The original documents are located in Box B98, folder "Swap Arrangements - General, 1970-75 (3)" of the Arthur F. Burns Papers at the Gerald R. Ford Presidential Library.

MAY 1962 EDITION
GSA FPMR (41 CFR) 101-11.6

UNITED STATES GOVERNMENT

Memorandum

~~CONFIDENTIAL~~

TO : Under Secretary Volcker DATE: January 12, 1972

FROM : T. P. Nelson TPN

SUBJECT: Foreign Exchange Losses and Maintenance of Value Obligations

Attached are two tables -- Table I shows the increment on gold with the estimated exchange losses of the ESF and of the Federal Reserve and the maintenance of value obligations.

A running subtotal of these losses and obligations is shown for comparison with the increment.

If the increment on gold were appropriated to the ESF, it could cover its own losses and the MOV to the IMF and come out about $50 million ahead.

It could also accept the liabilities for present dollar holdings and outstanding dollar loans of the international banks with a net loss of $201 million, which is, however, about $50 million less than its loss is estimated to be if the increment on gold were not appropriated to it and it bore the losses for which it already has liability.

Total losses and maintenance of value obligations for which the Treasury, including the ESF, has responsibility amount to $1,875 million compared to the $828 million increment on gold.

Federal Reserve losses are estimated at about $177 million, which would bring the total U. S. losses to $2,052 million.

Table II shows in more detail how the profit on gold and the exchange losses of the ESF and Federal Reserve are calculated.

Pending negotiations and actual settlements, which may be based on future market rates, the losses of the ESF and the Federal Reserve cannot be firmly stated.

The data on MOV obligations are from Bradfield table.

cc: Messrs. Bennett, Bradfield.

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TABLE I
(In millions of $)

A. Profit on gold ex IMF gold repurchase	$828	
Write up of gold tranche sales[illegible] for which no [illegible] payment	144	
	972	
B. Exchange losses and MOV Obligations		
1. Estimated Exchange Loss in ESF (Roosa bonds, SDR, IMF drawings)	252	
2. MOV to IMF	524	
Subtotal	776	
3. MOV to International Banks		
a. present $ holdings	167	
Subtotal	943	
b. dollar loans outstanding	86	
Subtotal	1,029	(ex Item B(1) $777)
c. Present callable Capital	586	
Subtotal	1,615	
d. Future Subscriptions, both paid in and callable	260	
Subtotal	$1,875	
4. Estimated Federal Reserve losses	177	
Grand Total	$2,052	

1875
95
1,780
972
808

~~CONFIDENTIAL~~ 1/12/72

808
586
222

~~CONFIDENTIAL~~

TABLE II

A. Gold Increment	Total U.S. gold holdings		$10,205.8	874.1
	less amounts repayable by IMF		543.9	44.6
			9,661.9	
			.0857	
	Increment		$ 828.0	830.0
B.(1) SDR (ESF)	Holdings		$ 1,809.9	
	less Allocation		2,294.0	
	Difference		-484.1	
			.0857	
	Loss		$ 41.5	
(2) Roosa Bonds (ESF)				
	German offset	$675.0		
	less DM held	225.0		
		450.0		
	Assumed loss (subject to negotiation	.0857		
	Loss		38.6	
	Belgian franc	32.0		
	(no revaluation protection)	.1157		
	Loss		3.7	
	Swiss franc	1,323.0		
	(from par to par)	.0557		
	Loss		73.7	
	Total Estimated Loss		116.0	
(3) IMF Drawing (ESF)			$ 1,105.0	
			.0857	
	Loss		94.7	
(4) Total Estimated Loss to ESF			$252.2	

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(TABLE II)

C. Federal Reserve Swaps

Belgian francs	635.00
to be negotiated	.0857
	54.40
Sterling	750.00
estimated (old ceiling	.0557
to new floor)	41.80
Swiss franc	1,600.00
estimated (old ceiling	.0480
to new par)	76.80
Deutschemark	50.0
to be negotiated	.0857
	4.3

Total estimated Fed loss 177.3

~~CONFIDENTIAL~~

1/21/72

Profits, Losses and Obligations Resulting From Dollar Devaluation - Treasury-ESF-Federal Reserve
(Calculated as of January 1, 1972 in millions of $)

Profits (Gross)	Amount	Remarks
1. Increment on gold in Treasury (10,132.2)	868.3	Will go to Miscellaneous Receipts unless legislation authorizes transfer to ESF.
Increment on gold in ESF (73.6)	6.3	
	874.6	
Less increment on gold repurchases (543.9) by IMF	44.6	
Net total	830.0	
	828.0	
2. Write up of ESF For. Exch.holdings		
a. due to U.S. devaluation 8.57%	19.8	To ESF - the profit due to revaluation of other currencies should perhaps be left out of these calculations since it is not due to U. S. devaluation as are all other items.
b. due to revaluation other currencies	7.2	
Total	27.0	
3. Increment U. S. gold tranche obtained without obligation under maintenance of value provision.	144.0	To Treasury Miscellaneous Receipts unless legislation authorizes transfer to ESF.
4. Increment in Value SDR	155.1	To ESF
Treasury-ESF Total Profits	1,156.1	
5. Write up of Federal Reserve For. Exch.	1.0	To Federal Reserve.
Grand Total	1,157.1	

~~CONFIDENTIAL~~

sses (Gross)	Amount	Remarks
German Offset Bonds ($675.0)	57.8	(To ESF - Estimated actual losses remain
Belgian bonds	3.7	(for determination through negotiation and on
Swiss franc bonds	73.7	(market rates in effect at time of payment.
IMF drawings (1,105.0)	94.7	To ESF - it would be reasonable to either transfer the increment on the gold tranche to the ESF or change the ESF commitment to provide the Treasury foreign currencies at the old parity rate. The arrangement could be changed to provide at new parities in which case profits in item 3 would eventually be only $49.3 instead of the $144.0 million indicated.
. SDR Allocations (2,299.0)	196.6	To ESF - this results in net loss of $41.5 when compared with gain in item 4 of profit total. It has been suggested that if allocation considered as equity a write up might not be necessary.
Treasury-ESF Total	426.5	
. Losses to Federal Reserve on Swaps	177.3	Estimated - subject to negotiation and market fluctuations.
Grand total	603.8	

~~CONFIDENTIAL~~

Maintenance of Value Obligations	Amount	Remarks
1. To IMF	524.5	
2. To International Banks	1,097.9	See attached table for breakdown.
	1,622.4	

SUMMARY

	Treasury	ESF	Total	Federal Reserve	Grand Total
Losses	-0-	426.5	426.5	177.3	603.8
MOV	1,622.4	-0-	1,622.4	-0-	1,622.4
	1,622.4	426.5	2,048.9	177.3	2,226.2
less Profits	940.0	182.1	1,156.1	1.0	1,157.1
Net	648.4	244.4	892.8	176.3	1,069.1

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MAINTENANCE OF VALUE IN IFI

(In $ millions)

	Present dollar holdings	Dollar loans outstanding	Present callable capital	Future Subscriptions Paid in	Future Subscriptions Callable	Grand total
IBRD	-	49.0	489.8	1.9	19.0	559.7
IDA	39.8	-	-	82.2		122.1
IDB						
OC	15.4	23.1	116.6	8.6	28.9	192.6
FSO	107.1	13.7		85.8		206.6
ADB	8.6	-	8.6			17.2
IMF	524.5					524.2
IFI Total	695.4	85.8	615.0	178.5	47.9	1,622.4

~~CONFIDENTIAL~~

U. S. TREASURY DEPARTMENT
Office of the Assistant Secretary
For International Affairs

Date 2/22/72

To: Governor Daane

T. Page Nelson

Room 5221 Ext. 2884

Estimated Revaluation of Assets and Obligations Arising from Devaluation of Dollar With Respect to Gold
(In millions of $)

Gold revaluation results in increment of 8.57% of U.S. gold stock	$828

Maintenance of Value Obligations (MOVs) in International Financial Institutions

The value of our subscriptions and capital stock, in accordance with the Articles of Agreement to which we have subscribed, must be revalued in terms of dollars to maintain their initial gold value. This entails the acceptance of liabilities with varying degrees of contingency.

International Monetary Fund

A. Additional letters of credit will be issued in the following amounts representing the 8.57% increase in:

(i) amount of U.S. dollar subscription (3/4 of quota)	431	
(ii) outstanding drawings by U.S.	94	525

B. The value of our subscription will increase by: 575
(The net increase of $50 million over the additional letters of credit issued represents the portion of our quota paid in gold and undrawn.)
The IMF transaction represents an exchange of assets and is not a budgetary item.

International Banks

The maintenance of value obligations incurred for the development institutions may be broken down as follows and total approximately as follows for paid in and callable capital: 1,069

	To be paid in	Callable
IBRD	51	509
IDA	122	--
IDB	224	146
ADB	9	9
	406	663

The paid in amount reflects that portion of our subscription already paid in or for which letters of credit are outstanding, plus amounts to be paid in under subscriptions to which we are committed and are now in the authorization process. Budgetary expenditures will take place only as payments are made under letters of credit and will be spread over a number of years (see below).

The callable capital represents a highly contingent liability. The likelihood of it being called and becoming an expenditure at any time is remote.

The dollar value of our subscription and capital stock in these institutions will increase commensurately with our MOV obligations.

Estimated Impact on Budgetary Expenditures

Gold:

No direct impact because not treated as a receipt under unified budgetary concept. Increment of $828 million will, however, have a cash impact that may reduce Treasury borrowing needs and thereby reduce interest cost which is a budgetary expense item. (At an assumed interest rate of 4 percent, interest savings would total about $33 million annually, which would substantially offset the budgetary expenditures noted below as they occur over the years.)

IMF: None

International Banks:

Paid in Capital

FY1972 and 1973 - None

FY1974 through FY1976 - representing MOV on capital now paid in and held by institutions, or to be paid in under authorizations in process	$343
FY1977 to FY1986 - representing MOV on paid in capital now out on loan by institutions for which letters of credit will be issued and payment made as loans are repaid and new disbursements made:	63

Callable Capital: None expected.

Note: The precise amount of maintenance of value obligations will have to be determined on the date the parity change becomes effective. The above figures are therefore subject to moderate change. Also, the IDB has under consideration the relationship of MOV to pending subscriptions to the FSO.

2/9/72

Foreign Currency Securities and SDR

In addition to MOVs in the international financial institutions certain liabilities will be incurred by the Exchange Stabilization Fund (ESF).

These arise from exchange guarantees on foreign currency denominated securities estimated at:	$172	
Against which there is an offset from gains on foreign exchange of	27	$145
Also the value of both SDR held by and allocated to the ESF will be written up. Since the U. S. is a net user of SDR there will be a net book loss, realizable only on dissolution of the SDR system or U. S. withdrawal therefrom of:		42

The exchange transactions of the ESF are not budgetary expenditures.

2/9/72

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Date February 22, 1972

To Chairman Burns

From J. Dewey Daane

I called Coombs this morning about the swap arrangements and he dictated the attached draft to my secretary this afternoon. As you will note, the loss figure on page 3 is still to be supplied.

I am also attaching the Bodner memo submitted to the FOMC on January 4 which gives the cumulative figures in clear perspective on page 1 as well as other relevant comments on page 3.

2/22/72 - 3:30 p.m.
Memo dictated by phone
by Mr. Coombs secretary
to Gail

D R A F T

TO: Governor Daane SUBJECT: Federal Reserve Swap Arrangements

FROM: C. A. Coombs

(1) The rationale of the Federal Reserve swap network derived from the legal obligation assumed by the United States under the Bretton Woods system to convert upon request the dollar accumulations of foreign central banks into gold or some other acceptable reserve asset such as a credit on the books of the IMF or subsequently SDR's. In order to reduce, or at least defer, such foreign central bank calls upon gold and other U.S. reserve assets, the Treasury in 1961, and the Federal Reserve in 1962, introduced an alternative to such convertibility in the form of Treasury ~~x~~ issues of foreign currency bonds and Federal Reserve borrowings of foreign currencies under its reciprocal credit arrangements or "swap lines" with foreign central banks.

(2) Under these arrangements, if a foreign central bank, say The Netherlands Bank, took in $100 million which it wished to convert into gold or some other reserve assets, the U.S. Government was enabled to shield our stock of gold and other reserve assets from such a conversion by borrowing from The Netherlands Bank $100 million equivalent of guilders, either through a Treasury issue of guilder bonds or by a Federal Reserve borrowing of guilders under its swap line with The Netherlands Bank.

The guilder proceeds of such Treasury or Federal Reserve borrowings could then be used to buy back the unwanted $100 million on the books of the Netherlands Bank, thus forestalling a conversion of such dollars into gold or other reserve assets. The guilder debt thus incurred by the Treasury or Federal Reserve might subsequently be extinguished by a Federal Reserve or Treasury purchase of guilders in the market or directly from the Netherlands Bank, if subsequent outflows of funds from the Netherlands created a demand for dollars. If such a reversal in the flow of funds did not occur before the final maturity dates of the Treasury bond issues or the Federal Reserve swap drawings, the guilder debt thus incurred by the U.S. Government could always be liquidated by U.S. sales to the Netherlands Bank of gold or other reserve assets.

(3) In undertaking such foreign currency borrowing, the U.S. was protected against the risk of losses arising from a revaluation of the foreign currency concerned. This revaluation guarantee was invoked, for example, following the revaluation of the Swiss franc and the move of the Netherlands guilder to a floating rate basis in May 1971, and should also be invoked when the revaluations, agreed on December 18, of the German mark and the Belgian franc are formalized by a declaration by these countries of new parities to the International Monetary Fund.

(4) In undertaking such borrowing of foreign currencies, however, the U.S. Government naturally had to assume the risk of a formal devaluation of the dollar through an increase in the official price of gold. Otherwise, the foreign central bank whose currency was borrowed

 (Figures to be supplied later.)

by the U.S. Government would not have regarded such U.S. issue of foreign currency debt instruments as a satisfactory alternative to conversion of U.S. dollars into gold or other reserve assets.

(5) When the U.S. delcares a new dollar parity to the IMF, based on the change in the official gold price from \$35 to \$38 per ounce, both the U.S. Treasury and the Federal Reserve will be compelled to honor the exchange guarantees implicit in the Treasury's ~~XXX~~ foreign currency bonds and the Federal Reserve swap debt by acquiring the foreign currencies concerned at the new and higher exchange rate levels caused by the devaluation of the dollar. Since the devaluation of the dollar amounts to 8.57 per cent, this means that liquidation of the currently outstanding Federal Reserve debt of \$2,855 million, if settled at rates corresponding to the new U.S. parity, would cost the Federal Reserve roughly \$_____ ~~XXXXXXXX~~ \$____ million more than the original dollar value of such debt. This additional cost may, of course, be significantly reduced if the foreign currencies concerned become available, either through the market or through direct purchases from the central bank concerned, at their new floor rates under the December 18 agreement rather than at their par values.

(6) Against such exchange losses caused by devaluation of the dollar, the Treasury will secure a roughly offsetting, perhaps more than offsetting, profit on more than \$2.8 billion of gold and other reserve assets, which it still holds because of foreign central banks willingness to accept foreign currency bonds or Federal Reserve drawings on the swap

lines as an alternative to taking $2.8 billion of gold or other reserve assets from the U.S. Treasury. In effect, the Treasury's profit on $2.8 billion of gold and other gold-denominated assets, such as SDRs, which it would have lost in the absence of Treasury or Federal Reserve assumption of foreign currency debt, fully washes out the exchange ~~x~~ losses that will be incurred by the Treasury or Federal Reserve in paying off such indebtedness. Alternatively, if the Treasury were now to decide to pay off all such foreign currency debt by selling gold or SDRs to the foreign central banks concerned exchange losses by both the Treasury and the Federal Reserve would be eliminated ~~by~~ but the Treasury would secure a correspondingly smaller profit on its reduced holding of gold and gold-denominated reserve assets.

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, D. C. 20551

January 5, 1972

CONFIDENTIAL (FR)

TO: Federal Open Market Committee

FROM: Mr. Broida

Enclosed for your information is a copy of a memorandum from Mr. Bodner, dated January 4, 1972, and entitled "System Losses on Foreign Exchange Transactions in 1971."

Arthur L. Broida

Arthur L. Broida,
Deputy Secretary,
Federal Open Market Committee.

Enclosure

CONFIDENTIAL (FR) January 4, 197~~1~~2

TO: Federal Open Market Committee

FROM: David E. Bodner

Subject: System Losses on Foreign exchange Transactions in 1971.

Contrary to experience in previous years, the foreign exchange operations of the Federal Reserve System generated a net loss in 1971, amounting to $8.2 million. This compared with profits of $3.5 million for distribution in 1970 and a previous cumulative total of $21.8 million of profits since the inception of the swap network. 1/ This memorandum briefly reviews the reasons for the loss in 1971, and assesses the immediate prospects for 1972. The respective shares of loss will be reported in the annual statements of the Reserve Banks as a deduction from earnings under the title "Loss on foreign exchange transactions."

For the first seven months of 1971, the System had net profits on foreign exchange operations amounting to $3.7 million. These profits arose in connection with liquidation of guaranteed sterling holdings, sales of German marks to the Netherlands and to the market, repayments of Swiss-franc swap commitments, and write-up of Swiss franc balances following the franc's revaluation last May. The profit would have been even larger except that the System had incurred a loss on the liquidation of Dutch-guilder swap commitments. These net profits were more than offset by losses from repayment of swap drawings after August 15.

1/ The System also has recorded substantial interest earnings on foreign exchange balances. These amounted to $2.6 million in 1971, which raised the cumulative total since 1961 to $322.8 million.

As you know, swap drawings by the Federal Reserve have been used as a shield for the U.S. gold stock and other international reserve assets by providing foreign central banks with a short-term exchange value guarantee on dollars that they might otherwise wish to convert. As the U.S. payments deficit mounted last year, other central banks accumulated large amounts of dollars and several asked the System to provide cover under the swap arrangements. When President Nixon suspended dollar convertibility on August 15, the Federal Reserve had a total of $3,045 million of commitments under the swap arrangements. With the subsequent rise in foreign currency rates in the market, and with the efforts by the U.S. to negotiate a realignment of currency rates, it became inevitable that the System would take a loss on these obligations, particularly since it was, and is, the Treasury's position that those debts should as far as possible be settled through the market rather than through the use of reserve assets. As individual swap drawings matured, they were generally renewed, given the fact that the negotiations were still proceeding and that reflows had not yet developed. The National Bank of Belgium, however, requested the System to begin making repayments through purchases in the exchange market, and some $145 million of the original $635 million equivalent of Belgian franc drawings was repaid on that basis. The System also paid down $10 million equivalent of German marks, but this was out of balances on hand and resulted in a nominal profit. Agreement on a currency realignment was reached in Washington on December 18, based on the United States' promise, pending settlement of other international issues, to propose to Congress a suitable means of devaluing the dollar. Since devaluation is precisely the contingency that the swaps protect foreign creditors against, the System has to make good on that guarantee. As reflows subsequently began to develop in the exchange market, the System purchased sufficient sterling to repay $35 million of its swap debt to the Bank of England. Thus, at the end of the year, the remaining drawings outstanding under the swap line were $2,855 million.

