and zinc mining.

So the first thing necessary is to find out just how much gold potential we have. Also, the

following should be assessed: the amount of newly mined production; how much gold reserves are in the ground for the future; the dependency of this supply on the price of gold, labor, and supplies; how few gold deposits can be mined by low-cost mechanical methods such as are used by the great iron and copper mines; and how the majority of our gold mines are now deep mines with the ore occurring in such a manner as to require a great number of man-hours per ton mined and little chance of bettering the mining cost (particularly how geological occurrence handicaps operations). Accordingly, the first paper in the morning program is a review of the newly mined gold supply of the world by Dr. Donald H. McLaughlin, president of Homestake Mining Company.

Gold is still the preferred medium of exchange in the settlement of international trade balances. The brief notes on the International Monetary Fund and the Bretton Woods agreement are merely to correct common misinterpretation of certain points concerning them. It takes more than a few notes to explain the extent of the U.S. commitments to support the U.S. gold dollar and the worldwide consequences of any change. The second paper, "Gold in International Payments Today," by Dr. Miroslav A.Kriz, associate economist of the First National City Bank of New York, goes into it fully and is a necessary presentation for full appreciation of the afternoon discussions.

The third paper of the morning will be "The Problem of Gold Convertibility" by Professor O.K.Burrell, professor of finance, School of Business Administration, University of Oregon. Professor Burrell understands the basic requirements which are usually overlooked and without which no monetary system will work. His analysis of the present domestic monetary system is a thoughtful introduction to the subject. At least one uninterrupted discussion of the U.S.domestic monetary policy is necessary as a prelude to the afternoon's panel of experts.

Philip Cortney, the speaker at the noon luncheon, is a well-known authority on the gold standard. A return to the gold standard appeals to many people, such as Jacques Rueff, French economic advisor, who has done so much to put France back on a sound program. Again it was considered that a preliminary talk on the gold standard was a better approach than assuming the audience is familiar with all of its workings and the theoretical principles on which it is based.

TIME, in reporting the meeting of the International Monetary Fund and the World Bank in Washington in October, 1959, included the groups that propose raising the price of gold with those that want to return to the full gold standard. Actually, these are two separate issues. Active in proposing an increase in the price of gold are the Union of South Africa, the Transvaal and Orange Free State Chamber of Mines, almost all gold producers, and such economists as SIr RoyF. Harrod of Oxford University, England.

Gold producers want the price of gold increased because their cost of producing an ounce of gold is fast approaching or has exceeded \$35.00 an ounce and they will have to shut down. Others point out the need for more gold to keep pace with trade and commerce; they propose to increase the gold value comparable to the rise in prices caused by inflation, thereby increasing the quantity in dollars by devaluation. Some of the advocates of the return to the gold standard believe more gold would then be required, and to secure this increased amount of gold they, too, agree that raising the price of gold is the only way to secure the quantity needed.

## QUESTIONS FOR THE PANEL

QUESTION 1: Have we enough gold?

V.C.Wansbrough will give a few brief summaries of the gold produced in the last twenty-five years as follows: (a) Total which has gone to industrial arts, private hoarding, monetary gold stocks, and accumulated monetary gold stocks. (b) The increase of monetary gold stocks as compared with the increase in world trade in the past twenty-five years.

Oscar L. Altman will give his views on the sufficiency of gold for present international payments; particularly if the present distribution of gold is equitable.

M.A.Kriz will give briefly the gold reserves of the U.S.Treasury in relation to present requirements and also possible future events.

O.K.Burrell will analyze the position of the Federal Reserve System's gold requirements.

Philip Cortney will give his opinion on the gold requirements of the United States, if it were to restore the gold standard, for both domestic and international payments.

Donald H.McLaughlin will state again the probably maximum production of gold which could be made by the gold mining industry under several assumptions.

Moderator to ask each panel member: In general, is the world gold supply adequate for our needs?

