

Monetary Effects of the Treasury Sale of Gold

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AT THE beginning of 1975, it became legal for U. S. residents to hold gold for the first time in 41 years. In early December, the U. S. Government announced its intention to offer 2 million ounces of gold for sale to the public early in January 1975 from its holdings of 276 million ounces. The Treasury received bids for only about one million ounces of gold and accepted bids for only 753,600 ounces. The gold was sold at an average price of \$165.65 per ounce, hence the sale added about \$125 million to the revenues of the Treasury.

This note illustrates the monetary implications of this sale of gold to the public. It is assumed that the Government did not alter its spending plans as a result of the sale of gold. It is assumed that the Treasury used the proceeds from the sale of gold to make expenditures rather than using tax revenues or using the receipts from the sale of bonds to the public. The effects of the transactions between the Treasury and the Federal Reserve are illustrated, and their effects on the monetary base are discussed. The sources of the monetary base are shown in Table I.

In the following analysis it does not matter whether a U. S. resident or a resident of a foreign country purchased gold sold by the Treasury. In order to purchase gold at the auction, a foreign individual must have dollars. Hence, when he pays for the gold, demand deposits of foreigners at U. S. commercial banks decrease. Since these deposits are part of the U. S. money stock, the analysis would be the same as when demand deposits of U. S. residents decline.

Treasury Monetizes Gold

In early December the U. S. Treasury held about 276 million ounces of gold. Of this total amount, 274 million ounces were held in the General Account of the Treasury and 2 million ounces were held in the Exchange Stabilization Fund. Only the 274 million ounces held in the General Account were counted in the monetary base. The Treasury had issued gold certificates to the Federal Reserve Banks against about 271.5 million ounces of gold, valued at \$11.5

Table I

SOURCES OF THE MONETARY BASE

| | |
|---------------------------------------|---|
| I. Factors Supplying Monetary Base | |
| | Federal Reserve holdings of Government securities ¹ |
| | Loans |
| | Federal Reserve float |
| | Gold stock plus Special Drawing Rights certificate account ² |
| | Treasury currency outstanding |
| | Other Federal Reserve assets |
| II. Factors Absorbing Monetary Base | |
| | Treasury cash holdings |
| | Deposits with Federal Reserve Banks |
| | Treasury |
| | Foreign |
| | Other ² |
| | Other Federal Reserve liabilities and capital |
| III. Reserve Adjustments ³ | |
| IV. Monetary Base (I - II + III) | |

¹Includes acceptances held.

²On January 1, 1970, the United States received an initial allocation of \$866.9 million of Special Drawing Rights (SDRs) from the International Monetary Fund. The Treasury, through its Exchange Stabilization Fund, monetized \$400 million of this allocation within a few months. In monetizing, the Treasury issued \$400 million of SDRs to the Federal Reserve Banks and in return received an equal credit to its Exchange Stabilization Fund at the New York Federal Reserve Bank which is included in other deposits.

³Computed by this Bank. It includes the effects of reserve requirement changes and shifts in deposits where different reserve requirements apply.

billion at the official U. S. price of \$42.22 per ounce.¹ The remaining 4.5 million ounces of gold was held in the Exchange Stabilization Fund² and in Treasury cash³ (2 and 2.5 million ounces, respectively).

¹As the Treasury purchased gold in the past, and when the official U. S. price of gold was changed, the Treasury had "monetized" the gold by issuing gold certificates to the Federal Reserve Banks. In return, the Treasury received demand deposits at the Federal Reserve Banks. See, Albert E. Burger, "The Monetary Economics of Gold," this *Review* (January 1974), pp. 2-7.

²The Exchange Stabilization Fund, administered by the Treasury, held 2,019,751 ounces of gold, valued at \$85.3 million. This gold had been acquired by the Fund prior to August 15, 1971, when the Fund engaged from time to time in gold transactions with foreign monetary authorities and with the market for the purpose of stabilizing the value of the dollar relative to gold.