Looking ahead to 1972, additional losses can be expected on the liquidation of the swap drawings. At present we estimate that these losses could amount to $140-$150 million, based on the assumption that the currency realignment negotiated in December is ultimately ratified by the governments and that reflows drive the currencies to their respective floors.[2/] Negotiations are continuing with other central banks looking toward agreement on an appropriate sharing of the losses in cases in which the new "central" rate reflects a combination of the proposed U.S. devaluation and a proposed revaluation of the other currency. It is anticipated that in those cases (Belgium and Germany) the respective central banks will honor the revaluation clauses in the swap agreements. As the losses are incurred, they will affect the System's over-all earnings, and will reduce the amounts to be transferred to the U.S. Treasury each month. Even for one month, however, the System's transfers to the Treasury are much larger than the total expected loss, and it is likely that the losses will be spread out over several months.

2/ It should be noted that, insofar as Federal Reserve swap drawings substituted for sales of reserve assets, the Treasury will have correspondingly larger "revaluation profits" on those assets. Treasury losses on foreign currency bonds outstanding probably will run to about $110 million.

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Date Feb. 23, 1972

To Chairman Burns

From *J. Dewey Daane*

One more piece of relevant material from the New York Fed.

J. D. D.

Dictated by Bodner's secy.
3:20 p.m. 2/23/72 (gr)

The Reporting of Federal Reserve Foreign Exchange Operations

The foreign exchange operation of the U.S. Treasury and the Federal Reserve System has been regularly and fully reported in the Special Manager's six-monthly reports published in the Federal Reserve Bulletin and the Monthly Review of the Federal Reserve Bank of New York. To the extent that the System's operations lead to indebtedness by the Federal Reserve, these are in the form of forward commitments to deliver foreign currency. In conformity with standard accounting practice among commercial and central banks here and abroad, forward commitments are not reported in the regular statement of condition of the Federal Reserve Banks or in the reports of the U.S. Treasury's Exchange Stabilization Fund. If forward contracts were to be included in the regular Condition Report, it would have to be in the form of a memorandum item, since there is no category of regular assets or liabilities in which future commitments can be appropriately reflected.

More generally, it has always been the views of treasuries and central banks in particular that market knowledge of their outstanding commitments on a current basis could have adverse consequences, both in terms of other operations being conducted by the central banks and treasuries and in terms of market psychology with respect to the value of their currency. There have been numerous occasions in which governments have made a decision to defend the value of their currency against speculative pressures in the exchange markets where, through swaps with foreign central banks or operations in the forward market, they have been able to divert pressure from their current gold and exchange reserve, thereby reducing the visible impact of the pressures and minimizing the extent to which additional speculation might be drawn into the market. The publication of outstanding forward commitments on a current basis could in such circumstances negate the value of the forward operations and could force governments into exchange adjustments that they might otherwise regard as both undesirable and unnecessary.

There are other circumstances in which the market's knowledge of outstanding forward commitments may lead it to draw erroneous conclusions either about the pressures currently facing a government or about pressures that will ultimately be brought to bear in the exchange markets themselves, because simple knowledge of the figures does not necessarily take account of inter-governmental or inter-central bank understandings that may govern the manner in which such commitments can ultimately be repaid. For these reasons, the U.S. Treasury and the Federal Reserve have since the resumption of their exchange operations in 1961 followed conventional accounting practice. On the other hand, as noted above, unlike most foreign central banks and governments, the System and the U.S. Treasury periodically report all their swap transactions and forward exchange operations.

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM

Office Correspondence

Date February 23, 1972

To Mr. Bryant

Subject: Estimates of System Losses on Swap Obligations

From Samuel I. Katz

Attached is a table prepared by Messrs. Pardee and Bodner of the New York Reserve Bank which we requested.

S.K.

cc: Governor Daane
Mr. R. Solomon
Mr. Hersey
Mr. Pizer
Mr. Bodner - Mr. Pardee

Estimates of Federal Reserve dollar losses on outstanding swap obligations, as of February 22, 1972
(in millions of dollars)

Currency	Minimum loss	Parity loss	Maximum loss
Sterling	37.7	55.0	72.3
Swiss franc	56.3	93.6	132.6
Belgian franc	36.0	42.0	42.0
German mark	3.9	3.9	3.9
TOTAL	133.9	194.5	250.8

Explanatory notes

1. Sterling and Swiss francs - No discussions yet opened with the foreign central banks concerned.

   The three estimates are based on assumption that the pounds and Swiss francs would be obtained as follows:

   (1) Minimum loss - at new floors for the foreign currency (ceiling for dollar);

   (2) Parity loss - at new parity for the foreign currency; and

   (3) Maximum loss - at new ceiling for the foreign currency (floor for dollar).

2. Belgian francs - New York Federal Reserve officials are already near agreement with officials of the National Bank of Belgium on the terms for the settlement of System swap obligations in this currency. The estimates are based on these discussions. In brief, System officials would expect to get the Belgian francs from the Belgian central bank at 8.57% above the former Belgian ceiling.

3. German mark - Estimates based on assumption that the Bundesbank would provide the small amount of DMs involved at 8.57% above the previous parity.

RCB

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM

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3. German mark - Estimates based on assumption that the Bundesbank would provide the small amount of DMs involved at 8.57% above the previous parity.

[c. 2-72?]

Question:

Why did the Federal Reserve continue to draw on the swap network in the spring and summer of 1971 when it was evident that a crisis was ahead? Couldn't the Federal Reserve have avoided the commitments that will involve it in losses of $200 million?

Answer:

If the Federal Reserve had refused to draw on its swap lines with other central banks they would have had the right to come to the U.S. Treasury and ask for conversion of those dollar balances into gold and other reserve assets. Thus the Treasury would have been faced with a very large drain on U.S. reserves. The decision to suspend convertibility of the dollar into reserve assets, which was made on August 15, would thus have had to be faced considerably earlier. With hindsight some might say that the decision should have been made earlier. Some, including Mr. Reuss, were recommending it then. But the U.S. Government clung to the hope that the balance of payments situation could be turned around without precipitating a severe crisis such as, in fact, was precipitated by the suspension on August 15. In any event, the delay until August 15 in suspending convertibility made it possible to combine the international with the domestic aspects of the President's economic program, thereby strengthening each of them.

February 28, 1972

MEMORANDUM

To: Arthur F. Burns

From: Charles Coombs, Federal Reserve Bank of New York

Subject: Mechanics of Swap Drawings

(1) One of the difficulties in giving a simple explanation of the mechanics of drawing on the Swap lines, is the lack of symmetry between a drawing by a foreign central bank and one by the Federal. This asymmetry reflects the fact that foreign central banks use the dollar as a reserve and intervention currency, while we generally do not use their national currency either as a reserve or for intervention on the foreign exchange markets.

(2) In the case of a foreign central bank drawing, say by the Bank of England in the amount of $100 million, the procedure is fairly simple. The Bank of England buys from the Federal $100 million spot against an equivalent credit sterling to the Federal on the books of the Bank of England and undertakes to reverse the transaction three months hence at the same rate. The Bank of England may then disburse the $100 million in the market to cover its reserve losses while the Federal retains the sterling IOU, which is in reality a dollar IOU, since the conversion back into dollars has been guaranteed by the Bank of England. In effect, the Bank of England

has simply borrowed $100 million from the Federal for disbursement in the market or to add to its reserves. So long as the Swap drawing is outstanding, our sterling claim is included in the "Other Assets" item in our balance sheet.

(3) When the Federal draws on the Swap line, say $100 million on the National Bank of Belgium, the mechanics get a bit more complicated. First of all, We normally do not intervene in the exchange market to defend the dollar, but rather rely upon foreign central banks to defend the dollar by buying dollars offered to them by the market when the dollar falls to its official floor. Assume that as a result of such market intervention by the National Bank of Belgium, the Bank has taken in $100 million which it initially holds on an uncovered basis. Under the Bretton Woods Agreement, if the National Bank of Belgium was unwilling to hold such dollars on an uncovered basis, it had a legal right to ask the U.S. to convert such dollars into gold, SDR's, or other reserve assets, or, alternatively, to ask us to buy these dollars back with Belgian francs. If the U.S. Treasury preferred settlement by the second alternative, i.e., buying the dollars back with Belgian francs, the Federal Reserve under its Swap arrangement with the National Bank of Belgium, would then buy $100 million equivalent of Belgian francs from the National Bank against a $100 million credit to the National Bank of Belgium on

the books of the New York Fed. The Fed would simultaneously agree to reverse the transaction 90 days hence at the same rate of exchange. Initially this transaction would be reflected on our books as a $100 million increase in our deposit liabilities and an increase in the "Other Assets" item of $100 million equivalent of Belgian francs. But, on the very same day, we would normally employ our Belgian franc balance to buy uncovered dollars from the National Bank of Belgium. We would simultaneously invest the $100 million credited under the Swap to the National Bank of Belgium in special Treasury securities. As a result of these transactions, our assets would remain unchanged, since the Belgian franc proceeds of the Swap drawing had been disbursed, while our deposit liabilities would also remain unchanged, since the Swap credit of $100 million to the National Bank of Belgium had been invested in special Treasury issues. On the books of the National Bank, however, the transaction has resulted in a substitution of covered dollars for uncovered dollars. Thus, the $100 million invested by the National Bank in special Treasury issues is guaranteed against exchange risks by the agreement of the Federal under the terms of the Swap to convert these dollars back into Belgian francs at the same exchange rate. In effect, Federal has taken on a debt of $100 million equivalent in Belgian francs in order to save the U.S. Treasury an equivalent loss of gold or other reserve assets.

(4) Repayment of this Belgian franc Swap debt may be effected, as has occurred many times in the past through outflows of funds from Belgium, which would require the National Bank of Belgium to sell dollars to the market to keep the Belgian franc from going through its floor. Assume that the National Bank has to sell $100 million in the market tomorrow morning before New York opens. To cover the market losses they would telex us an offer to sell us $100 million equivalent of Belgian francs against dollars. We would naturally agree, and the National Bank of Belgium would use the dollar proceeds of this direct exchange transaction with us to finance its dollar payments to the market. The National Bank would still have on its books the $100 million invested in special Treasury issues as a result of the original Swap transaction. But the Federal Reserve would now have $100 million of Belgian francs to cover its Swap debt. Accordingly, the Federal would propose immediate liquidation of the Swap contract by using its Belgian franc balance to buy back the dollars held by the National Bank in the special Treasury issues, with the result that the dollar balance of the National Bank would be reduced to zero, the original starting point.

February 28, 1972

MEMORANDUM

To: Arthur F. Burns

From: Charles Coombs, Federal Reserve Bank of New York

Subject: Mechanics of Swap Drawings

(1) One of the difficulties in giving a simple explanation of the mechanics of drawing on the Swap lines, is the lack of symmetry between a drawing by a foreign central bank and one by the Federal. This asymmetry reflects the fact that foreign central banks use the dollar as a reserve and intervention currency, while we generally do not use their national currency either as a reserve or for intervention on the foreign exchange markets.

(2) In the case of a foreign central bank drawing, say by the Bank of England in the amount of $100 million, the procedure is fairly simple. The Bank of England buys from the Federal $100 million spot against an equivalent credit sterling to the Federal on the books of the Bank of England and undertakes to reverse the transaction three months hence at the same rate. The Bank of England may then disburse the $100 million in the market to cover its reserve losses while the Federal retains the sterling IOU, which is in reality a dollar IOU, since the conversion back into dollars has been guaranteed by the Bank of England. In effect, the Bank of England

has simply borrowed $100 million from the Federal for disbursement in the market or to add to its reserves. So long as the Swap drawing is outstanding, our sterling claim is included in the "Other Assets" item in our balance sheet.

(3) When the Federal draws on the Swap line, say $100 million on the National Bank of Belgium, the mechanics get a bit more complicated. First of all, we normally do not intervene in the exchange market to defend the dollar, but rather rely upon foreign central banks to defend the dollar by buying dollars offered to them by the market when the dollar falls to its official floor. Assume that as a result of such market intervention by the National Bank of Belgium, the Bank has taken in $100 million which it initially holds on an uncovered basis. Under the Bretton Woods Agreement, if the National Bank of Belgium was unwilling to hold such dollars on an uncovered basis, it had a legal right to ask the U.S. to convert such dollars into gold, SDR's, or other reserve assets, or, alternatively, to ask us to buy these dollars back with Belgian francs. If the U.S. Treasury preferred settlement by the second alternative, i.e., buying the dollars back with Belgian francs, the Federal Reserve under its Swap arrangement with the National Bank of Belgium, would then buy $100 million equivalent of Belgian francs from the National Bank against a $100 million credit to the National Bank of Belgium on

the books of the New York Fed. The Fed would simultaneously agree to reverse the transaction 90 days hence at the same rate of exchange. Initially this transaction would be reflected on our books as a $100 million increase in our deposit liabilities and an increase in the "Other Assets" item of $100 million equivalent of Belgian francs. But, on the very same day, we would normally employ our Belgian franc balance to buy uncovered dollars from the National Bank of Belgium. We would simultaneously invest the $100 million credited under the Swap to the National Bank of Belgium in special Treasury securities. As a result of these transactions, our assets would remain unchanged, since the Belgian franc proceeds of the Swap drawing had been disbursed, while our deposit liabilities would also remain unchanged, since the Swap credit of $100 million to the National Bank of Belgium had been invested in special Treasury issues. On the books of the National Bank, however, the transaction has resulted in a substitution of covered dollars for uncovered dollars. Thus, the $100 million invested by the National Bank in special Treasury issues is guaranteed against exchange risks by the agreement of the Federal under the terms of the Swap to convert these dollars back into Belgian francs at the same exchange rate. In effect, Federal has taken on a debt of $100 million equivalent in Belgian francs in order to save the U.S. Treasury an equivalent loss of gold or other reserve assets.

(4) Repayment of this Belgian franc Swap debt may be effected, as has occurred many times in the past through outflows of funds from Belgium, which would require the National Bank of Belgium to sell dollars to the market to keep the Belgian franc from going through its floor. Assume that the National Bank has to sell $100 million in the market tomorrow morning before New York opens. To cover the market losses they would telex us an offer to sell us $100 million equivalent of Belgian francs against dollars. We would naturally agree, and the National Bank of Belgium would use the dollar proceeds of this direct exchange transaction with us to finance its dollar payments to the market. The National Bank would still have on its books the $100 million invested in special Treasury issues as a result of the original Swap transaction. But the Federal Reserve would now have $100 million of Belgian francs to cover its Swap debt. Accordingly, the Federal would propose immediate liquidation of the Swap contract by using its Belgian franc balance to buy back the dollars held by the National Bank in the special Treasury issues, with the result that the dollar balance of the National Bank would be reduced to zero, the original starting point.

SCHEMATIC
Feb. 29, 1972

Assume Netherlands Bank buys $100 million in the foreign exchange market in order to prevent the guilder from rising above the ceiling. The dollars are invested in Treasury bills.

STEP 1

The Federal Reserve Bank of New York is requested by the Netherlands Bank to draw $100 million on reciprocal currency arrangement.

Federal Reserve Bank of New York

(dollars)

+100 (deposit at Netherlands Bank)	+100 (deposit of Netherlands Bank)

STEP 2

The Federal Reserve Bank of New York uses the guilders to purchase the Treasury bills held by the Netherlands Bank.

Federal Reserve Bank of New York

-100 (deposit at Netherlands Bank)	
+100 (U.S. Treasury bills)	

Net changes resulting from Steps 1 and 2:

Federal Reserve Bank of New York

+100 (U.S. Treasury bills)	+100 (deposit of Netherlands Bank)

STEP 3

Netherlands Bank deposit at FRBNY is invested in Special Treasury issue.

Federal Reserve Bank of New York

	-100 (deposit of Netherlands Bank)
	+100 (U.S. Treasury)

Net changes resulting from Steps 1, 2 & 3:

Federal Reserve Bank of New York

+100 (U.S. Treasury bills)	+100 (U.S. Treasury)

Memo item: must deliver 300 million guilders to Netherlands Bank in 3 months.

STEP 4 (3 months later)

Federal Reserve Bank of New York buys guilders from Netherlands Bank.

Federal Reserve Bank of New York

+100 (deposit at Netherlands Bank)	+100 (deposit of Netherlands Bank)

STEP 5

The Federal Reserve Bank of New York fulfills its obligation to pay 300 million guilders to the Netherlands Bank, and receives the Special Treasury issue in return.

Federal Reserve Bank of New York

-100 (deposit at Netherlands Bank)	
+100 (Speical Treasury issue)	

STEP 6

Treasury redeems Special Treasury issue held by FRBNY.

Federal Reserve Bank of New York

-100 (Special Treasury issue)	-100 (U.S. Treasury)

STEP 7

Netherlands Bank buys Treasury bills with its deposit at FRBNY.

Federal Reserve Bank of New York

-100 (U.S. Government Securities)	-100 (deposit of Netherlands Bank)

STRICTLY CONFIDENTIAL (FR)

SWAP ARRANGEMENTS BETWEEN THE SYSTEM
AND FOREIGN CENTRAL BANKS
March 15, 1972

Listed below as of March 15, 1972, are the swap arrangements concluded on behalf of the Federal Reserve System with foreign banks.

Foreign Bank	Amount of Agreement (millions of dollars)		Maturity of latest authorized renewal
Austrian National Bank	200		December 1, 1972
National Bank of Belgium	600		December 22, 1972
Bank of Canada	1,000		December 30, 1972
National Bank of Denmark	200		December 1, 1972
Bank of England	2,000		December 1, 1972
Bank of France	1,000		June 28, 1972
German Federal Bank	1,000		June 15, 1972
Bank of Italy	1,250		June 30, 1972
Bank of Japan	1,000		December 1, 1972
Bank of Mexico	130		December 1, 1972
Netherlands Bank	300		June 30, 1972
Bank of Norway	200		December 1, 1972
Bank of Sweden	250		December 1, 1972
Swiss National Bank	1,000		December 1, 1972
B.I.S.	1,600	(600)	December 1, 1972
		(1,000)1/	December 1, 1972
Total	11,730		

1/ This reciprocal arrangement provides for swaps of dollars against authorized European currencies other than Swiss francs.

As of March 15, 1972, drawings on the above arrangements are outstanding in the amounts indicated below:

Arrangements with	Drawings Outstanding on Swaps: Initiated by System (millions of dollars equivalent)	Initiated by foreign bank	Date since facility has been in continuous use
National Bank of Belgium	455	--	June 30, 1970
German Federal Bank	50	--	May 7, 1971
Swiss National Bank	1,000	--	May 19, 1971
B.I.S.	635	--	August 12, 1971
Swiss francs	(600)		
Belgian francs	(35)		
Bank of England	715	--	August 17, 1971
Total	2,855		

STRICTLY CONFIDENTIAL (FR)

SWAP ARRANGEMENTS BETWEEN THE SYSTEM
AND FOREIGN CENTRAL BANKS
May 17, 1972

Listed below as of May 17, 1972, are the swap arrangements concluded on behalf of the Federal Reserve System with foreign banks.