The following questions will be treated in like manner by panel members:

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QUESTION 2: The United States will not change its gold price willingly, but could it be forced to devalue the dollar by a protracted balance-of-payments deficit or a run by foreigners on its gold reserve? What would be the economic consequences if the United States were forced to devalue?

QUESTION 3: What are the effects of past and recent gold inflows and outflows on monetary and economic conditions in the United States?

QUESTION 4: Why do not the United States or western European nations want to re-establish full domestic convertibility of domestic currencies into gold? What are the links of the chain uniting gold, domestic money supply, and monetary and economic policy-making?

QUESTION 5: Is it any more difficult to manage a paper money system wisely than it is to manage a gold standard wisely?

QUESTION 6: How would you maintain gold production if costs continue to increase and the cost becomes higher than \$35.00 an ounce? Or would you counsel another standard or system?

QUESTION 7: What should be the policy in the future toward import licensing, foreign exchange control, trade blocs, and other means which have been used for lack of dollar exchange and gold in international trade?

QUESTION 8: Toward which aim do you believe the monetary policy of the United States should be directed: full employment, a stable price level, a mild inflation, a stable U.S.gold dollar, or lower discount and interest rates?

QUESTION 9: Is it your opinion that a meeting of this type, with a comprehensive program of three or more days and representatives from the principal countries including economists, bankers, heads of government agencies, and important gold producers, held at a center such as New York, London, or Geneva, would accomplish a better understanding of the problems discussed today?

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# THE FOREIGN MINERAL TRADE OF THE U.S.S.R. IN 1958 \*

The physical volume of U.S.S.R. mineral exports in 1958 was substantially higher than in 1957. Because of the decline in prices, however, the total value of mineral exports increased less than 5 percent. Because the value of all Soviet exports declined slightly in 1958, the share of minerals in the overall export trade increased to a new high for recent years. On the other hand, the value of mineral imports decreased while total imports, mostly from satellite nations, advanced. As a result, minerals accounted for a smaller share of the total Soviet import trade.

	Million Soviet Rubles**				
	1955	1956	1957	1958	
Exports Value of all exports Value of mineral exports Mineral exports as percent of total exports	13,874	14,677	17,526	17, 190	
	3,616	4,553	6,079	6, 366	
	26.1	31.0	34.7	37.0	
Imports Value of all imports Value of mineral imports Mineral imports as percent of total imports	12,242	14,453	15,751	17,399	
	2,854	3,727	3,869	3,789	
	23.3	25.8	24.5	21.8	

The Soviet Union exports a variety of products in ever-increasing quantities and has become a significant competitor in some international mineral markets. What are the major factors motivating this trend?

The fulfillment of the Seven-Year Plan, the most ambitious of all to date, and of the commitments made to the satellite nations within the framework of the Communist Council for Mutual Economic

Aid has required rapid expansion of Soviet mineral production. Large capital expenditures in development of mineral and metal industries to assure adequate supplies have been made, sometimes with little regard for cost. In 1958 the U.S.S.R. accounted for more than one-sixth of the world's mineral output by value. Estimated 1958 Soviet production of selected mineral commodities and its share of total world output is shown in the table below.

Production of Selected Mineral Commodities, U.S.S.R., 1958 (in 1,000 metric tons, except where noted)					
Production	Share of world				
	total production				
Petroleum (crude), (1,000 bbls) 834,225	12.6%				
Iron ore (marketable)	22.0				
Pig iron (incl. blastfurnace ferroalloys)	20.2				
Steel ingots and castings	20.3				
Chromite	21.7				
	45.3				
Molybdenum 4.2	16.4				
Tungsten ore (60% WO3 basis) 7.5	13.0				
Nickel (content of ores)	22.4				
Copper (smelter)	11.9				
Lead (smelter)	13.8				
Zinc (smelter)	13.4				
Tin (smelter)	8.4				
Cadmium	5.2				
Bismuth	4.6				
Mercury (76 lb. flasks)	10.3				
Gold (1,000 troy ounces) 10,000	24.7				
Silver (1,000 troy ounces)	10.6				
Platinum group metals (1,000 troy ounces)	28.3				

Since the end of World War II, the Soviet Union has turned from a position of many shortages to one of moderate to substantial surpluses in a number of commodities. In recent years these surpluses have been sold in free world markets to earn foreign exchange.