³Treasury cash holdings represent the funds that the Treasury technically has at its disposal without drawing on its deposits

Illustration I

Treasury Monetizes Previously Nonmonetized Gold
(Millions of Dollars)

| Treasury | | Federal Reserve | | Monetary Base ¹ | |
|--|-------------------------|-------------------------|--------------------------------|--|-----------|
| | | | | Sources | Uses |
| \$107 monetized gold | \$107 gold certificates | \$107 gold certificates | \$107 Treasury demand deposits | (+) -\$107 Treasury cash | No change |
| -107 Treasury cash (nonmonetized gold) | | | | (-) \$107 Treasury demand deposits at F.R. | |

¹Sign in brackets indicates direction of effect on monetary base. For example, a decrease in Treasury cash increases the base (+).

In December the Treasury monetized the remaining 4.5 million ounces of gold held in its accounts by purchasing 2 million ounces from the Exchange Stabilization Fund and issuing gold certificates against the entire 4.5 million ounces of gold. In return, it received deposits at the Federal Reserve Banks equal to \$192 million.

The "monetary" or Treasury gold stock of the United States consists of both the amount of gold against which gold certificates have been issued and gold against which no gold certificates have been issued (nonmonetized gold). Nonmonetized gold is included in the account "Treasury cash holdings" which appears as a factor affecting bank reserves and is included on the sources side of the monetary base. An increase (decrease) in Treasury cash absorbs (releases) bank reserves and hence reduces (increases) the monetary base.

Illustration I shows the effects of the Treasury monetizing the 2.5 million ounces of previously unmonetized gold in Treasury cash valued at \$107 million.⁴ In the process of monetizing gold, the Treasury issued gold certificates to the Federal Reserve Banks, in return for which the Federal Reserve Banks credited the demand deposits of the Treasury. The decrease in Treasury cash, which occurred as the

Treasury monetized the gold, is a factor increasing the monetary base; the rise in demand deposits of the Treasury at Federal Reserve Banks is a factor decreasing the monetary base. Therefore, the Treasury action of issuing gold certificates against the 2.5 million ounces of nonmonetized gold in December had no effect on the monetary base.

The 2 million ounces of gold held in the Exchange Stabilization Fund (ESF), however, was not previously included in the gold component of the monetary base. In the sources of the monetary base, "other deposits" at Federal Reserve Banks included a special gold account of the Secretary of the Treasury which included the gold held by the Federal Reserve Bank of New York for the Exchange Stabilization Fund. Other deposits also included the special checking account of the Exchange Stabilization Fund. Therefore, when the Treasury purchased the 2 million ounces of gold from the Exchange Stabilization Fund and issued gold certificates against this amount to the Federal Reserve Banks, the value of the gold stock in the monetary base rose by \$85 million. In the week ended December 11 the gold stock of the monetary base rose by \$36 million and then rose by an additional \$49 million in the week ended December 18.

When the Treasury purchased gold from the ESF, deposits of the ESF at the Federal Reserve rose and Treasury deposits fell. The gold from the ESF account was initially transferred into the Treasury's General Account holdings of nonmonetized gold, hence the item Treasury cash rose. When the Treasury issued gold certificates against the gold it had acquired from the ESF, the gold became classified as monetized gold, Treasury cash decreased, and Treasury demand deposits increased. These transactions are shown in Illustration II.

at the Federal Reserve or Tax and Loan accounts at commercial banks. This account includes any currency and coin held by the Treasury in its own vaults plus nonmonetized gold and silver bullion, silver dollars, and nonsilver coinage metal. See Federal Reserve Bank of New York, *Glossary: Weekly Federal Reserve Statements*, "Factors Affecting Bank Reserves" (September 1972), p. 20.

⁴The Treasury held 2,518,006 ounces of nonmonetized gold which, valued at the official price of \$42.22 an ounce, was worth \$106.3 million. For exposition purposes this amount has been rounded up to \$107 million.