Foreign Bank	Amount of Agreement (millions of dollars)	Maturity of latest authorized renewal
Austrian National Bank	200	December 1, 1972
National Bank of Belgium	600	December 22, 1972
Bank of Canada	1,000	December 30, 1972
National Bank of Denmark	200	December 1, 1972
Bank of England	2,000	December 1, 1972
Bank of France	1,000	June 28, 1972
German Federal Bank	1,000	June 15, 1972
Bank of Italy	1,250	June 30, 1972
Bank of Japan	1,000	December 1, 1972
Bank of Mexico	130	December 1, 1972
Netherlands Bank	300	June 30, 1972
Bank of Norway	200	December 1, 1972
Bank of Sweden	250	December 1, 1972
Swiss National Bank	1,000	December 1, 1972
B.I.S.	1,600 (600)	December 1, 1972
	(1,000) 1/	December 1, 1972
Total	11,730	

1/ This reciprocal arrangement provides for swaps of dollars against authorized European currencies other than Swiss francs.

As of May 17, 1972, drawings on the above arrangements are outstanding in the amounts indicated below:

Arrangements with	Drawings Outstanding on Swaps: Initiated by System (millions of dollars equivalent)	Initiated by foreign bank	Date since facility has been in continuous use
National Bank of Belgium	455	--	June 30, 1970
German Federal Bank	50	--	May 7, 1971
Swiss National Bank	1,000	--	May 19, 1971
B.I.S.	635	--	August 12, 1971
Swiss francs	(600)		
Belgian francs	(35)		
Bank of England	715	--	August 17, 1971
Total	2,855		

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM

Office Correspondence

Date June 23, 1972

To Mr. Bryant

From A.B. Hersey ABH

Subject: Should the Federal Reserve Now Indicate Willingness to Draw on the Central Bank Swap Network?

CONFIDENTIAL (FR)

As you asked, Gemmill and I have discussed the matter and we arrived at the following conclusions.

(1) The probable re-fixing of the pound sterling parity at a rate that will be generally acceptable improves the chances of maintaining a (modified) Smithsonian structure of parities.

(2) However, it has not yet been demonstrated whether the Smithsonian structure of parities meets U.S. needs or not. Stability of parities is desirable during the reform negotiation period but progress toward a satisfactory U.S. current account surplus is even more desirable. The United States is not unalterably opposed to necessary parity changes.

(3) If and when it were to become generally recognized that further revaluations and/or dollar devaluation would be needed, nothing could then prevent new closings of markets, floatings, and settings of new parities. Existence or nonexistence of outstanding swap drawings would be irrelevant, with no effect on market psychology.

(4) In the meantime, swap drawings by the United States are unnecessary to cause foreign central banks to intervene whenever rates against the dollar reach the Smithsonian limits -- because they have at least as great an interest in stability of parities as we have.

(5) Swap drawings by the United States are undesirable for two reasons. First, but of minor importance: the exchange value guaranty tends to bias foreign central banks' thinking even farther toward favoring dollar devaluation as against other currencies' revaluations.

(6) More importantly, swap drawings implicitly signal an intention to settle U.S. deficits by delivering reserve assets. Nothing that has happened this week alters the undesirability of the United States making any move toward convertibility or "asset settlement" until the reform negotiations and other events give us assurance that we can achieve an adequate current account surplus.

(7) Finally, giving exchange value guaranties through Federal Reserve swap drawings against future reserve additions by particular countries would be inequitable toward present holdings of uncovered dollars by those countries and others. Moreover, capital flows and current transactions among other countries can cause shifts of reserves from one to another, and could therefore bring an increase in U.S. exchange value guaranties even though there were no U.S. payments deficit.

(8) There is no need to reactivate the swap network in the other direction -- viz., to allow the U.K. to draw. While they float they need no reserves. When they stabilize they will have adequate reserve resources in the IMF and EEC. The possible desirability of supplementing these resources is outweighed by the undesirability of any reactivation of the swap network during the reform negotiation period.

STRICTLY CONFIDENTIAL (FR) CORRECTED COPY

SWAP ARRANGEMENTS BETWEEN THE SYSTEM AND FOREIGN CENTRAL BANKS
August 9, 1972

Listed below as of Aug. 9, 1972, are the swap arrangements concluded on behalf of the Federal Reserve System with foreign banks.

Foreign Bank	Amount of Agreement (millions of dollars)		Maturity of latest authorized renewal
Austrian National Bank	200		December 1, 1972
National Bank of Belgium	600		December 22, 1972
Bank of Canada	1,000		December 30, 1972
National Bank of Denmark	200		December 1, 1972
Bank of England	2,000		December 1, 1972
Bank of France	1,000		December 28, 1972
German Federal Bank	1,000		December 15, 1972
Bank of Italy	1,250		December 29, 1972
Bank of Japan	1,000		December 1, 1972
Bank of Mexico	130		December 1, 1972
Netherlands Bank	300		December 29, 1972
Bank of Norway	200		December 1, 1972
Bank of Sweden	250		December 1, 1972
Swiss National Bank	1,000		December 1, 1972
B.I.S.	1,600	(600)	December 1, 1972
		(1,000)1/	December 1, 1972
Total	11,730		

1/ This reciprocal arrangement provides for swaps of dollars against authorized European currencies other than Swiss francs.

As of Aug. 9, 1972, drawings on the above arrangements are outstanding in the amounts indicated below:

Arrangements with	Drawings Outstanding on Swaps: Initiated by System (millions of dollars equivalent)	Initiated by foreign bank	Date since facility has been in continuous use
National Bank of Belgium	435	--	June 30, 1970
Swiss National Bank	700	--	May 19, 1971
B.I.S.	635	--	August 12, 1971
Swiss francs	(600)		
Belgian francs	(35)		
Bank of England	98	--	August 17, 1971
Total	1,368		

TABLE Ib

September 6, 1972

SYSTEM FOREIGN CURRENCY DOLLAR SWAP ARRANGEMENT
(in millions of dollars)

Institution	Maturity Arrangement	Total Faciltiy	Drawings Outstanding* Amount Initiated by U. S.	Other Party	Maturity	Initial Date
Bank of England	12/ 1/72	2,000				
Bank of France	12/28/72	1,000				
Swiss National Bank	12/ 1/72	1,000	300.0		11/10/72	8/10/71
			400.0		11/17/72	8/17/71
National Bank of Belgium	12/22/72	600	15.0		10/ 3/72	2/10/71
			30.0		10/ 6/72	4/ 7/71
			40.0		10/20/72	7/21/71
			25.0		10/27/72	7/28/71
			55.0		11/ 3/72	8/ 4/71
			65.0		11/10/72	5/10/71
			40.0		11/10/72	8/10/71
			70.0		11/13/72	8/12/71
			20.0		11/16/72	8/16/71
			10.0		11/17/72	8/17/71
			35.0		11/24/72	2/24/71
			30.0		11/24/72	5/26/71

* Any System balances arising from swaps may be invested in interest-earning accounts and foreign dollar balances may be invested in U. S. Treasury Certificates of Indebtedness-Foreign Series (except for BIS and BNS balances which may be invested in U. S. Treasury bills).

TABLE Ib
(Cont'd)

September 6, 1972

SYSTEM FOREIGN CURRENCY DOLLAR SWAP ARRANGEMENT
(in millions of dollars)

Institution	Maturity of Arrangement	Total Facility	Drawings Outstanding: Amount Initiated by U. S.	Drawings Outstanding: Amount Initiated by Other Party	Maturity	Initial Date
Bank of Italy	12/29/72	1,250				
German Federal Bank	12/15/72	1,000				
Netherlands Bank	12/29/72	300				
Bank of Canada	12/30/72	1,000				
Austrian National Bank	12/ 1/72	200				
Bank of Sweden	12/ 1/72	250				
Bank of Japan	12/ 1/72	1,000				
National Bank of Denmark	12/ 1/72	200				
Bank of Mexico	12/ 1/72	130				
Bank of Norway	12/ 1/72	200				
Bank for International Settlements	12/ 1/72	600	600.0		11/13/72	8/12/71
		1,000**	35.0***		11/17/72	8/18/71
		11,730	1,770.0			

** Under this arrangement, drawings take the form of swaps expressed in terms of dollars/authorized European currencies other than Swiss francs.

*** Belgian franc drawing.

SEP 11 1972

Any reference in the attached report to exchange market operations by the Federal Reserve should be regarded as being strictly confidential.

C. A. Coombs

RB (ret)

CONFIDENTIAL -- (F.R.)

REPORT ON OPERATIONS IN FOREIGN CURRENCIES FOR SYSTEM OPEN MARKET ACCOUNT AND TREASURY ACCOUNT AND FOREIGN EXCHANGE MARKET CONDITIONS FOR THE STATEMENT WEEK ENDED SEPTEMBER 6, 1972

PREPARED BY THE FEDERAL RESERVE BANK OF NEW YORK

EXCHANGE MARKET CONDITIONS

The dollar continued to show a firm underlying tone in the exchange markets during the current statement week. Spot rates for most major currencies fluctuated narrowly with some Continental currencies firming slightly by the end of the period, as the favorable effect of the continuing rise in short-term U.S. interest rates was by that time offset by prospects of tighter money markets on the Continent. The yen remained at the ceiling, however, and the Bank of Japan had to absorb close to $200 million, mostly before the weekend. In all markets trading was quiet, with New York closed for the Labor Day holiday and dealers generally awaiting the outcome of the upcoming international conferences.

The German mark traded narrowly throughout the period, closing at $0.3136 1/4, little changed from the level of a week ago. The market turned quiet with the passing of month-end, even though German banks still remained concerned over their liquidity positions for September. The three-month forward mark was quoted at a premium of 3.84 per cent per annum on Wednesday, virtually unchanged from a week earlier.

The official French franc retreated to trade generally a point or so away from its upper limit before the weekend. A firmer franc developed thereafter, however; by Wednesday afternoon the spot rate was again straddling the ceiling and the Bank of France took in $17 million that day. The financial franc, fluctuating erratically downward, dropped 13 points to close the period at $0.2068. In the forward market, the premium on three-month francs, at 0.86 per cent per annum on Wednesday, was virtually unchanged from a week earlier.

With the passing of month-end demands, sterling opened the period at $2.4490, some 1/4 of a cent lower than it had closed the preceding day. It continued to drift downward, reaching $2.4481 by the time the market opened in New York on Friday. The spot rate returned to $2.4490 and traded narrowly around that level through Tuesday, as British interest rates remained relatively firm. Sterling came into somewhat stronger demand on Wednesday, and the spot rate advanced to $2.4502 by the close of the day. In the forward market, the discount on three-month sterling narrowed by 3/16 of one percentage point over the week, to 2.73 per cent per annum by Wednesday afternoon.

By Thursday, the market had become convinced that the Swiss National Bank was going to postpone implementation of measures it had recently proposed to mop up domestic liquidity. The Swiss franc, therefore, retreated to around $0.2645, and held near to that level through the close of the period. In the forward market, the premium on three-month francs widened by 1/4 of one percentage point, to 4.61 per cent per annum by Wednesday.

With the Amsterdam money market still flooded with excess liquidity, the Dutch guilder continued to ease, opening the period down 5 points from the day before, at $0.3096 3/4. As a result of the recent decline, the spread between the guilder and the Belgian franc widened to 1 1/2 per cent and the Netherlands Bank was obliged to sell francs against guilders under the terms of the Benelux agreement. This intervention brought the guilder's decline to a halt, and the spot rate held a few points higher through Tuesday. On Wednesday, rumors that the central bank was considering measures to absorb some of the excess domestic liquidity pushed the spot rate up to as high as $0.3104 3/4 in New York. On Thursday morning, after the period, the spot rate advanced further, to as high as $0.3108, after the Netherlands Bank announced it would reintroduce minimum cash reserves against the banks' deposit liabilities, and would resume open-market operations as well. The bank made it clear, however, that it intended to maintain a certain liquidity in the money market to prevent its policies from triggering new inflows of foreign funds by unduly raising domestic interest rates. At the same time the bank took the opportunity to cut its discount rate from 4 to 3 per cent and to similarly lower all its other lending rates by 1 per cent, in order to bring them more into line with the low rates prevailing in the Amsterdam market. In the forward market, the premium on guilders narrowed by 1/2 of one percentage point over the week, to 4.19 per cent by Wednesday.

The official Belgian franc eased in quiet trading to $0.022760 on Thursday morning. Subsequently, the rate moved upward, advancing particularly strongly on Wednesday to reach $0.022789, before retreating to $0.022775 by the close of the day. The financial franc dropped sharply to $0.022753 on Thursday morning in Europe, but then came back to $0.022789 on Wednesday before softening to the official franc's level by the close. In the forward market, the premium on three-month francs stood at 2.02 per cent per annum on Wednesday, for a narrowing of 3/16 of one percentage point over the week.

The Italian lira continued to hold just above the central rate, at about $0.001721, throughout the statement period, showing little response to the widespread strike actions underway on the Italian railways and in other sectors of the economy. In the forward market, the discount on three-month lire, at 2.91 per cent on Wednesday, widened only slightly over the week.

The Canadian dollar advanced 2 1/2 points at the opening of the period, to $1.0176 1/2. It subsequently edged downward in a generally featureless market, however, closing the statement week at $1.0168, and the Bank of Canada sold $1 1/2 million while moderating the decline. In the forward market, the three-month Canadian dollar, which had traded at par with the spot rate one week earlier, was quoted at a premium of 0.08 per cent per annum on Wednesday afternoon.

The failure of working-level negotiations prior to the Nixon-Tanaka summit meeting to resolve outstanding economic issues set off a short bout of speculation in favor of the Japanese yen before the weekend. During the three days through Saturday the Bank of Japan had to take in $180 million. At the conclusion of the meeting, Japan announced, as had been expected, that it agreed to $1.1 billion of special imports from the United States. After the weekend pressures on the spot rate eased and the central bank bought only an additional $19 million. However, speculation on the inevitability of another yen revaluation was still reflected in the forward market, where the premium on yen for November delivery stood at 9.37 per cent on Wednesday--6 3/8 percentage points wider than the corresponding premium one week earlier.

After easing just prior to the period as month-end pressures passed, short-term Euro-dollar rates firmed markedly on Thursday. Seven-day funds held generally steady thereafter, to close the statement week at 4 3/4 per cent per annum, a net gain of 3/4 of one percentage point. The one-month rate rose further on technical factors to 5 5/8 per cent on Monday, but then retreated to 5 1/16 per cent on Wednesday, for a net gain of 1/16 of one percentage point. Three-and six-month deposits strengthened by 3/16 and 1/16 of one percentage point to 5 9/16 and 6 3/16 per cent, respectively, by the end of the statement week.

The gold markets continued quiet, showing little reaction to the mounting number of proposals to increase the official price of gold as part of a general reform of the international monetary system. In London, the price stood at $67.00 an ounce at the second fixing on Wednesday, for a net gain of 10 cents over the period. In Zurich, the price rose by 20 cents to $67.20 an ounce, while in Paris the price of a standard bar was quoted at $68.31 an ounce, 32 cents more than one week earlier.

FEDERAL RESERVE OPERATIONS

On Friday and Tuesday, the System repaid its recent swap drawings of $10.2 million equivalent of Belgian francs. These repayments were financed with francs purchased for this purpose against German marks by the National Bank of Belgium as agent for the System, supplemented by some balances on hand. The original Belgian franc swap commitments of $470 million equivalent (including $35 million to the BIS) remained unchanged.

During the statement week the System purchased $3.2 million equivalent of German marks while delivering $9.3 million equivalent in connection with purchases of Belgian francs (see above).

During the statement week the System purchased $3.1 million equivalent of Swiss francs (of which $2.1 million purchased in Europe through the BIS for value after the period).

TREASURY OPERATIONS

On September 1, the U.S. Treasury issued a 15-month $29.1 million Swiss franc-denominated security to the Swiss National Bank in exchange for a similar note maturing that day.

OTHER OPERATIONS

For correspondents, this Bank purchased $9.3 million equivalent of sterling and $0.4 million of other foreign currencies, while selling $7.3 million of Japanese yen and $1.1 million of other foreign currencies. Also for correspondents, this Bank purchased $3.9 million of sterling from the Bank of England, $4.3 million of guilders from the Netherlands Bank, and $10.9 million of French francs from the Bank of France.

Charles A. Coombs
Special Manager of the
System Open Market Account
For Foreign Currency Operations

September 8, 1972

TABLE I

STATEMENT WEEK
August 31 - September 6, 1972

FEDERAL RESERVE FOREIGN EXCHANGE TRANSACTIONS
(in millions of dollars equivalent)

	Swaps		Other Spot			Forward		
Currency	Drawings	Repayments	Purchases	Sales	Deliveries on Forwards	Purchases	Sales	Renewals
Pound sterling								
French franc								
German mark			3.2	9.3				
Italian lira								
Dutch guilder								
Swiss franc			1.0					
Belgian franc		10.2	9.3					
Canadian dollar								
Austrian schilling								
Swedish krona								
Japanese yen								
Danish krone								
Mexican peso								
Norwegian krone								

TABLE Ia

Close of Business
September 6, 1972

FEDERAL RESERVE SYSTEM FOREIGN EXCHANGE BALANCES AND COMMITMENTS
(in millions of dollars equivalent)

	Balances in connection with			Forward Sales(-)or Purchases(+)			Net Position		
Currency	Swaps	Other Transactions	Total	Swaps*	a.Market b.Official Sector	3rd Currency Swap	Swaps*	Total*	Available under swaps**
Pound sterling		0.2	0.2					0.2	2,000.0
French franc			-0-					-0-	1,000.0
German mark		17.8	17.8					17.8	1,000.0
Italian lira			-0-					-0-	1,250.0
Dutch guilder			-0-					-0-	300.0
Swiss franc	8.4	#	8.4	-1,300.0			-1,291.6	-1,291.6	300.0
Belgian franc	0.3	0.1	0.4	-470.0***			-469.7	-469.6	165.0
Canadian dollar		0.1	0.1					0.1	1,000.0
Austrian schilling			-0-					-0-	200.0
Swedish krona			-0-					-0-	250.0
Japanese yen		1.0	1.0					1.0	1,000.0
Danish krone			-0-					-0-	200.0
Mexican peso			-0-					-0-	130.0
Norwegian krone			-0-					-0-	200.0
Total	8.8	19.2	27.9	-1,770.0	-0-	-0-	-1,761.2	-1,742.1	

* Approximation only inasmuch as commitments are still stated on the basis of their original contract amounts. All balances other than Canadian dollars were revalued following formal notice to the IMF of the U. S. dollar's devaluation.

** In addition, the System has a $1,000 million swap arrangement with the BIS under which drawings take the form of swaps expressed in terms of dollars/authorized European currencies other than Swiss francs. Presently the Federal Reserve has a $35.0 million equivalent Belgian franc/dollar swap outstanding under this arrangement.

*** Of which $35.0 million equivalent due to the BIS.

\# Less than $0.05 million.