<sup>\*</sup> Excerpts from a report prepared by Alexander Gakner, East European Specialist, Division of Foreign Activities of the Bureau of Mines, and appearing in U.S.Bureau of Mines Mineral Trade Notes, special supplement, January 1960.

<sup>\*\*</sup> Four Soviet rubles equal \$1.00 U.S.currency.

Soviet foreign trade with the free world depends to a great extent on "overflow" from intrabloc needs. The quantities available for exportation are, therefore, not subject to frequent and rapid adjustments to meet the demand set in free, competitive markets. With an expanding economy and the Communist government continuously pressing for larger and more efficient production, the U.S.S.R. probably would not tell its coal mine managers to reduce output or close a few mines (and let the workers stay home) just because there is no market for coal. The government also probably would not favor maintaining large and ever-increasing stockpiles, except for strategic commodities. These factors account for the frequent spotsales at reduced prices which occur whenever undesirable surpluses burden the domestic economy. Trade experts from the Soviet Union insist that they are trying to earn as much foreign exchange as possible. However, in order to make products competitive in markets prejudiced against Soviet commodities, Soviet goods must be offered at reduced prices.

# TURKISH CHROME MINES RECEIVE U.S. HELP

Turkish chrome mines have recently received help from the United States through a barter arrangement whereby United States surplus wheat will be exchanged for Turkish metallurgical-grade chrome. The announcement by the U.S.Department of Agriculture, which appeared in the January 14, 1960, E & MJ Metal and Mineral Markets, states:

"The exchange wheat will be delivered to Turkey by June 1, 1960. The quantity of chromite involved in the transactions will be such as to insure the export to Turkey of approximately 80,000 metric tons of wheat. Chromite received in exchange must be delivered to CCC (Commodity Credit Corp.) within one year from the dates of individual barter commitments. Chromite to be delivered under these transactions will be incorporated into the Supplemental Stockpile authorized by the Agricultural Trade Development and Assistance Act of 1954, as amended."

## CHROMIUM IN JAPAN

The production of chromium increased from 507 metric tons in 1957 to 1,234 tons in 1958. The Tekkosha Company is the only Japanese company producing commercial quantities of chromium. With a Commodity Credit Corporation (CCC) contract ensuring a market, Tekkosha has expanded its monthly output of electrolytic chromium to 100 tons. Delivery of a total 1,500 tons to the CCC was expected to be completed by September 1959.

Almost all of the chromite processed in Japan is imported. In 1957, 250,000 tons was imported, but only 75,000 tons was imported in 1958. The Philippines were the chief source of supply with 141,000 tons in 1957, and the U.S.S.R. followed with 38,000 tons. There were no imports from the U.S.S.R. in 1958. By comparison, domestic production of both high-and low-grade concentrates was 46,000 tons in 1957 and 42,000 tons in 1958. (From U.S. Bureau of Mines Mineral Trade Notes, Jan.1960.)

## ROGUE GEM AND GEOLOGY CLUB EXHIBIT

A colorful exhibit of gem-stone material is being shown at the Department's office in Portland by the Rogue Gem and Geology Club of Grants Pass, Oregon. The exhibit contains beautiful hand-made jewelry, crystals, petrified wood, thundereggs, polished cabachons, and spheres of various sizes and colors. Included in the exhibit are agatized materials of local origin such as Medfordite, Rogueite, and Oregonite. The exhibit is expected to be on display until about the middle of March.