Illustration II

Treasury Purchases Gold From Exchange Stabilization Fund and Monetizes the Gold
(Millions of Dollars)

| Treasury | | Federal Reserve | | Monetary Base ¹ | |
|--|---|------------------------|----------------------|---|-----------|
| | | | | Sources | Uses |
| Treasury Purchases Gold From Exchange Stabilization Fund | \$85 Treasury cash (non-monetized gold) | No change | | (+) \$85 Treasury demand deposits at F.R. | No change |
| | - 85 demand deposits | | | (-) 85 ESF deposits | |
| | | | - 85 gold due ESF | (+) 85 Gold | |
| | | | - 85 ESF gold | (-) \$85 Treasury cash | |
| <hr/> | | | | | |
| Treasury Monetizes Gold | - 85 Treasury cash | | | (+) - 85 Treasury cash | No change |
| | 85 monetized gold | 85 gold certificates | 85 gold certificates | (-) 85 Treasury demand deposits at F.R. | |
| | 85 demand deposits | | | | |
| Net Effect | | Net Effect | | Net Effect | |
| \$85 monetized gold | \$85 gold certificates | \$85 gold certificates | 85 ESF deposits | (+) 85 gold | No change |
| | | | | (-) 85 ESF deposits | |

¹Sign in brackets indicates direction of effect on monetary base. For example, a rise in Treasury cash decreases the base (-).

These transactions between the Treasury and the Federal Reserve had no effect on the monetary base or the money stock. The increase in the gold stock (\$85 million) in the monetary base was completely offset by a corresponding rise in deposits of the Exchange Stabilization Fund (\$85 million) at the Federal Reserve. However, since the Treasury issued gold certificates against the gold it purchased from the Exchange Stabilization Fund, the amount of gold certificates held by the Federal Reserve Banks rose by \$85 million.

The combined results of the two steps whereby the Treasury monetized \$192 million of gold are shown in Illustration III. All the Treasury's gold holdings have been monetized, gold certificates held by the

Federal Reserve have risen and Treasury deposits at the Federal Reserve Banks have increased.

Treasury Sells Gold to Public

As the Treasury received payment from the public for the gold it sold and deposited these funds in its accounts at Federal Reserve Banks, the money stock temporarily decreased. Demand deposits of the public at commercial banks, which are part of the money stock, declined; Treasury deposits at Federal Reserve Banks rose, and bank reserves fell. These effects are shown in Stage I of Illustration IV.

Since it was assumed that the expenditures of the Treasury are unaffected by the sale of gold, these

Illustration III

Combined Results of Actions Shown in Illustrations I and II
(Millions of Dollars)

| Treasury | | Federal Reserve | | Monetary Base ¹ | |
|----------------------|-------------------------|-------------------------|--------------------------------|--|-----------|
| | | | | Sources | Uses |
| \$192 monetized gold | \$192 gold certificates | \$192 gold certificates | \$107 Treasury demand deposits | (+) \$85 gold | No change |
| - 107 Treasury cash | | | 85 ESF deposits | (+) - 107 Treasury cash | |
| 107 demand deposits | | | | (-) 85 ESF deposits | |
| | | | | (-) 107 Treasury demand deposits at F.R. | |

¹Sign in brackets indicates direction of effect on monetary base.

Illustration IV
Effect on Money Stock of Treasury Sale of Gold
 (Millions of Dollars)

| Stage I Treasury Sells Gold | | Stage II Treasury Makes Payments to the Public | |
|--|--|---|---|
| Federal Reserve | | Federal Reserve | |
| | \$125 Treasury deposits at Federal Reserve Banks | | -\$125 Treasury deposits at Federal Reserve Banks |
| | -\$125 member bank deposits at Federal Reserve Banks | | \$125 member bank deposits at Federal Reserve Banks |
| Banks | | Banks | |
| -\$125 member bank deposits at the Federal Reserve Banks | -\$125 demand deposits of the public | \$125 member bank deposits at the Federal Reserve Banks | \$125 demand deposits of the public |

These effects are shown in Stage II of Illustration IV. The money stock returns to its level prior to the sale of gold.

The effects of the Treasury sale of gold on the monetary base are shown in Illustration V. At the end of December the Treasury held gold in only one account, 276 million ounces against all of which gold certificates had been issued. As the Treasury sold gold to the public in early January, it had to redeem gold certificates from the Federal Reserve representing claims of an equal amount. These gold certificates were redeemed at the official U. S. price of gold (\$42.22 an ounce). Hence, the Treasury paid the Federal Reserve about \$32 million to redeem gold certificates representing claims on 753,600 ounces of gold. This transaction had no effect on the money stock or the monetary base. Treasury deposits at Federal Reserve Banks decreased by \$32 million and the amount of gold in the monetary base (which is valued at the official U. S. price of gold) declined by \$32 million. These effects are shown in the upper third of Illustration V.

transactions will be reversed shortly. The Treasury makes payments for goods and services and makes transfer payments by writing checks drawn on its deposits at the Federal Reserve Banks. Therefore, as the Treasury makes expenditures, Treasury deposits at the Federal Reserve Banks decrease, demand deposits of the public rise, and bank reserves increase.