TABLE II

STATEMENT WEEK
August 31 - September 6, 1972

TRANSACTIONS FOR U. S. TREASURY ACCOUNT
(in millions of dollars equivalent)

	Spot			Forward		
Currency	Purchases	Sales	Deliveries on Forwards	Purchases	Sales	Renewals
Pound sterling						
French franc						
German mark						
Italian lira						
Dutch guilder						
Swiss franc		NO ACTIVITY				
Belgian franc						
Canadian dollar						
Austrian schilling						
Swedish krona						

TABLE IIa

Close of Business
September 6, 1972

U. S. TREASURY FOREIGN CURRENCY BALANCES AND COMMITMENTS
(in millions of dollars equivalent)

Currency	Balances	Forward Commitments: 3rd Currency Swap	Forward Commitments: Other Swaps	Forward Commitments: Outright	Treasury Borrowings	Net Position: Excluding Treasury Borrowings	Net Position: Including Treasury Borrowings
Pound sterling	2.6					2.6	2.6
French franc	-0-					-0-	-0-
German mark	197.1				-612.0	197.1	-414.9
Italian lira	0.2					0.2	0.2
Dutch guilder	#					#	#
Swiss franc	#				-1,389.2	#	-1,389.2
Belgian franc	-0-					-0-	-0-
Canadian dollar	#					#	#
Swedish krona	#					#	#
Total	199.9	-0-	-0-	-0-	-2,001.2	199.9	-1,801.3

Less than $0.05 million.

TABLE IIb

September 6, 1972

OUTSTANDING U. S. TREASURY SECURITIES DENOMINATED IN FOREIGN CURRENCIES

Issued to	Maturity Date	Issue Date	Term (in Months)	Interest Rate	Foreign Currency (in millions)		Dollar Equivalent a/
German Federal Bank	10/ 2/72	4/ 1/68**	54	5.73	DM	500.0	153.0
	2/19/73	8/19/69** b/	42	3.05	DM	500.0	153.0
	10/ 2/73	3/ 3/72** c/	48	2.051	DM	500.0	153.0
					DM	1,500.0	459.0
German Banks (Spec. Sec. Acc. of German Fed. Bank)	12/22/72	6/24/68**	54	6.25	DM	500.0	153.0
Swiss National Bank	10/ 6/72	7/ 6/71*	15	6.15	SF	225.0	57.5
	11/ 6/72	8/ 6/71*	15	6.35	SF	110.0	28.1
	11/20/72	8/19/71**	15	5.65	SF	120.0	30.7
	12/11/72	9/10/71*	15	5.45	SF	1,075.0	274.6
	12/13/72	9/13/71**	15	5.55	SF	100.0	25.5
	1/ 8/73	10/ 8/71**	15	5.25	SF	130.0	33.2
	1/29/73	10/29/71*	15	4.85	SF	170.0	43.4
	3/ 9/73	12/ 9/71*	15	4.80	SF	435.0	111.1
	4/ 5/73	1/ 5/72*	15	4.50	SF	97.0	24.7
	4/17/73	1/17/72*	15	4.15	SF	575.0	147.9
	8/20/73	5/18/72*	15	4.77	SF	129.0	33.4
	8/27/73	8/27/71*	24	5.67	SF	1,352.0	345.4
	8/30/73	5/30/72**	15	4.55	SF	130.0	33.7
	11/30/73	9/ 1/72*	15	5.50	SF	110.0	29.1
					SF	4,758.0	1,218.3
Bank for International Settlements	1/19/73	7/21/72+	6	4.375	SF	430.0	114.0
	2/ 2/73	8/ 4/72+	6	4.24	SF	215.0	56.9
					SF	645.0	170.9

* Convertible into cash upon two days' notice.

** Nonconvertible securities issued to the German Federal Bank, German banks and the Swiss National Bank as fiscal agent of the Swiss Confederation.

\+ Certificates of Indebtedness convertible upon two days' notice into U. S. Treasury bills.

a/ Based on market rates for securities rolled over so far during 1972; otherwise on market rates as of December 31, 1971 for remainder of securities as per U. S. Treasury decision.

b/ Security originally issued on August 19, 1968 but modified in January 1970 following agreement between the U. S. Treasury and the German Federal Bank to compensate for the effect of the 1969 revaluation of the German mark by way of a lower interest rate (effective as of newly-assigned issue date).

c/ Security originally issued on April 12, 1969 but modified in January 1970 (effective as of October 2, 1969) and again on March 3, 1972 following agreement between the U. S. Treasury and the German Federal Bank to compensate in whole or in part for the effects of the revaluations of the German mark by way of lower interest rates.

TABLE III

STATEMENT WEEK
August 31 - September 6, 1972

EXCHANGE RATES FOR MAJOR FOREIGN CURRENCIES
(in U. S. dollars per unit)

Currency	Central Rate*	Intervention Limits* Upper	Intervention Limits* Lower	New York Offered Rates During the Statement Week Open	High	Low	Close
Pound sterling	2.60571	Suspended		2.4490	2.4502	2.4481	2.4502
German mark	.310318	.317460	.303490	.3135 1/4	.3138	.3134 1/4	.3136 1/4
French franc	.195477	.199980	.191168	.1998	.2000	.1998	.2000
Swiss franc	.260417	.266418	.254680	.2645 1/4	.2646 3/4	.2644 1/4	.2645 1/2
Dutch guilder	.308195	.315271	.301432	.3096 3/4	.3105	.3096 3/4	.3102
Belgian franc	.022313	.022827	.021822	.022760	.022789	.022760	.022775
Italian lira	.001720	.001759	.001682	.001721	.001721 1/4	.001720 1/2	.001721 1/4
Canadian dollar	None communicated to IMF			1.0176 1/2	1.0176 1/2	1.0167	1.0168
Japanese yen	.003247	.003322	.003175	.003324	.003324	.003323	.003323

* Communicated to the IMF

September 12, 1972

Swap Network -- Maturity of Drawings

The FOMC authorization for System foreign currency operations authorizes and directs the FRBNY to "draw foreign currencies and to permit foreign banks to draw dollars under the reciprocal currency arrangements . . . provided that drawings by either party to such an arrangement shall be fully liquidated within 12 months after any amount outstanding at that time was first drawn, unless the Committee, because of exceptional circumstances, specifically authorizes a delay." (1.D.)(The 12 months refers not to the duration of any particular drawing, but rather the length of time a particular swap line is in continuous use.)

Guideline
6 or 8
weeks
year -

As of June 1968, the System had, for the first time, made continuous use of a swap facility for more than one year (with the Swiss National Bank).

As of July 1969, the Bank of England had been in continuous debt to the System for more than one year, the first instance in which a foreign central bank had utilized the facility for more than one year.

over a year
None (- [illegible])
Aug 15, 1971

1 year 1/2 a half is
longest -

not used
& [illegible] up
unrealistic
exchange rate

September 12, 1972

Outstanding Swap Drawings
at end of period
(millions of dollars)

End of Drive	System drawings	System claims
1962 - I	110	250
II	230	0
1963 - I	200	35
II	320	55
1964 - I	0	65
II	295	200
1965 - I	328	360
II	135	475
1966 - I	0	175
II	280	550
1967 - I	370	368
II	1,776	1,396
1968 - I	324	416
II	432	1,668
1969 - I	95	1,271
II	330	650
1970 - I	220	400
II	810	0
1971 - I	550	0
II	650	0
July	715	0
Aug. 15	3,045	0

Aug 6-13 drew 1,840 billion $\left\{ \begin{array}{l} \text{Britain 750} \\ \text{Switz 1000} \\ \text{Belgium 90} \end{array} \right.$

~~drew~~

~~Aug 12 – no net drawings~~

STRICTLY CONFIDENTIAL (FR)

System Sales and Purchases of DM
(millions of DM)

Date	Amt. offered[1]	Rate	Amt. sold	Amt. purchased
July 19 (direct)	80	31.568	8[2]	--
19 (brokers')	30	31.593	--	--
		31.579	--	--
		31.570	--	--
20	30	31.545	30[3]	--
28	--	31.471	--	4.0[4]
	--	31.489	--	4.0[4]
Aug. 1	--	31.472	--	4.8
	--	31.476	--	5.2
22	--	31.427	--	10.2
8	--	31.445	--	5.2
9	--	31.429	--	4.7
16	--	31.324	--	3.2
	--	31.328	--	3.1
	30	31.345	--	--
		31.343	--	--
		31.335	30	--
17	--	31.308	--	4.8
	--	31.305	--	4.8
18	--	31.317	--	4.8
	--	31.318	--	5.2
	--	31.319	--	10.0 (BIS)
21	--	31.261	--	4.5
	--	31.261	--	5.5
	--	31.267	--	15.0 (BIS)
25	--	31.319	--	5.0
	--	31.316	--	5.0
28	--	31.331	--	5.0
30	n.a.	31.370	11.0 (Brussels)[5]	--
31	--	31.344	--	5.3
	--	31.340	--	5.0
	n.a.	31.333	10.0 (Brussels)[5]	--
Sept. 1	n.a.	31.344	8.8 (Brussels)[5]	--
12	--	31.345	--	10
Totals	170 (N.Y.)		68.0 (N.Y.)	134.3
			~~28.8~~ 29.8 (Brussels)	

1/ Direct offers of DM totaling 80 million DM made to eight major NYC banks July 19. All other offers on July 19 and after were placed in brokers' market with a NYC bank acting as intermediary. On July 19 and August 16 we lowered our offer rate twice as the market backed away.

2/ Balances borrowed from U.S. Treasury.

3/ System balances.

4/ Repaid to U.S. Treasury August 1.

5/ Sold against Belgian francs in Brussels.

STRICTLY CONFIDENTIAL (FR)

System Intervention in Belgian Francs
(millions of francs)

Date	Amt. offered[1/]	Rate	Amt. sold	Amt. purchased
Aug. 10	300	2.2826	--	--
		2.2823	280[2/]	--
	300	2.2822	45[2/]	--
	255	2.2819	40[2/]	--
11	150	2.2825	--	--
		2.2822	--	--
	100	2.2820	--	--
	100	2.2818	80[2/]	--
14	100.0	2.2821	--	--
16	100.0	2.2810	--	--
	50.0	{ 2.2805	--	--
	50.0	{ 2.2800	--	--
		{ 2.2800	--	--
		{ 2.2797	--	--
17	100.0	2.2802	--	--
18	100.0	2.2813	--	--
		2.2803	--	--
30	--	2.2781	--	151.5[3/]
31	--	2.2762	--	137.7[3/]
Sept. 1	--	2.2760	--	120.9[3/]
Total			445.0	410.1

1/ All offers placed in brokers' market with a NYC bank acting as intermediary. We lowered our offer rate as the market backed away, but at times the market was below our level. Occasionally we offered equal amounts at two levels simultaneously (shown by brackets).

2/ Balances obtained by drawing on swap line with National Bank of Belgium.

3/ Purchased against mark balances held by System. National Bank of Belgium acted as System's agent, doing these transactions in Bussels market. Francs purchased used (along with balances purchased by System from customer)to repay earlier swap drawings.

September 13, 1972

Interest Earnings and Expenses
Associated with Swap Drawings Prior to August 15, 1971

I. Federal Reserve Drawing:

1. During the life of the swap, the foreign central bank holds a special Treasury Certificate of Indebtedness, on which the Treasury pays interest.

2. If the Federal Reserve immediately uses the foreign currency it acquires as a result of the swap (for redeeming "uncovered" dollar holdings), it does not hold the foreign currency during the life of the swap and therefore earns no interest.

3. If the Federal Reserve had not made the drawing and the Treasury had not arranged another related alternative (e.g., a drawing from IMF), the foreign central bank would either (a) have demanded reserve assets from the Treasury or (b) have decided to hold dollars without the protection of the swap.

4. In case (a), foreign dollar holdings would have been smaller and therefore interest payments by the U.S. Government would have been smaller.

5. In case (b), foreign dollar holdings would not have been smaller and therefore interest payments by the U.S. Government would have been no different than in the swap case.

6. If the Federal Reserve had not been willing to make swap drawings, more often than not (a) would have been the outcome.

7. Conclusion: interest payments by the U.S. Government to foreign central banks were somewhat higher than they would have been if swap drawings had not been made.

BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM

Office Correspondence

Date September 14, 1972

To Mr. Bryant

From John E. Reynolds

Subject: Probable Losses on Swaps

CONFIDENTIAL (FR)

I discussed the "about $160 million" figure with Dave Bodner (in Mr. Coombs' absence). That is the figure which Coombs thinks is the best one to use. But the Chairman should know how it is constructed.

(1) A $50 million loss has already been taken.

(2) The remaining $110 million is the loss that will result if we acquire the needed foreign currencies at their central rates.

The maximum loss, if we should have to buy currencies at ceiling rates, would be about $204 million. Even this figure, however, is exceeded by the Treasury's revaluation profits on the reserve assets that the swap drawings permitted the Treasury to conserve.

FEDERAL RESERVE BANK OF NEW YORK

MONTHLY REVIEW

SEPTEMBER 1972

Contents

Volume 54 No. 9

Treasury and Federal Reserve Foreign Exchange Operations*

By CHARLES A. COOMBS

The Smithsonian agreement of December 18, 1971 was greeted with satisfaction and relief by the exchange markets. Rates for a number of European currencies settled at or close to their new floor levels, and sizable reflows of funds to the United States developed through the year-end. Following the turn of the year, however, market optimism shifted to an anxious and even skeptical mood as traders began to ponder the long negotiating path to a restructured international financial system. Market concern focused particularly on the risk that certain foreign central banks might suddenly withdraw from their Smithsonian commitments to defend their currencies at the new upper limits, and successive waves of speculation in January and February drove the mark, the guilder, the Belgian franc, and the yen close to or hard against their official ceilings.

The central banks concerned intervened decisively and without hesitation, however, and this demonstration had a reassuring effect. In early March, expeditious Congressional action on a "clean" gold price bill removed another source of uncertainty that had been breeding unsettling market rumors. Simultaneously, the German government took action to discourage borrowing abroad by German business firms, which had been a major source of buying pressure on the mark over the previous three years, while the Japanese government reinstated controls on speculative buying of the yen. Finally, the interest rate gap between Europe and the United States began to be squeezed out from both sides. As recessionary tendencies continued in Europe, discount rate cuts were announced in Germany, Belgium, and the Netherlands, while the United States Treasury bill rate rose significantly.

The dollar showed growing strength and resiliency throughout most of the spring months, as a return flow of short-term funds largely offset continuing deficits in other components of the United States balance of payments. This encouraging trend was abruptly reversed midway in June, however, as sterling was suddenly swept off its Smithsonian parity by a speculative wave that had been gathering force for many months past. In allowing sterling to float on June 23, the British authorities indicated that the defense of sterling during the previous six days had cost the equivalent of $2.6 billion.

Such official intervention to defend sterling was almost entirely conducted in Common Market currencies, in accordance with a British undertaking on May 1 to join with its prospective Common Market partners in maintaining a spread of no more than 2¼ percent between sterling and any other Common Market currency. This European Community (EC) agreement had thus created a dual system of exchange rate limits in which the 2¼ percent Common Market band became colloquially described as the "snake" in the "tunnel" represented by the 4½ percent Smithsonian band. A critical feature of the Common Market 2¼ percent band was that intervention in dollars was to be confined to circumstances in which a weakening Common Market currency should decline the full distance to its Smithsonian floor or a strong currency should rise to its Smithsonian ceiling. Otherwise, maintenance of the 2¼ percent Common Market band was to be carried out by intervening in each other's currencies.

As sterling came under selling pressure in June, the Bank of England accordingly was called upon to offer marks and whatever other Common Market currencies were being quoted at rates 2¼ percent above sterling, while its European partners bought sterling with their currencies. The general effect of such intervention to maintain the 2¼ percent Common Market band was to brake the decline of sterling toward its Smithsonian floor of $2.5471, while simultaneously pulling down the stronger EC currencies well below their Smithsonian ceilings. In this strained pattern of rates, the markets may have sensed a two-way speculative opportunity to go short of sterling and long of Continental currencies in the hope of profiting on both. Most of the outflow from London seems to have ended up in the Common Market.

On June 23 the British authorities announced their decision to float the pound, in effect temporarily suspending their participation in the Smithsonian and EC agreements. Following that announcement, other European currencies immediately rebounded to their Smithsonian ceilings, reflecting market fears of a severe tightening of capital import controls, a joint float of the Common Market currencies, or some combination of both. The European currency markets were then closed down, and an emergency meeting of the Community Finance Ministers was set for the following Monday in Luxembourg. At that meeting Denmark formally withdrew from the EC monetary agreement, while Italy secured a temporary authorization to keep the lira within the 2¼ percent band by intervening in dollars rather than European currencies. The Finance Ministers then reaffirmed their determination to defend both the Smithsonian parities and the Common Market band.

* This report, covering the period March to September 1972, is the twenty-first in a series of reports by the Senior Vice President in charge of the Foreign function of the Federal Reserve Bank of New York and Special Manager, System Open Market Account. The Bank acts as agent for both the Treasury and Federal Reserve System in the conduct of foreign exchange operations.

Table I

FEDERAL RESERVE RECIPROCAL CURRENCY ARRANGEMENTS
September 8, 1972
In millions of dollars

Institution	Amount of facility
Austrian National Bank	200
National Bank of Belgium	600
Bank of Canada	1,000
National Bank of Denmark	200
Bank of England	2,000
Bank of France	1,000
German Federal Bank	1,000
Bank of Italy	1,250
Bank of Japan	1,000
Bank of Mexico	130
Netherlands Bank	300
Bank of Norway	200
Bank of Sweden	250
Swiss National Bank	1,000
Bank for International Settlements:	
Swiss francs-dollars	600
Other authorized European currencies-dollars	1,000
Total	11,730

Despite this reaffirmation and subsequent drastic controls imposed by Switzerland and Germany to ward off unwanted capital inflows, rumors of a European joint float continued to incite heavy speculative selling of dollars against the stronger European currencies and the yen. By Friday, July 14, the sterling crisis had generated not only the previously noted flight of $2.6 billion of funds from sterling into other Common Market currencies but also additional flows totaling over $6 billion from dollars into various European currencies and the yen.

Meanwhile, the United States authorities had been considering the advisability of renewed operations in the exchange markets, involving, if necessary, Federal Reserve swap drawings which had been suspended on August 15, 1971. On United States initiative and with the approval of the Bundesbank, the first of such exchange operations was launched on July 19 in the form of repeated offerings by the Federal Reserve Bank of New York of sizable amounts of German marks on the New York market. This intervention, which was continued briefly on the following day, was described by Chairman Burns as a move by the United States authorities to play their part to restore order in foreign exchange markets and to do their part in upholding the Smithsonian agreement, just as other countries were doing. The Chairman also indicated that the operation would continue on whatever scale and whenever transactions seemed advisable. The United States Treasury also confirmed the intervention, stating in part that: "The action reflects the willingness of the United States to intervene in the exchange markets upon occasion when it feels it is desirable to help deal with speculative forces. The action indicates absolutely no change in our basic policy approach toward monetary reform and the necessary efforts on all fronts to achieve a sustainable equilibrium in our balance of payments."

On August 10, the Federal Reserve Bank of New York intervened in a second European currency, the Belgian franc, which had remained pinned to its ceiling. In a series of daily operations in some volume, the Belgian franc rate was brought down appreciably below its ceiling and, in the process, some unwinding of speculation on the Belgian franc may have been set in motion.

Since July 19, the New York Reserve Bank has intervened in the market on nine occasions and sold in the process $31.5 million of foreign currencies; total offerings were, of

Table II

FEDERAL RESERVE SYSTEM DRAWINGS AND REPAYMENTS UNDER RECIPROCAL CURRENCY ARRANGEMENTS

In millions of dollars equivalent

Transactions with	System swap drawings outstanding on January 1, 1972	Drawings (+) or repayments (—) 1972			System swap drawings outstanding on September 8, 1972
		I	II	July 1-September 8	
National Bank of Belgium	455.0		— 20.0	+ 10.2 — 10.2	435.0
Bank of England	715.0		— 52.0	—663.0	—0—
German Federal Bank	50.0			— 50.0	—0—
Swiss National Bank	1,000.0		—300.0		700.0
Bank for International Settlements (Swiss francs)	600.0				600.0
Bank for International Settlements (Belgian francs)	35.0				35.0
Total	2,855.0	—0—	—372.0	+ 10.2 —723.2	1,770.0

course, much larger. All market sales of foreign currencies, either from balances or from small swap drawings, were fully covered by market purchases as the dollar strengthened on the exchanges.

As noted in the preceding report in this series, Federal Reserve swap debt, which had reached a peak of $3,045 million on August 13, 1971, had been reduced to $2,855 million by the end of last year. Since then, further net repayments of $1,085 million have brought down the total outstanding debt to $1,770 million (see Table II), a reduction of nearly 40 percent from the August 1971 peak. The bulk of such debt repayments during the period under review was accounted for by liquidation of the remaining $715 million of an original $750 million drawing on the Bank of England. The sterling needed for such repayments was acquired in regular purchases during June, July, and early August, both through the market and in direct transactions with the Bank of England, plus a sizable direct purchase from the United States Treasury of sterling previously acquired in a United States Government drawing on the International Monetary Fund (IMF). In June, $300 million of swap debt to the Swiss National Bank was repaid through a direct purchase of $250 million of Swiss francs from the National Bank, supplemented by Federal Reserve purchases of Swiss francs in the market. In July, the remaining $50 million of swap debt due to the Bundesbank was liquidated through a direct transaction with that institution. In May, swap debt in Belgian francs was reduced by a $20 million repayment to $470 million equivalent. Finally, in August, new drawings of $10.2 million equivalent were made on the Belgian swap line, but these were fully liquidated by early September.

In March and July of this year, the United States Treasury redeemed in two equal instalments a $153 million equivalent German mark-denominated note that had been issued to the Bundesbank under the 1967 military offset agreement with Germany (see Table IV). Other foreign-currency-denominated securities were renewed at maturity. As of September 8, outstanding United States Treasury foreign-currency-denominated securities amounted to $2.0 billion equivalent.

STERLING

In 1971 the United Kingdom had recorded a large payments surplus, with a substantial gain in official reserves. Meanwhile, however, the British economy had become afflicted by a wage and price spiral which threatened to weaken its competitive position in world markets. Moreover, a significant proportion of the 1971 reserve gain reflected hot money inflows that could be reversed in short order. Consequently, at the Smithsonian meeting the United Kingdom maintained sterling's gold parity, thereby limiting the appreciation of sterling against the dollar to the 8.57

percent increase in the dollar price for gold. A middle rate for the pound of $2.60571—commensurate with the dollar's devaluation—was established, and the Bank of England announced official buying and selling rates in conformity with the Smithsonian agreement's provision for a band of 4.5 percent around the new middle or central rates. At the same time the British authorities relaxed the exchange control regulations they had announced in late August and early October to discourage inflows of nonresident funds. Spot sterling fell close to the new floor of $2.5471 in late December, as some speculative positions began to be unwound and year-end adjustments were made. Taking advantage of this development, the Federal Reserve acquired sterling in the New York market and repaid, just prior to the year-end, $35 million of the $750 million equivalent swap drawing on the Bank of England that had been entered into in August 1971.

After the year-end adjustments were completed, however, the initial post-Smithsonian euphoria in the markets faded. The outflow of funds from the United Kingdom dried up rapidly, and spot sterling moved away from the floor. Doubts about the durability of the new exchange rates quickly surfaced, and by mid-January most other major European currencies were bid up toward, or even above, their central rates. At the same time it became clear that the EC countries were approaching agreement on narrowing the margin of fluctuation between their currencies and that the United Kingdom probably would participate in the arrangements. Consequently, sterling was bid up into line with the Continental currencies, rising by 4 cents to more than $2.59 before leveling off. In early February, following a further decline in Euro-dollar rates relative to money market rates in London, the pound advanced to its middle rate. Over the course of that month, sterling weakened from time to time, reflecting the market's pessimism over the long-term implications of a protracted coal miners' strike, but once the strike was settled the continuing general advance of other major European currencies had a buoyant effect on sterling.

On March 7, against a background of widespread market uncertainty and growing speculation about the readiness of individual central banks to absorb sizable new inflows of dollars, the EC countries announced agreement to narrow the margin of fluctuation between their own currencies to 2¼ percent by July 1. The market saw this agreement as greatly increasing the likelihood of a concerted European attempt to stem further inflows of dollars —either through new controls or a joint float against the dollar—and there was a rush to stockpile currencies that might become more expensive or even unavailable later on. Although the buying wave was directed with particular force toward Continental currencies, demand for sterling was also strong, and the spot rate shot up by almost 5 cents in three days to well over $2.65. The flurry soon abated, however, as the United States Congress acted on the gold bill, short-term interest rates in this country began to firm, and, following the March central bank meeting in Basle, it was made clear that there was continuing firm support for the Smithsonian agreement. Sterling, in particular, fell back sharply, especially after the release of British trade figures showing a swing into deficit in February. Thus, by the time the British budget was presented on March 21, sterling was down to the $2.61 level once again. The budget, which was expansionary, stressed the need for combating the sluggish trend in the domestic economy and the persistent high level of unemployment. In addition, there was a

Table III

DRAWINGS AND REPAYMENTS BY FOREIGN CENTRAL BANKS AND THE BANK FOR INTERNATIONAL SETTLEMENTS UNDER RECIPROCAL CURRENCY ARRANGEMENTS

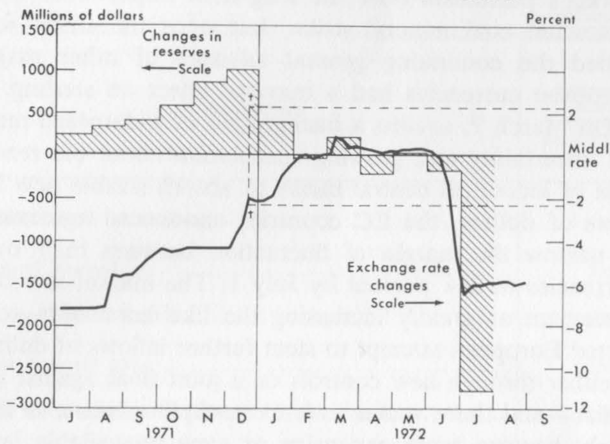
In millions of dollars

Banks drawing on Federal Reserve System	Drawings on Federal Reserve System outstanding on January 1, 1972	Drawings (+) or repayments (—) 1972			Drawings on Federal Reserve System outstanding on August 31, 1972
		I	II	July 1-August 31	
Bank for International Settlements (against German marks)	—0—	+8.0 —8.0	+6.0 —6.0	+1.0 —1.0	—0—
Total	—0—	+8.0 —8.0	+6.0 —6.0	+1.0 —1.0	—0—

Chart I

UNITED KINGDOM

MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



*In this and the following currency charts, movements in exchange rates are measured as percentage deviations of weekly averages of New York noon offered rates from the middle or central rates established under the Smithsonian agreement. Changes in reserves are computed from the figures published in the International Monetary Fund's International Financial Statistics and, as such, reflect for December 1971 not only actual movements in reserve assets but also the revaluation, on the basis of the Smithsonian agreement, of assets other than dollars. Changes for January 1972 include this year's allocations of special drawing rights (SDRs).

†Upper and lower intervention limits established in December 1971.

modest relaxation of exchange controls, primarily for capital outflows to the EC and candidate countries, and British firms controlled by residents of those nations were allowed to raise unlimited sterling finance for their operations in the United Kingdom. Following the budget announcement, forward sterling softened somewhat but, reflecting the general pressure against the dollar, spot sterling rose close to \$2.62 by the end of March.

In April the sterling market was reasonably well balanced, with the spot rate fluctuating around \$2.61. On April 28 the United Kingdom discharged the remainder of its debt to the IMF, thereby reconstituting its full drawing rights with the Fund for the first time since December 1964. The repayment required the cooperation of a number of countries. Under the arrangement that was worked out, the United States Treasury drew SDR200 million equivalent of sterling from the IMF, thereby reducing the United Kingdom's repurchase obligation by a corresponding amount to SDR950 million. The United Kingdom, in turn, discharged this residual commitment with SDR500 million equivalent of currencies acquired from third countries against dollars, with SDR50 million of gold and SDRs purchased from Canada, and with SDR400 million out of British reserves. Then, on May 1, the United Kingdom formally began its participation in the EC narrower band arrangement that had been put into effect one week earlier. There was little reaction in the market, however, as sterling had been holding well within the 2¼ percent band for some two months.

Spot sterling remained fairly steady through most of May. Nevertheless, an increasingly pessimistic atmosphere was developing in the market, as price and wage inflation and the continuing series of labor disputes threatened to cut further into Britain's competitiveness in world markets. The trade deficits, which had appeared in February and had continued in March and April, were taken as a sign that the huge current-account surplus of the past three years was already being eroded and might soon be erased. Market pessimism first showed through in a widening of discounts on forward sterling late in May, and in early June spot sterling began to soften as well. The pound was still trading above the middle rate for the dollar but had fallen close to the bottom of the EC band.

On June 8, the release of first-quarter balance-of-payments statistics for the United Kingdom, showing a sharp drop in Britain's current-account surplus, seemed to confirm market fears about the pound's prospects, and sterling came on offer, with traders beginning to switch into German marks, Swiss francs, and Dutch guilders. Then, on June 15, out of a growing morass of legal and jurisdictional controversies on the labor front, a wildcat dock strike triggered a new selling wave of both forward and spot sterling. With spot sterling now at the bottom of the EC band, the Bank of England and several Common Market central banks were obliged to intervene heavily in support of the pound against EC currencies. As the pound dipped to \$2.58½ against the dollar on June 16, it tended to pull the whole band down *vis-à-vis* the dollar, thereby making the Continental currencies appear relatively cheap.

Meanwhile, sterling's prospects had become a subject of general debate in the United Kingdom, especially against the background of Chancellor of the Exchequer Barber's statement in the March budget address that "the lesson of the international balance-of-payments upsets of the last few years is that it is neither necessary nor desirable to distort domestic economies to an unacceptable extent in order to maintain unrealistic exchange rates, whether they are too high or too low". In Parliamentary debate on June 19, an opposition spokesman stated that he did not see how a devaluation could be delayed beyond July or August of this year. Over the next three days, enormous amounts of sterling were dumped on the exchanges. Forward sterling was driven to deep discounts (as much as 15 percent per annum on one-month deliveries), and spot sterling was pushed down to as low as \$2.56½ against the dollar, even as EC central banks continued their massive support effort to maintain the 2¼ percent band among their own currencies. In sum, over the six trading days June 15-22, such support amounted to \$2.6 billion equivalent, financed by exchange transactions with the Bank of England which were to be liquidated by the end of July.

Early on the morning of Friday, June 23, with no end to the reserve losses in sight, the British authorities announced:

> H.M. Government has decided that, as a temporary measure, sterling will be allowed to float. This means that for the time being the market rate for sterling will not necessarily be confined within announced limits either in respect of the U.S. dollar or in respect of EEC currencies.
>
> It is the Government's intention to return as soon as conditions permit to the maintenance of normal IMF margins round parity and participation in the special EEC currency arrangements.

At the same time, the London market was closed through the following Monday and most of the exchange controls applying to nonsterling-area countries were extended to the overseas-sterling-area countries other than the Republic of Ireland.

The floating of the pound, and the subsequent withdrawal on the same day of the Continental central banks from their respective markets, gravely weakened confidence in the durability of the Smithsonian agreement and the EC intervention arrangements. On Monday, June 26, however, the EC Finance Ministers agreed in Luxembourg to continue to defend the Smithsonian rates and to retain the narrower EC band arrangements, while the pound continued to float.

On June 27, when London was the only major European foreign exchange market to resume normal operations, the sterling rate dropped almost to \$2.47, but a sharp squeeze for balances developed later in the day as deliveries on earlier sales contracts had to be met, and the spot rate temporarily rebounded to \$2.51¾. Once the squeeze for balances had passed, sterling dropped off steadily, by a penny or two a day over the course of the next week, to as low as \$2.41¼ on July 4 in London. At that point, commercial demand reappeared and the rate recovered to around \$2.45. The revival of commercial demand was underscored by the release of trade figures for June, which had swung back into surplus and confirmed that in fact the United Kingdom was still in current-account surplus. Moreover, the continuing money market squeeze in London tended to support sterling in the exchanges. Even so, new troubles on the labor front, culminating in a dock strike beginning on July 21, had a disturbing influence on the sterling market, occasionally pulling the rate down sharply. Over the remainder of July,

Table IV

UNITED STATES TREASURY SECURITIES
FOREIGN CURRENCY SERIES

In millions of dollars equivalent

Issued to	Amount outstanding on January 1, 1972	Redemptions (—) 1972 I	II	July 1-September 8	Amount outstanding on September 8, 1972
German Federal Bank	612.0	—76.5		—76.5	459.0
German banks	153.0				153.0
Swiss National Bank	1,215.4				1,218.3
Bank for International Settlements*	164.8				170.9
Total	2,145.2	—76.5	—0—	—76.5	2,001.2

Note: Discrepancies in totals result from valuation adjustments and from rounding.
* Denominated in Swiss francs.

sterling traded in the $2.44-$2.45 range. On July 31, the United Kingdom settled its debts in connection with the defense of sterling in June, utilizing $1,150 million of funds previously swapped out under special arrangements, $634 million equivalent drawn under the United Kingdom's IMF gold tranche position, and $823 million from reserves which at the end of July still amounted to $6,082 million (inclusive of Britain's remaining $126 million IMF gold tranche position).

Meanwhile, as sterling began to decline sharply against the dollar in mid-June, this Bank, acting in close consultation with the Bank of England, began to buy sterling in the New York market to repay the Federal Reserve's remaining swap commitment. By the end of June the System had been able to reduce its swap commitment by another $52 million to $663 million equivalent. After sterling was floated, the United States Treasury periodically bought sterling on days when the rate was declining in New York and by mid-July had purchased a total of $41.5 million equivalent. At that point the Federal Reserve, in order to repay the remainder of its swap commitment in sterling, initiated a program of daily purchases of sterling, mainly on a direct basis from the Bank of England but also in the market. These purchases, together with sterling acquired from the United States Treasury, including the pounds drawn by the Treasury at the time of the British IMF repayment in April, enabled the System to reduce its swap commitment by $405 million equivalent to $258 million as of July 31. The program of daily purchases continued through early August, and by August 14 the Federal Reserve had acquired sufficient sterling to liquidate the remainder of its original swap commitment of $750 million.

Buoyed by a tight domestic money market and continuing commercial demand, sterling rose early in August to trade above $2.45. Announcement of an end to the dock strike and release of a second consecutive trade surplus gave additional support to the spot rate toward midmonth. Subsequently, the squeeze for balances eased, with British short-term interest rates declining abruptly, and spot sterling edged to below the $2.45 level in early September.

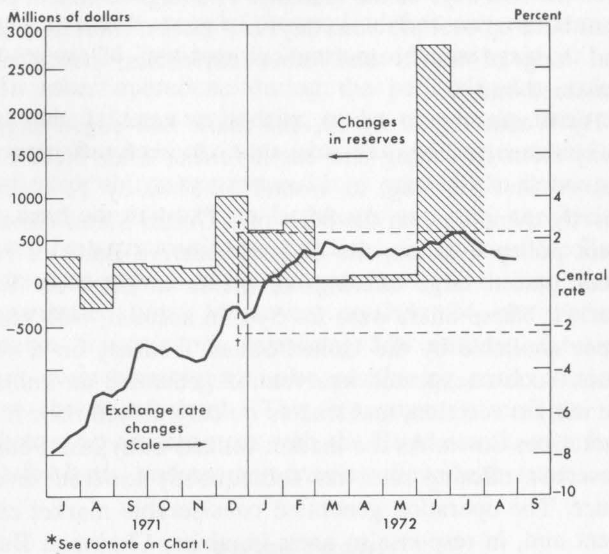
GERMAN MARK

Following the Smithsonian agreement, the German authorities established a new central rate for the mark of $0.3103⅛, an effective appreciation of 13.58 percent against the dollar, and set margins at $0.3034⅞ and $0.3174⅝ on either side of the central rate. None of the restraints against inflows of foreign funds introduced earlier in 1971 were removed, but the government announced that it would not avail itself for the time being of its new power to impose deposit requirements of up to 50 percent against German firms' borrowings abroad. When exchange trading was resumed, the mark settled well below its new central rate. Except for some modest outflows toward the year-end, there was no significant reversal of the huge speculative positions in marks that had been built up over the course of 1971.

Early in 1972 doubts began to spread in the exchange markets that a durable settlement of the international monetary crisis really had been achieved. Moreover, many Europeans were expressing concern over the further decline taking place in the United States interest rates. With the press and the markets focusing more and more on these issues, the atmosphere deteriorated progressively over the early weeks of the new year, and almost any news item or rumor was seized upon as a reason for additional selling of dollars. Funds were shifted into Germany particularly, and in heavy demand the spot mark rose through the new central rate by mid-January. Further waves of nervousness swept through the foreign exchange markets in February. Each time the mark rate was bid up sharply, and the pressures eased only after forceful intervention by the Bundesbank. Then, late in February, the German authorities announced new measures designed to lessen the inflow of funds and to defend the Washington agreement. These included cuts in the Bundesbank's discount and Lombard rates and a hike in the marginal reserve requirement against nonresident liabilities. More importantly, the Ministry of Economics and Finance imposed a 40 percent deposit requirement (Bardepot) on most foreign borrowings of nonbanking enterprises, retroactive to January 1, moving for the first time to curb German corporate borrowings abroad. Following the announcement of these measures, the spot rate declined to almost 1½ percent below its upper limit by late February. Over the month as a whole, however, German official reserves had increased by $744 million.

The demand for marks soon built up again in early March, and the mark was driven up almost to its Smithsonian ceiling in reaction to the growing press discussion of a possible concerted European response to the continued influx of dollars—through either the introduction of controls or a joint float against the dollar. Following encouraging reports of the Basle meeting of central bankers on the weekend of March 11-12 and indications that United States short-term interest rates were beginning to firm, the mark backed off somewhat and traded around the $0.3150 level. The mark held at this level well into April, with little reaction to the announcement early that month that on April 24 the EC would implement its narrower trading band arrangement (the "snake in the tunnel").

Chart II
GERMANY
MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



*See footnote on Chart I.
† Upper and lower intervention limits established in December 1971.

By that time, and indeed throughout the second quarter, Germany's international payments position was undergoing a substantial readjustment. The domestic economy had leveled off, but wage and price pressures remained strong in Germany and the rise of the mark rate over the course of the previous year was beginning to exert an influence on the German trade balance. Thus the trade surplus, which had swelled to substantial proportions toward the end of 1971 and through the early months of 1972, showed a decline in March and subsequent months. Coupled with a further deterioration in service items and transfer payments, this moved the full current account from surplus to rough balance.