As the Treasury received payment from the public for the gold, Treasury deposits at Federal Reserve Banks rose by \$125 million. These effects are shown in the middle of Illustration V. When the Treasury spent the proceeds from the sale of gold, these transactions were reversed; demand deposits of the Treasury at Federal Reserve Banks fell by \$125

Illustration V
Treasury Sells Gold to the Public and Redeems Gold Certificates at Federal Reserve Banks
 (Millions of Dollars)

| | Treasury | | Federal Reserve | | Monetary Base ¹ | |
|---|--|--|-------------------------|--|--|-----------------------------------|
| | Sources | Uses | Sources | Uses | Sources | Uses |
| Treasury Redeems Gold Certificates | -\$32 monetized gold -32 demand deposits | -\$32 gold certificates -32 net worth | -\$32 gold certificates | -\$32 Treasury demand deposits | -\$32 gold (+) -32 Treasury demand deposits at F.R. | No change |
| Treasury Receives Payment for Gold | 125 demand deposits | 125 net worth | No change | 125 Treasury demand deposits -125 member bank deposits | (-) 125 Treasury demand deposits at F.R. | -125 member bank deposits at F.R. |
| Treasury Purchases Goods and Services with Proceeds of Gold Sale | -125 demand deposits 125 goods and services | No change | No change | -125 Treasury demand deposits 125 demand deposits of member banks | (+) -125 Treasury demand deposits at F.R. | 125 member bank deposits at F.R. |

¹Sign in brackets indicates direction of effect on monetary base.

Illustration VI

Summary of Effects of Gold Transactions on the Monetary Base
(Millions of Dollars)

| Treasury | | Federal Reserve | | Monetary Base ¹ | |
|------------------------|-------------------------|-------------------------|-------------------------------|---|-----------|
| | | | | Sources | Uses |
| \$160 monetized gold | \$160 gold certificates | \$160 gold certificates | \$75 Treasury demand deposits | (+) \$53 gold | No change |
| 75 demand deposits | | | 85 ESF deposits | (-) 75 Treasury demand deposits at F.R. | |
| -107 Treasury cash | | | | (+) -107 Treasury cash | |
| 125 goods and services | 93 net worth | | | (-) 85 ESF deposits | |

¹Sign in brackets indicates direction of effect on monetary base.

million and deposits of member banks at the Federal Reserve Banks rose by \$125 million, as shown in the lower third of Illustration V.

Illustration VI depicts the final effect on the monetary base, after the Treasury had monetized 4.5 million ounces of gold, sold about 750,000 ounces of gold to the public, and spent the proceeds from the sale of gold (\$125 million). Gold in the monetary base rose by \$53 million, equal to the transfer of gold from the ESF (\$85 million) less the official dollar amount sold to the public (\$32 million). Treasury cash decreased by \$107 million reflecting the decrease in nonmonetized gold. ESF deposits (included in "other deposits") rose by \$85 million, reflecting the purchase of gold from the ESF by the Treasury.

The Treasury experienced an increase in net worth because it sold gold, valued on its accounts at \$42.22

an ounce, to the public at an average price of \$165.65 an ounce. Gold holdings of the Treasury, as valued in Treasury accounts, decreased by \$32 million, but the Treasury received \$125 million from the public. Hence, the Treasury had a gain in net worth of \$93 million.

One important item to note in the final result for the monetary base is that Treasury demand deposits at the Federal Reserve Banks are \$75 million higher even after it has spent the proceeds from the sale of gold. The Treasury received \$192 million in deposits at Federal Reserve Banks as a result of monetizing 4.5 million ounces of gold. It spent \$85 million to pay for the gold it acquired from the Exchange Stabilization Fund and \$32 million to retire gold certificates as a result of the sale of gold. When the Treasury spends the balance of the proceeds from monetizing gold (\$75 million) *the monetary base will increase* by this amount.