The continuing strength of the mark during the spring reflected, therefore, an increasingly heavy influx of capital. These inflows were mainly generated by the market's expectation that there might be a further rise in the value of mark-denominated instruments. At the same time, moreover, German corporations continued to seek funds abroad through a variety of means. To avoid the Bardepot, the corporations ran down their foreign market borrowings by $1.3 billion in March and April but at the same time were able to sell to foreigners a substantial volume of mark-denominated bonds.

The exchange markets were in better balance in May, but the general uneasiness over the international monetary situation showed through on a number of occasions. Such events as the intensification of the Vietnam war early in the month and Treasury Secretary Connally's resignation toward midmonth brought forth a spate of market and press commentary on their ultimate significance for the monetary system. Comments to the press by officials from either side of the Atlantic, or even rumors of what they might have said, were closely scrutinized for any hint of further moves to be made on the international monetary front. Thus, several times in May the German mark was bid up sharply in the exchanges, pulling several other European currencies along with it. These bursts of demand were short-lived, however, and each time the spot rate quickly retreated.

The mark was trading quietly around $0.3150 in early June, when swiftly moving events in the sterling market sent shock waves into other markets as well. The rush out of sterling was directed mainly toward the mark, which rose sharply against the dollar. By June 16, sterling had fallen to its intervention point against the mark under the EC arrangements and both the Bundesbank and the Bank of England had to intervene massively (selling marks against sterling) to keep the spread between their two currencies from widening beyond 2¼ percent. This heavy injection of marks into the exchanges tended to pull the mark down against the dollar, and the rate dropped to $0.3131 by June 22.

When the British authorities announced the floating of the pound on Friday, June 23, thereby dropping out of the Smithsonian and EC agreements, traders immediately began shifting funds out of dollars and into other European currencies as they feared a general abandonment of the Smithsonian rates. As a result, the Bundesbank was flooded with nearly $900 million within the first hour of trading, after which it suspended operations and closed the exchange market. In trading later that day and on Monday, June 26, in New York, the spot mark jumped 15 points above its Smithsonian ceiling. Following the EC Finance Ministers' decision on June 26 to continue to defend the Smithsonian limits and to maintain the EC band, the German authorities announced they would reopen their foreign exchange markets on Wednesday, June 28.

When normal trading resumed that day, the spot mark traded just below its ceiling, but marks for future delivery were quoted at large premiums. The next day the German government moved to back up the decision to support the existing international exchange agreements by announcing a series of measures to tighten controls. The Bardepot requirement was raised from 40 percent to 50 percent and was applied to a wider range of borrowings. Sales of domestic fixed-income securities to nonresidents were made subject to the prior approval of the authorities, to be administered restrictively. The Bundesbank again raised its reserve requirements against the banks' foreign liabilities, so that in effect reserves totaling between 90 percent and 100 percent would be required against any additional foreign liabilities of the banks. Finally, domestic reserve requirements were hiked to absorb the liquidity generated by inflows of the nonbanking sector. This increase in domestic liquidity reflected the fact that Germany's official reserves, which had risen by $121 million in April and May, had been swelled by a further $2,763 million in June, largely as a result of the intervention to support both sterling and the dollar.

The tightening of controls by the German authorities did not immediately allay market anxieties and, in the generalized pessimism over the future of the Smithsonian agreement, traders hastened to shift even more funds into Germany ahead of the possible imposition of additional controls. Consequently, the mark was in heavy demand early in July and the Bundesbank was obliged to absorb dollars on a large scale. The buying of marks, and of most major European currencies, continued until the Swiss authorities relieved some of the uncertainties by taking forceful defensive measures of their own on July 4 and 5. The Bundesbank then intensified its efforts to tighten up the Bardepot and also asked banks to enter into a gentlemen's agreement neither to sell assets out of their own portfolios to nonresidents nor to arrange or guarantee any sizable foreign credits to residents. In addition, the Bundesbank once again boosted its minimum reserve requirements against domestic liabilities to mop up the liquidity flowing directly into German corporations.

These various measures helped settle the markets briefly, but a new rush into marks and other currencies soon developed in the week prior to the scheduled July 17-18 London meeting of EC Finance Ministers. With the atmosphere still tense following the floating of the pound, there were reports in the European press suggesting that the EC Finance Ministers would plan a joint float of their currencies against the dollar, rather than stick to their announced agenda. The market seized upon these reports to mount a new drive out of the dollar and into the mark and other European currencies. With the mark pushed once again to its upper limit, the Bundesbank had to absorb some $1.1 billion over the two days of July 13-14. On Monday, July 17, the EC Ministers in London made clear their determination to maintain the Smithsonian exchange rate structure and emerged with a general agreement on longer term monetary questions, including the need for par values. The reports out of London gave pause to the markets, and the demand for marks let up over the two days of the meeting. The huge technical positions built up over previous days and weeks, short of dollars and long of marks and other currencies, nevertheless remained intact.

By Wednesday, July 19, the mark had edged slightly away from its ceiling and eased further after New York opened that morning, to around $0.3160 by 11 o'clock. Shortly thereafter, on the basis of a United States Government policy decision, the Federal Reserve Bank of New York placed large offerings of marks in the New York market. These offers were for System account, with marks made available by the United States Treasury on a swap basis. Such unexpected intervention generated an immediate market reaction, and traders quickly moved their mark quotations down. As the market backed away, the Federal Reserve's offering rate was subsequently lowered several times. The operation generated considerable market comment and, in response to press inquiries, Chairman Burns confirmed the System's intervention in marks, adding that such intervention would continue on whatever scale and whenever it was deemed desirable. The following morning in Germany, with the market fully alerted to the news of the United States initiative, the spot mark fell further, reaching $0.3152 (some ¾ percent below the upper limit) by the time the New York market opened. The Federal Reserve followed up with a further offering of marks out of previously accumulated System balances. Over succeeding days, with additional favorable press and market commentary on the Federal Reserve initiative, the mark rate continued to decline. This tendency persisted into early August, with some unwinding of speculative positions, and the rate settled temporarily around $0.3140.

By midmonth a more favorable atmosphere developed for the dollar, following the release of improved United States balance-of-payments figures for the second quarter and indications of new efforts by the United States to negotiate a settlement of the Vietnam conflict. In addition, the various measures taken by the German authorities in July were beginning to bite. Consequently, the mark rate dropped further, reaching $0.3134 on August 16, and the Federal Reserve again sold marks to consolidate the dollar's improvement. These sales brought to $21.4 million equivalent the total of marks sold in market operations.

The shift in sentiment in favor of the dollar continued, pushing the mark rate to $0.3126¼ on August 21. On the next day, however, German commercial banks reportedly found themselves short of liquidity to meet their reserve requirements through the end of August. A squeeze developed in the Frankfurt money market, and the banks

scrambled to buy marks in the exchanges, setting off a sharp rise in the mark rate before the banks' liquidity needs were met. When the July trade figures for the United States showing a narrowing of the trade deficit were announced on August 24, however, the mark eased once again.

In other operations during the period under review, the United States authorities, under agreements with the German Bundesbank, were able to liquidate certain German mark obligations entered into prior to the floating of the mark in May 1971. In March and July the United States Treasury purchased sufficient marks from the Bundesbank to redeem in two payments a $153 million mark-denominated note. Moreover, on July 24, the Federal Reserve liquidated its remaining $50 million equivalent mark swap commitment, also purchasing marks directly from the Bundesbank. This repayment placed the $1 billion swap arrangement with the Bundesbank on a fully standby basis, and no new drawings have been made.

SWISS FRANC

Under the Smithsonian agreement the Swiss authorities fixed a central rate for the franc of $0.2604⅛—in effect, an increase of 6.36 percent against the dollar from the franc's previous parity and of 13.88 percent from the parity in force prior to Switzerland's revaluation on May 10, 1971—and announced their new intervention points, 2¼ percent on either side of the central rate. Actual trading conditions were little changed, however, since the banks had been allowed to deal throughout and because the restrictions imposed the preceding August remained in effect. Increases in the banks' net foreign liabilities over the July 31, 1971 levels continued to be subject to a 100 percent reserve requirement, and interest payments on nonresidents' deposits made after July 31 were still prohibited. In the wake of the Smithsonian agreement there were modest outflows from Switzerland, and the franc gradually began to ease toward the new floor of $0.2546¾. There was no substantial unwinding of speculative positions, however, and the Swiss banks remained highly liquid as the year-end approached.

Early in January, with the current account of Switzerland's balance of payments continuing in small surplus and the markets hesitant in the face of the many monetary issues still to be resolved, the franc rate remained slightly above the floor, even as domestic monetary conditions eased further. By midmonth the market was already beginning to question the durability of the exchange rate realignment, and the spot franc rose along with other European currencies. Over succeeding weeks, as traders grew increasingly jittery, several rounds of heavy buying pushed the franc up to as high as the central rate. At that time, in view of the continuing inflows from abroad, the Swiss National Bank instituted a requirement that 25 percent of the proceeds of foreign bond issues in Switzerland (which were running at more than twice their volume of a year earlier) had to be converted into dollars by the central bank at the franc's lower intervention limit. Another wave of demand for francs developed in early March when, in the general strengthening of European currencies, the Swiss franc was rapidly bid up to some 1 percent above the central rate. The tensions in the foreign exchanges eased abruptly at that point, however, and the franc rate fell back sharply. Since domestic liquidity remained extremely abundant in Switzerland, the decline was steeper in the Swiss franc market than elsewhere on the Continent, and after mid-March the spot rate was again below the central rate.

On April 5 the Swiss National Bank and the Swiss Bankers Association agreed on two measures to mop up some of the excess domestic liquidity. First, marginal reserve requirements ranging up to 20 percent were introduced against the growth in the banks' domestic liabilities since July 31, 1971. Second, the already existing 100 percent reserve requirement against increases in the banks' net foreign liabilities was considerably tightened through a more restrictive interpretation, even though the required ratio was halved. At first, there was little reaction to these measures in the Swiss franc market and the spot rate held fairly steady. But, as the market came to appreciate the possible consequences of the restriction on the banks' net foreign currency positions, the franc weakened.

Late in April the Swiss banks began to transfer funds to the National Bank under the terms of the tightened reserve requirement against increases in net liabilities to foreigners. An alternative for the banks was to reduce their net external liability positions by purchasing dollars from the National Bank, and on May 2 the National Bank sold $150 million at the rate of $0.2577¼ (SF3.88) for this purpose. The following day the National Bank announced that it would henceforth be prepared to sell dollars at this higher rate, rather than at the official lower intervention point of $0.2546¾, thereby reducing the effective range of fluctuation of the Swiss franc. In a parallel move, it lifted to the same level the exchange rate for conversions of foreign bond proceeds raised in Switzerland, while increasing to 40 percent from 25 percent the share of such proceeds that had to be converted at the central bank. These measures had no direct impact on the market but, over succeeding weeks, resulted in a further decline in the National Bank's dollar holdings.

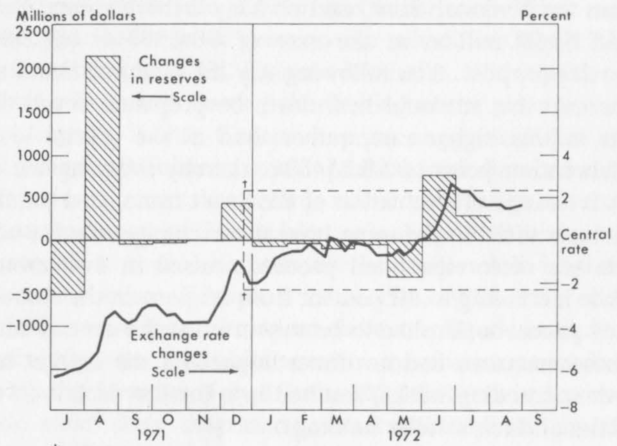
The nervousness that broke out in the exchanges at the beginning of the second week of May pushed the franc somewhat higher, but there was never any severe pressure and the spot rate soon receded, declining until the middle of that month. Trading in francs then turned quiet, with the rate about ¾ percent under the central rate and well below the EC currencies. Taking advantage of the relatively weak exchange rate, the Federal Reserve, with the agreement of the Swiss National Bank, initiated a program of moderate purchases of Swiss francs in the market to make a start on covering the System's swap commitments in that currency—$1 billion equivalent to the Swiss National Bank and $600 million to the BIS. By early June, such Federal Reserve purchases were sufficient, together with $250 million of francs bought directly from the Swiss National Bank to replenish its dollar balances, to enable the Federal Reserve to make swap repayments totaling $300 million equivalent to that bank. The System's Swiss franc swap indebtedness to the National Bank was thereby reduced to $700 million, while the additional $600 million equivalent Swiss franc drawing on the BIS remained outstanding.

Late in May the Swiss National Bank's sustained efforts to absorb domestic liquidity began to take hold and the Swiss franc strengthened. On May 30, an erroneous press report from Switzerland to the effect that Under Secretary Volcker had not absolutely ruled out the possibility of another dollar devaluation set off a particularly sharp reaction in the Swiss franc market. In heavy trading, the rate surged by ¼ percent within half an hour. Although the wire service later admitted that it had transmitted its own interpretation of Mr. Volcker's response to questions and that the Under Secretary had in fact strongly supported the Smithsonian alignment, the market did not immediately recover from the initial adverse reaction, and the franc swung widely around the central rate over the subsequent days.

Chart III

SWITZERLAND

MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



* See footnote on Chart I.

† Upper and lower intervention limits established in December 1971.

This misunderstanding was the first of a series of disquieting developments to hit the exchange markets in rapid succession in the late spring, and the Swiss franc became increasingly subject to speculative pressures. Early in June, free-market gold prices—which had already advanced sharply the preceding month—surged in a strong speculative outburst on rumors of an increase in the official price of gold. In response, the Swiss franc rose rapidly, moving through its $0.2604⅛ central rate.

Later in the month, the fever in the gold markets abated and the Swiss banks' concerns over their midyear liquidity positions were eased by the willingness of the National Bank to extend assistance through short-term swaps. (In fact, it granted a total of $923 million in swaps over the midyear period.) Nevertheless, demand for Swiss francs began to pick up, as funds were switched out of sterling on a progressively heavier scale. Since Switzerland is not a party to the EC currency arrangements, the franc rate was not pulled downward, as were many other Continental currencies, by the rapid drop of sterling *vis-à-vis* the dollar. Instead, the spot franc was propelled upward by speculative positioning to $0.2653 by June 22.

Following the floating of the pound on June 23, the Swiss National Bank announced that it would not intervene in the foreign exchange market until further notice. The Swiss banks were still free to trade, however, and the franc immediately rose above its ceiling. On June 26 the Swiss authorities took new and more drastic measures to limit the inflow of foreign capital, this time banning the sale to foreign investors of domestic securities, foreign securities denominated in Swiss francs, and mortgages on land and also prohibiting all sales of Swiss real estate to nonresidents. Following these steps, the franc rate moved back down toward its official ceiling. When other Continental central banks reopened for business on June 28, however, the National Bank stayed out of the market to assess the situation further, and the franc continued to trade erratically above the upper limit in a thin market through the month end. During this period, the Federal Reserve sold out of balances small amounts of francs in the New York market, with most of the proceeds used to purchase German marks.

When the National Bank resumed operations on Monday, July 3, it warned that a negative interest rate penalty on increases in nonresident deposits in Switzerland would

be imposed if the inflow of funds became too large. Nevertheless, there was a heavy demand for francs, and the bank was forced to intervene at the upper intervention limit. The Swiss authorities moved promptly, therefore, to impose a quarterly 2 percent tax on any portion of foreign deposits with Swiss banks in excess of the balances held on June 30, 1972. In addition, they extended the prohibition of interest payments on nonresident deposits made after July 31, 1971 to all banks (this ban had previously applied only to deposits with the larger banks), prohibited all banks from having net foreign exchange liability positions (including forward positions) at the close of business on any day, subjected borrowings abroad by Swiss citizens and corporations to the prior approval of the Swiss National Bank, and placed on a legal basis the previous gentlemen's agreement establishing the marginal reserve requirements against banks' net foreign liabilities. This barrage of measures halted the inflows, and the Swiss franc fell away from its upper limit, reaching as low as $0.2647 on July 5.

As the July 17-18 meeting of the EC Finance Ministers approached, the Swiss franc again came into extremely heavy demand, and the National Bank had to absorb just over $1 billion. Once the meeting got under way, however, the market concluded that the anticipated joint EC float against the dollar probably would not materialize, and buying pressure on the franc tapered off. When the meeting ended in a reaffirmation of official intent to defend the Smithsonian parities, some offerings of Swiss francs against dollars developed and the franc rate fell rapidly away from its $0.2664⅛ ceiling. The downward movement was accelerated by the news of the United States authorities' reentry into the exchanges on July 19 and by the favorable response that action received. The franc reached as low as $0.2641 before leveling off. On July 21, in order to absorb part of the franc liquidity resulting from the heavy mid-July inflows, the National Bank raised its marginal reserve requirements against increases in the banks' domestic and foreign liabilities.

The Swiss franc market, no longer fueled by a rapid succession of speculative rumors, then turned very quiet. In mid-August, when sentiment toward the dollar improved in response to the Federal Reserve's continuing market intervention and release of improved second-quarter United States balance-of-payments figures, the Swiss franc followed the German mark downward. By early September, the spot rate was fluctuating around the $0.2645 level.

BELGIAN FRANC

Following the Smithsonian meeting, the Belgian authorities announced that the franc's central rate would be set at $0.022313, an effective revaluation of 2.76 percent against gold and a total appreciation of 11.57 percent against the dollar. New intervention points were established at 2¼ percent above and below the central rate. At the same time, Belgium and the Netherlands (which appreciated the guilder by the same percentage against the dollar) decided to maintain the close link between their currencies by continuing to intervene when necessary to keep the rate between the franc and the guilder within a 1.5 percent spread. Moreover, the Belgian authorities maintained the two-tier market structure, with only current transactions going through the official market. When the Brussels exchange market was reopened on December 21, the Belgian franc was quoted well above the new floor and rose gradually thereafter. By the year-end, when Euro-dollar quotations fell below comparable Belgian domestic interest yields, the franc reached the new central rate.

Early in 1972, the Belgian franc joined other currencies in rising sharply against the dollar, and by February the National Bank had begun to take in dollars, both on a swap and an outright basis. Moreover, in the separate market for financial francs, quotations had risen to a significant premium over the commercial rate. To a large extent, the run-up of the franc reflected relatively high interest rates in Belgium, as well as market fears over the prospects for the Smithsonian agreement. For its part, the National Bank cut its lending rates three times between the first of the year and early March, with the discount rate reduced from 5½ percent to 4 percent in ½ percent steps, but these actions served merely to bring Belgian rates down into line with comparable rates in other centers. At the same time, economic activity was only gradually recovering from a slow-down and Belgium's current-account surplus remained large. Once the spot rate began to rise, fears of a possible further advance led to a buildup of leads and lags in trade payments, which in turn generated additional demand in both spot and forward markets for commercial francs.

Early in March, when there was widespread discussion of a possible common EC response to growing dollar inflows, either through a joint float of their currencies or through administrative controls to bar these inflows, there was a jump in demand for several currencies, and the National Bank of Belgium again had to take in dollars at the Smithsonian ceiling. On March 9, in an effort to discourage short-term capital inflows, the authorities instructed the banks to avoid any further buildup in their spot liabilities to foreigners without a corresponding increase in their spot foreign assets. This tended to stem the tide for the time being, and the franc rate backed away.

With the Brussels money market now highly liquid, and with incentives having opened up in favor of moving into Euro-dollars, the Belgian franc continued to decline through mid-April. The generally improved exchange market atmosphere also encouraged some unwinding of the earlier leads and lags in favor of the franc. Nevertheless, the Belgian current account was still in surplus, and when the domestic money market turned tighter once again late in April while Euro-dollar rates declined, the Belgian franc began to advance. This tendency continued through May, when renewed nervousness in the exchanges led to a number of brief spurts in the Belgian franc rate. Late in May, when the Belgian government needed dollars for current payments, the Federal Reserve purchased francs in a direct transaction with the National Bank and, using these francs as well as some balances on hand, repaid a total of $20 million equivalent of its swap debt to the National Bank. The System's Belgian franc swap commitments were thereby reduced to $470 million, including $35 million equivalent owed to the BIS.

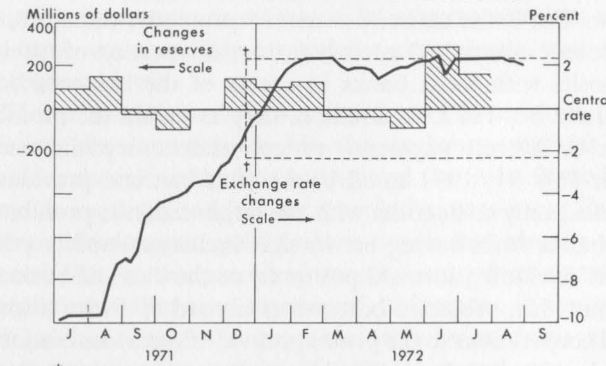
When sterling came under speculative attack in mid-June, the Belgian franc was initially pushed up to its upper limit against the dollar. Sterling soon dropped to its middle rate, and the spread within the EC band thus reached the full 2¼ percent. Consequently, as pounds continued to be dumped on the markets, the National Bank of Belgium joined other EC central banks in the support effort, buying sterling with francs in the market and making francs available to the Bank of England for corresponding intervention in London. As the whole EC band was pulled down against the dollar by the pressure on sterling, the franc dropped to as low as $0.022537 on June 22, or 1.3 percent below the ceiling. The floating of the pound on June 23 released the downward pressure on the EC band, and the franc snapped back to its ceiling. After absorbing some dollars, the National Bank of Belgium quickly withdrew from the market along with the other Continental central banks that had opened that morning. In the limited trading that followed, the franc rate immediately rose above its Smithsonian ceiling. After the EC Finance Ministers met in Luxembourg on June 26 and made clear their intention of upholding both the Smithsonian and EC currency arrangements, the Belgian exchange market was reopened on June 28. At first, the rate held just below its upper limit and there was no need for the Belgian authorities to intervene.

The grave uncertainties left in the wake of the floating of the pound soon led to new demands for Continental currencies, however, and along with other European central banks the National Bank had to intervene heavily in early July, particularly on July 13-14, just prior to the EC Finance Ministers' meeting in London. Reports from that meeting tended to reassure the markets and, as with

Chart IV

BELGIUM

MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



* See footnote on Chart I.

† Upper and lower intervention limits established in December 1971.

other currencies, the franc edged away from its upper limit. Nevertheless, although the German mark, the Dutch guilder, and the Swiss franc all declined fairly sharply over subsequent days, the Belgian franc hovered close to its upper limit. By late July it had moved back to its ceiling and held there into early August, with the National Bank again absorbing dollars almost every day.

In part, the relative strength of the Belgian franc reflected the continuing current-account surplus. In addition, the Belgian authorities had worked out a gentlemen's agreement with the Belgian commercial banks to absorb some of the domestic liquidity created by the earlier official purchases of sterling and dollars, and the banks made sizable deposits with the central bank at the end of July and during most of August. Finally, it was clear that the speculative buildup of the previous month had not been unwound, and the longer the rate held at the ceiling the more entrenched became market expectations that the Belgian authorities might not be able to resolve the situation within the context of the Smithsonian agreement.

In these circumstances, on August 10, following consultations with the National Bank of Belgium, the Federal Reserve initiated a probing action in the New York exchange market to see whether some shift of expectations could be generated that would pry the Belgian franc loose from its ceiling. As in the case of the operation in German marks in July, this Bank placed a large offer of Belgian francs in the market at the current rate. As the market backed away, the offer was subsequently moved down and a moderate amount of francs was sold over the course of the day. On the following morning in Europe there was

not only some decline of the franc rate but also some sympathetic easing of other currency rates. To consolidate the gain, the Federal Reserve followed up with further offers on subsequent days, but, with the market continuing to back away, only a small amount of Belgian francs was sold. By August 14, the Belgian franc was clearly following the general downtrend of other European currencies, so that no further offers were made. As had been agreed at the inception of the operation, the Federal Reserve covered its franc sales by drawing on its swap line with the National Bank. These drawings totaling $10.2 million equivalent were repaid by early September, as improved conditions permitted the Federal Reserve to acquire the needed francs through market operations.

With the generally improved sentiment for the dollar, the franc continued to decline on its own through the end of August, reaching as low as $0.022743 before steadying in early September. As of September 8, the Federal Reserve swap drawings in Belgian francs remained at $470 million equivalent.

DUTCH GUILDER

At the conclusion of the Smithsonian meeting, the Dutch government announced that the guilder would be revalued by 2.76 percent against gold, thus producing an effective appreciation of the guilder of 11.57 percent relative to the dollar. New intervention limits were set at 2¼ percent on either side of the new central rate of $0.3082. There was little outflow of funds from the Netherlands when the Amsterdam market was reopened on December 21 and, with the Dutch current account strengthening against the background of sluggish domestic economic activity, the guilder rate began to rise during late December and early January.

With interest rates falling in foreign centers early in January, the Netherlands Bank reduced all its lending rates by ½ percentage point, the discount rate being cut to 4½ percent. Domestic money market rates declined in response, but the exchange rate did not follow suit, as there were sizable new direct investment inflows and the underlying Dutch payments position remained strong. Even more important, the demand for guilders reflected the exchange market's growing concern over the viability of the exchange rate realignment negotiated in Washington, and the rise of the guilder followed closely the advance of other Continental currencies, particularly the German mark. Consequently, the guilder rate was ratcheted upward in several stages in January and early February, reaching almost to the upper intervention level. In February, the Dutch authorities moved to provide additional liquidity to the Amsterdam money market, first by open market purchases of Dutch Treasury bills and subsequently through exchange market swaps, and these operations relieved some of the upward pressure on the spot rate. Nevertheless, just after midmonth a new wave of exchange market uncertainty briefly pushed the spot guilder to the ceiling, and the Netherlands Bank had to absorb a modest amount of dollars. The market turned quieter through the end of February, and in view of the further decline in interest rates abroad, effective March 2, the Netherlands Bank cut its discount rate by ½ percentage point to 4 percent.

By early March, however, the debate in Europe over alternative means of dealing with dollar inflows was in full swing, with a further extension of capital controls appearing to be the most likely route. Consequently, there was an influx of funds into guilders by traders and investors who feared that new controls could render the guilder more expensive or even unavailable for certain kinds of transactions later on. The heavy demand pushed up the guilder rate, although the Netherlands Bank slowed the advance by entering into new swaps with its banks. Then, on March 7, the EC countries reached the decision to narrow the band of fluctuation between their currencies, and the market took the view that the Community would now be in a better position to take common action against dollar inflows—perhaps through a joint float. The demand for guilders thus swelled even further, pushing the spot rate to its Smithsonian upper limit, and over the course of three days the Netherlands Bank had to absorb $417 million. On March 9 the Netherlands Bank moved to curb inflows from abroad by prohibiting nonresidents from making new guilder time deposits or renewing such deposits when they mature and by banning the payment of interest on nonresidents' demand deposits. At the same time, the central bank restated its determination to maintain its Smithsonian buying and selling rates for dollars. Following these moves, the market turned much quieter and, as new inflows tapered off, the spot rate soon retreated from the ceiling.

The Dutch money market was now extremely liquid as a result of the earlier heavy influx of funds, and the guilder tended to drift downward through the second half of March and well into April, steadying only after dropping below $0.3100 in mid-April. Thereafter, the guilder followed the gradual updrift of the German mark and other Continental currencies, and by early June was trading quietly around $0.3125.

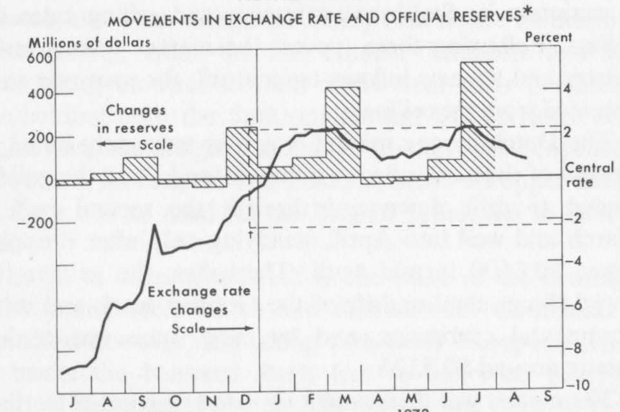
The guilder was then caught up in the rush out of sterling. Although the guilder rate was bid up at first, the operation of the EC currency arrangements eventually resulted in a decline of the whole EC band *vis-à-vis* the dollar. As sterling weakened, it reached its support point against successive Community currencies. By June 22, the guilder too was at the ceiling of the Community band (now well below the Smithsonian upper limit against the dollar) and the Netherlands Bank was obliged to buy sterling with guilders. This additional supply of guilders tended to push the guilder rate still lower against the dollar, to 1.4 percent below the ceiling at one point.

On June 23, following announcement of the floating of sterling, the Netherlands Bank along with other European central banks withdrew from the market. After the EC Finance Ministers' meeting on June 26, the Dutch joined others in reaffirming their commitment to the Smithsonian and EC arrangements. The Amsterdam market was officially reopened on Wednesday, June 28, with the guilder trading below its official ceiling. Over subsequent days, however, the dollar came under pressure in other Continental markets and, with exchange controls in other countries deflecting funds away from those currencies, the guilder came into strong demand, obliging the Netherlands Bank to absorb substantial amounts of dollars. By July 7, stiff measures by the Swiss authorities had helped calm the European exchanges and the guilder edged away from its ceiling. The respite proved only temporary, as the prospective EC Finance Ministers' meeting on July 17-18 in London sparked new rumors of a possible joint float against the dollar that led to massive shifting out of dollars into most Continental currencies. Along with other central banks, the Netherlands Bank had to absorb progressively

Chart V

NETHERLANDS

MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



* See footnote on Chart I.

† Upper and lower intervention limits established in December 1971.

larger amounts of dollars. In sum, from the time of the floating of sterling through July 17, the Netherlands Bank took in $543 million at the Smithsonian ceiling.

Demand pressures for Continental currencies abated considerably when, during the course of the London meeting, the EC Finance Ministers reaffirmed their determination to defend the Smithsonian agreement, while focusing their discussion on longer term issues of monetary reform. Also, on July 17, the Netherlands Bank announced additional measures to curtail capital imports, both through leads and lags in payments for merchandise trade and through intracorporate transfers by multinational firms. These steps helped calm the guilder market further, and the rate began to ease away from the upper limit. The Federal Reserve's reentry into the exchange market through offers of marks in New York on July 19 brought about an easing of the German mark against the dollar over the next few days, and the guilder rate too began to decline. Moreover, as the rate continued to soften through the end of July and into August, previous leads and lags on trade transactions began to be unwound. As a result of this decline, the spread between the guilder and the Belgian franc reached 1½ percent. Under the terms of the Benelux agreement the Netherlands Bank was obliged to sell modest amounts of Belgian francs against guilders in order to prevent the spread from widening still further. By early September the guilder was trading below $0.3100 in a quiet market.

FRENCH FRANC

The French balance of payments had been in substantial surplus in 1971, and the franc had remained strong throughout the year. As part of the Smithsonian agreement, the French government agreed to keep the gold parity of the franc unchanged, thereby permitting the franc to appreciate relative to the dollar by 8.57 percent. The new central rate for the franc was set at $0.1954¾, with intervention limits set at 2¼ percent on either side. Although many of the exchange controls imposed in the second half of 1971 were eased or abolished following the Smithsonian agreement, the French authorities maintained the basic structure of their two-tier exchange market. Under this system, which subsequently has been liberalized, the Bank of France defends the franc at the prescribed intervention points only in the official market (through which trade and most service transactions as well as governmental transactions are effected), while all capital transactions and some service transactions are strictly segregated in a financial market where the franc rate is allowed to find its own level.

Despite the strength of the franc during 1971, most market participants had not expected so large an appreciation

of the franc against the dollar, and profit taking brought the rate under heavy selling pressure as soon as the Paris exchange market was reopened on December 21. With leads and lags beginning to be unwound, the French authorities sold a considerable amount of dollars in the market as the spot franc edged downward almost to its new floor. Selling pressure on the franc let up in the last days of December and, as doubts began to develop in the markets over the durability of the Smithsonian agreement, the franc rate early in 1972 started a long steady advance. The financial franc, in the meanwhile, had fallen below the official franc's floor on December 21 as speculative positions were unwound, but it subsequently converged with the official franc.

During the first quarter, the French current-account balance deteriorated. Furthermore, in January the French authorities took a number of steps to stimulate the domestic economy, including reductions by the Bank of France in its rates on discounts and secured advances of ½ percentage point to 6 percent and 7½ percent, respectively. While the franc rate might have been expected to soften in consequence, there was simultaneously a general strengthening of European currencies against the dollar, and the spot franc quickly rose to a level only slightly below the central rate. In early February, an additional burst of demand, set off in part by open debate over measures to control short-term capital flows and rumors of growing official support in Europe for a joint EC float, lifted the franc somewhat above the central rate. These speculative pressures continued through much of the month and, with the Bank of France on the sidelines, the rate rose steadily. At the same time, the financial franc was pushed up to a modest premium above the official rate.

The market atmosphere deteriorated further when, on March 3, French Finance Minister Giscard d'Estaing warned that the European response to continuing dollar inflows would be a further extension of exchange controls—perhaps at first on a piecemeal basis but later in concert. It was shortly thereafter that the EC Finance Ministers announced they would soon cut to 2¼ percent the maximum permissible spread among their currencies. In the general rush into all European currencies that followed, the commercial franc was pushed almost to its ceiling by March 9, and the financial franc, bid up not only by speculative pressures but also by heavy foreign purchases of French securities, surged almost 3 percent above that level.

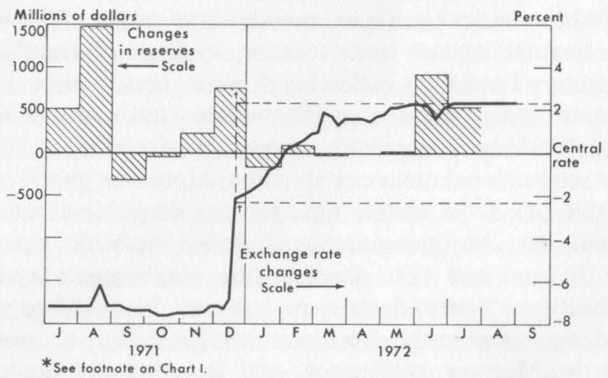
The flurry was short-lived, however, and the commercial franc quickly settled down to a rate well below its ceiling. The financial franc, although staying above the official ceiling, also eased. At first, the softening reflected a normal technical reaction to the preceding excessive sales of dollars. In mid-March, however, there was a perceptible improvement in market atmosphere following the regular central bank meeting in Basle, Switzerland, Secretary Connally's indication of willingness to discuss the forum for negotiations on international monetary reform, and President Pompidou's expression of optimism about the international monetary situation. Moreover, the French authorities acted at this time to ease domestic monetary conditions, cutting requirements against the banks' domestic demand and time deposits (the requirements against liabilities to nonresidents were, however, kept unchanged), reducing those longer term interest rates directly controlled by the Ministry of Finance, and lowering the Bank of France's domestic money market intervention rates.

Further relaxations of monetary policy relieved buying pressure on the franc until late April. Then, heavy month-end conversions of export proceeds and, later, a temporary liquidity squeeze during the tax payment period exerted upward pressure on the franc, and the spot rate climbed close to its ceiling. Underlying liquidity conditions continued to ease, however, and, once month-end factors were out of the way, the franc traded quietly just below the upper intervention point until the end of May.

At that point the franc rose to its ceiling in response to an erroneous news report of Treasury Under Secretary Volcker's press conference on May 30. The pressure was especially heavy on June 2, when the Bank of France moved to restrain the growth of the French money supply by raising the reserve requirement against increases in bank credit from 2 percent to 4 percent. With interest rates in France already higher than in other major European countries, however, the authorities were confronted with a dilemma since they did not wish to draw in additional funds from abroad. Consequently, the Bank of France reduced its money market intervention rates on successive days to keep domestic interest rates below Euro-dollar yields. With each drop in the domestic intervention rates, the pressure in the exchange market subsided and the franc temporarily edged below its ceiling. Meanwhile, the financial franc had advanced to a premium of over 3 percent above the commercial rate, reflecting flows of funds into the French stock market and some switching of funds out of sterling.

The franc rate was again pushed hard against its ceiling in mid-June, when speculation against sterling began. As the flight from sterling gathered momentum, large-scale official intervention was required to keep sterling within 2¼ percent of the franc. Both the Bank of France and the Bank of England had to inter-

Chart VI
FRANCE
MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



*See footnote on Chart I.
† Upper and lower intervention limits established in December 1971.

vene on a progressively heavier scale, supplying francs against sterling to an often hectic market. In the circumstances, the franc was pulled lower and lower *vis-à-vis* the dollar until it reached $0.1972½ by the morning of June 22, some 1.4 percent below the ceiling.

With the announcement of the floating of the pound at the opening on June 23, the franc immediately rebounded to the ceiling. After absorbing a sizable amount of dollars, the Bank of France, in a joint move with the other EC central banks that were still dealing in the foreign exchanges that morning, ceased intervening and the Paris exchange market was closed. When the Bank of France reopened the exchange market on June 28, the franc hovered close to the ceiling but the market was relatively quiet and there was little further official intervention. As a result of the inflows during June, French reserves rose by $921 million.

During the first half of July, strong speculative pressure began to build up against the dollar; with the franc rate hard against its upper limit, the Bank of France had to intervene almost every day, often in large amounts. The outcome of the EC Finance Ministers' meeting in London on July 17-18 had a calming effect on the market, however, and in line with the general firming of the dollar in mid-July the demand for francs eased to the point where official support tapered off. Nevertheless, the spot rate continued to bump up against the ceiling until news of the Federal Reserve's intervention in defense of the dollar on July 19 helped reduce pressure on the franc. Even then the franc continued firm by comparison with other Continental currencies, as the French authorities maintained a relatively tight rein on domestic liquidity by raising the banks' minimum reserve requirements against both resident and nonresident liabilities by 2 percentage points, effective July 21. The franc remained close to the ceiling in early August, but a somewhat softer tone developed toward mid-month following market and press reports that the Federal Reserve had been selling Belgian francs. Moreover, the dollar was also helped by subsequent news of improved second-quarter United States balance-of-payments figures and reports of further United States efforts to find a settlement of the war in Vietnam. The financial franc had been dropping more sharply, falling to a premium of less than 2½ percent over the official franc's ceiling, as new issues of franc-denominated Euro-bond issues slackened during the vacation period and as conversions of franc bank notes sold abroad by French tourists swelled. Later in August, both the commercial and financial franc rates firmed but trading remained orderly.

ITALIAN LIRA

Following the Smithsonian meeting, the Italian authorities established a central rate of $0.0017193¾ for the lira, representing a 7.48 percent appreciation against the dollar that was slightly less than the dollar's devaluation against gold. At the same time, they revoked the exchange control regulations introduced as of December 6, whereby the Italian banks had been instructed to refuse conversion of foreign currencies into lire unless the proceeds were required for normal trade or service transactions or for nonspeculative capital transactions backed by the appropriate documentation.

After the Italian exchange market was reopened on December 21, the spot rate soon settled near its new floor. A prolonged period of political uncertainty and the resultant delay in dealing with important social and economic problems generated some capital outflows. At the same time there were continuing prepayments of foreign loans. Consequently, even though the already large surplus in Italy's balance of payments on current account was expanding as the pace of domestic economic activity slowed, the spot rate held close to its lower limit through the second week in January. Then, with successive waves of speculation pushing many of the other EC currencies to their ceilings, the lira was pulled upward, eventually reaching some 1 percent below its central rate where it traded through early March.

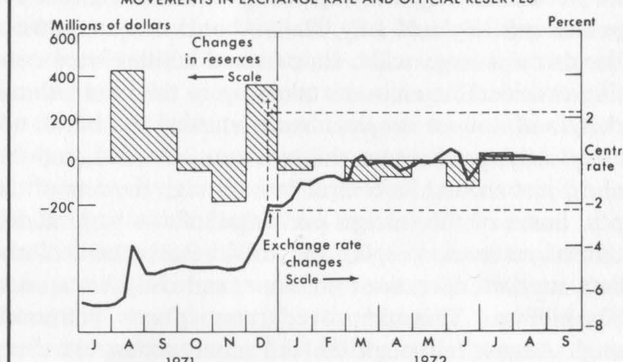
On March 7 the EC Finance Ministers announced their agreement in principle to narrow the margin of fluctuation between the Common Market countries' currencies to 2¼ percent. With other EC currencies at or close to their ceilings, the market responded to this announcement by pushing the lira up into the proposed band. For some days the spot rate was, therefore, above the central rate. But the European markets soon turned quieter and, when the other EC currencies edged away from their upper limits, the lira —near the bottom of the 2¼ percent band—dropped back to the central rate or just below, where it held through the end of the month.

A still softer tone developed in early April, especially when the Bank of Italy acted to help stimulate an upturn in economic activity by relaxing domestic credit conditions. Taking advantage of the tendency toward lower interest rates abroad, the bank cut its rates on discounts and secured advances by ½ percentage point to 4 percent and 3½ percent, respectively, effective April 10. (The additional 1½ percentage point penalty for banks making excessive use of central bank credit was, however, maintained.) Simultaneously, interest payments on balances held by commercial banks with the Bank of Italy were discontinued for deposits of more than eight days, and were reduced from 1½ percent to 1 percent per annum for deposits of eight days or less. The banks were thus induced to place excess funds in the market rather than with the central bank, and shortly thereafter they cut both their lending and deposit rates.

The spot lira rate declined until just before the EC currency arrangements limiting the maximum permissible spread between any two EC currencies were put into effect on April 24. At that point the spot rate firmed somewhat, fluctuating about 2 percent below the strongest EC currency through the month end. In early May, when the Belgian and French francs moved smartly higher, the lira held at the lower end of the band. But no official intervention was required to keep the lira within the band, as market arbitrage proved sufficient to do so in the absence of strong pressures. As other EC currencies rose during May, the lira rate was pulled higher and it hovered around the central rate until late May. Then, when formal consultations to form a new government in Italy were undertaken, the lira moved up to about 0.4 percent above the central rate.

The accelerating attack on sterling that developed in mid-June brought with it heavy selling of lire and an abrupt shift in leads and lags against Italy. By June 22 the spot rate had been pushed to more than 1 percent below the central rate. When the Italian exchange market remained closed on Friday, June 23, in the wake of the floating of the pound, reports circulated widely both in the market and in the Italian press that the lira would be devalued or that the Italian authorities were strongly considering withdrawing from the EC arrangements. In this

Chart VII
ITALY
MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



*See footnote on Chart I.
† Upper and lower intervention limits established in December 1971.

atmosphere, the formation of a new Italian coalition government failed to allay the market's intense nervousness.

On June 26 the EC Finance Ministers, meeting in Luxembourg in the aftermath of sterling's float, confirmed their intention to maintain the EC arrangements and, to facilitate Italy's continued adherence to the scheme, permitted Italy to intervene for a three-month period in dollars rather than in EC currencies to keep the lira within the EC band. (The EC arrangements normally permit intervention in dollars only when a currency is at its Smithsonian limits.) In addition, the Italian authorities took several other measures in an attempt to tighten control over foreign currency movements. They prohibited the crediting of lira notes to foreign accounts, thereby shutting down the export of capital through bank note conversion. They authorized the banks to assume net foreign liability positions rather than, as before, requiring balanced positions. And, finally, they reopened the door to nonbank borrowings abroad.

Fortified with these measures, the Italian authorities reopened the exchange market on June 28. The lira opened that day well outside the 2¼ percent EC band, and sizable intervention was required to bring the lira back into the band at around its central rate. Despite this support, pressure on the lira continued as leads and lags remained adverse and Italian residents continued to repay their foreign borrowings. Consequently, the Italian authorities had to intervene in support of the lira well into July. To help offset the cost to official reserves of this foreign exchange market intervention, the Italian Exchange Office required any bank that developed a net foreign asset position to use the surplus foreign exchange to repay outstanding dollar swaps with it, while public enterprises were encouraged to tap the Euro-dollar market for large amounts. By mid-July, Italian banks were repatriating funds on a large scale, state-owned entities were converting considerable amounts taken up in the international market, and tourist receipts were starting to build up. Consequently, pressure on the spot rate subsided, and the lira held just around its central rate through the rest of the month. Some of the foreign exchange inflows were added to official reserves, keeping the total reserve cost of the Italian support operations in June and July to around $100 million. This improved atmosphere continued through August, although the lira eased somewhat along with other European currencies as the dollar strengthened.

JAPANESE YEN

For several years prior to 1971, Japan had recorded progressively larger balance-of-payments surpluses, marked both by a burgeoning trade surplus and by increasingly heavy private capital inflows. As foreign exchange reserves mounted, the government had moved to impede or offset the inflows of funds by tightening exchange controls, by promoting a shift in the financing of Japanese imports from foreign to domestic sources, by liberalizing some of the controls on imports and on capital outflows, and by depositing some officially held dollars with commercial banks. While these measures had helped to relieve some of the immediate pressure, the markets became increasingly convinced that the yen was seriously undervalued. Therefore, when the United States Government suspended convertibility of the dollar in August 1971, there was a massive rush into yen which ultimately forced the Japanese government to float its currency later that month. Over the following months, the yen rose sharply in the exchange market. But the authorities, concerned that a rapid run-up in the yen rate might impede the hoped-for recovery in the domestic economy, intervened heavily to moderate the advance.

Under the terms of the Smithsonian agreement, the central rate for the yen was established at $0.003246¾, an effective appreciation of 16.88 percent against the dollar. The Japanese authorities, in line with actions taken by other countries, immediately abolished some of the severe measures imposed earlier to block the inflow of funds. Then, on January 5, with the yen settling near its floor and some reflows developing, the government announced a further relaxation of exchange controls, eliminating among other things the requirement of prior official approval for any prepayment of Japanese exports. Not all of the control apparatus was dismantled, however, and certain measures limiting the foreign positions of Japanese banks were retained. Over the next two days a bunching-up of export prepayments gave rise to a burst of demand for yen, and the Bank of Japan absorbed a sizable amount of dollars, but the market then turned quieter.

By late January, the exchange markets had become increasingly jittery. Most major foreign currencies began to rise sharply against the dollar, reflecting uncertainty over the viability of the Smithsonian agreement and concern over declining interest rates in the United States. The yen, in particular, was in strong demand as the December 18 appreciation was seen by some as insufficient, given the size of the adjustment needed to bring the Japanese payments accounts into balance. Even with the Bank of Japan intervening to slow the advance, the yen almost reached its upper limit by February 24.

In view of this renewed show of strength for the yen, the authorities resumed their efforts to encourage the financing of Japanese trade out of Japanese reserves rather than with foreign credits and the yen eased. The Ministry of Finance began to make deposits, totaling $200 million in February and $100 million in March, with the Japanese exchange banks to induce those banks to reduce their borrowings from United States banks. Deposits with the banks to facilitate the provision of export cover had been initiated in June 1971, and these new deposits raised the total amount transferred out of official reserves to $1.5 billion. Then, late in March, the Bank of Japan announced that, as an additional step to curb official reserve growth, it would increase its share of the financing of the country's imports from 30 percent to 50 percent over the four-month period beginning in April; credits already extended by the central bank under this program totaled some $1.3 billion at that time. Despite these programs, however, Japan's official reserves rose by $1.2 billion during the first quarter, exclusive of the 1972 allocation of SDRs.

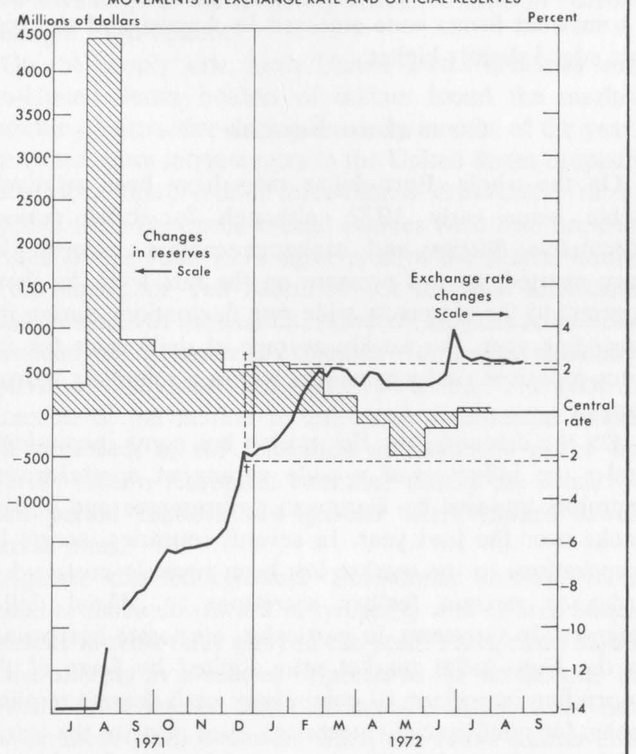
Early in April, the authorities decided to stimulate some demand for dollars by requiring repayment at maturity of a series of special dollar deposits made the previous fall in connection with provision of forward cover for small- and medium-sized Japanese enterprises. Since the banks did not have the dollars available, they were forced to come into the market as buyers of dollars to repay the maturing deposits. Shortly thereafter, Japanese seamen began a prolonged strike, and subsequent work disruptions at the docks and in other industrial sectors curtailed Japanese exports for some time. As a consequence of these developments, the yen declined over much of April and remained easy in early May. By mid-May, the yen dropped to as low as $0.003282, and the Bank of Japan sold dollars

to steady the market. On May 23 the Bank of Japan announced that, as of June 1, the 1.5 percent minimum reserve requirement against the foreign exchange banks' free-yen liabilities to foreigners would be replaced by a 25 percent marginal requirement on increases in such liabilities. Also that day, the Japanese cabinet gave approval to a multifaceted plan to stimulate domestic business activity and, at the same time, bring Japan's external accounts into better balance. The exchange market did not believe these measures would bring any early change in the basic situation, however, and the spot rate held steady through early June.

With the attack on sterling, the entire Smithsonian alignment appeared threatened and the yen was bid sharply upward. Following the floating of the pound, the Bank of Japan closed its exchange market while also announcing a reduction in its discount rate by ½ percentage point, to 4¼ percent. Then, in an attempt to isolate the Tokyo market from a new round of short-term inflows, the bank doubled the reserve requirement for free-yen accounts to 50 percent and strengthened the regulations against advance payments of Japanese exports. When the Japanese market reopened on June 29, the Bank of Japan had to absorb substantial amounts of dollars through the end of June to hold the spot rate at the ceiling. These inflows and the continuing basic payments surplus were more than fully offset by the various measures taken to push dollars out of reserves. By the end of June the special deposits with the banks, which had been increased in several stages, amounted to $1.9 billion, and the Bank of Japan's share in import financing amounted to some $2.3 billion. During the entire second quarter, the Japanese authorities succeeded in pushing some $1.4 billion out of reserves through special operations, bringing about a reduction in reserves of $820 million for the quarter.

In early July, the exchange markets remained in the grip of uncertainties over the future of the Smithsonian agreement and, with the yen at its ceiling, the Bank of Japan was obliged to intervene heavily. Although most European currencies eventually edged away from their dollar ceilings, particularly after the July 17-18 London meeting of the EC Finance Ministers and the July 19 exchange market initiative by the Federal Reserve, the Japanese yen remained at its upper limit in Tokyo. Demand remained heavy as a result of the continuing large export surplus and renewed inflows to the Japanese stock market. The Bank of Japan, therefore, had to take in dollars almost daily, and sometimes in fairly substantial amounts, during July and August.

Chart VIII
JAPAN
MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



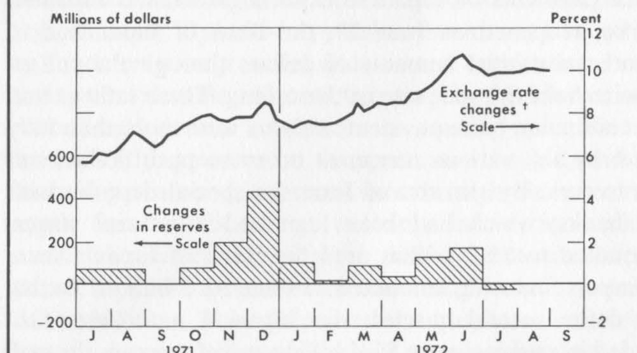
* See footnote on Chart I.
† Upper and lower intervention limits established in December 1971.

CANADIAN DOLLAR

As other major currencies rose strongly against the United States dollar late last year, there was also occasional upward pressure on the Canadian dollar. Heavy buying of Canadian dollars did not develop, however, until the conclusion in early December of the Group of Ten meeting in Rome. Thereafter, the Canadian dollar was pushed as high as $1.00½, and it remained strong until the Smithsonian meeting of the Group of Ten on December 17-18.

The communiqué at the conclusion of the Washington meeting noted that "Canada intends temporarily to maintain a floating exchange rate without intervention except as required to maintain orderly conditions". The Canadian dollar immediately rose to nearly $1.00¾, but expectations of a further appreciation dissipated rapidly, and the spot rate dropped back to below the $1.00 level in late December. After easing further early in January, the Canadian dollar settled at around $0.99½ by the middle of that month.

Chart IX
CANADA
MOVEMENTS IN EXCHANGE RATE AND OFFICIAL RESERVES*



* See footnote on Chart I.
† Measured as percentage deviations from the $0.92 ½ official parity established in May 1962. The Canadian dollar has been floating since June 1, 1970.

With the domestic economy expanding rapidly, the Canadian current account had slipped into deficit in late 1971 and the deficit increased in early 1972. Nevertheless, a step-up in loan demand in Canada put pressure on bank liquidity and in February interest rates began to rise, attracting funds from abroad. This influx of short-term capital, combined with continuing longer term Canadian borrowings, tended to offset the current-account deficit, and the Canadian dollar held relatively steady in the exchanges through late February. At that point, substantial new Canadian wheat sales to the Soviet Union were announced, leading to a bullish reaction in the market. The spot rate for the Canadian dollar began to advance and, with rising interest rates in Canada still drawing funds from abroad, the rate soon rose above $1.00 once again. As it has done throughout the floating period, the Bank of Canada intervened intermittently on both sides of the market to moderate fluctuations in the rate and, with the Canadian dollar rising on balance, Canadian official reserves rose by $189 million over the first three months of the year.

During the second quarter the Canadian dollar came into strong, persistent demand. On occasion, this demand reflected the general uncertainties which were having such profound effect on other currency markets. Nevertheless, the growing strength of the Canadian dollar throughout the spring was more clearly traceable to developments in Canada's own payments position. Canada's current account improved sharply during the second quarter, with a swing of some $400 million away from the exceptional deficit of the first quarter. Moreover, the Canadian provincial governments and public utilities borrowed heavily abroad through bond issues, particularly in May. In addition, domestic credit conditions in Canada continued to tighten, and the chartered banks moved aggressively to attract funds. The consequent heavy demand for Canadian dollars drove the spot rate up by more than 2 cents from late April through early June, to about $1.02¼. At that point, the squeeze for balances in Canada became acute, and the chartered banks, facing heavy loan demand but under pressure not to raise their prime rates above 6 percent, had begun to offer certificates of deposit (CDs) at yields of as much as 6½ percent. This naturally drew in still more funds, pushing the Canadian dollar to almost $1.02¾. The Canadian authorities then moved to forestall a further rise in the exchange rate by prevailing upon the chartered banks to cut back their CD rates, effective June 12. Subsequently, other Canadian money market yields also dropped back, as loan demand eased up somewhat. The Canadian dollar began to ease in the exchanges, reaching $1.01½ by the end of June. Over the second quarter as a whole, official intervention in a market which was rising on balance resulted in a substantial net reserve gain of $328 million.

Trading turned much quieter in July, and the Canadian dollar held fairly steady between $1.01½ and $1.01¾ throughout the month. With the onset of seasonal strength, a somewhat firmer tone emerged in August and the spot rate edged slightly higher.

EURO-DOLLAR

On the whole, Euro-dollar rates have been relatively stable since early 1972, although for brief periods speculative flurries and exchange market uncertainties have exerted upward pressure on the rate level. In sharp contrast to the extremely wide rate fluctuations during the preceding year, the weekly average of daily rates for the three-month maturity remained within a relatively narrow range.

On the demand side, the market has come increasingly under the influence of a wide variety of administrative restraints imposed by European governments and central banks over the past year. In several countries, access by corporations to the market has been severely curtailed in order to restrain further accretions to official dollar reserves. In Germany, in particular, corporate borrowings in the Euro-dollar market were limited by fears of the impending imposition of compulsory cash deposit requirements for nonfinancial enterprises, even prior to the actual implementation of the Bardepot on March 1. In addition, in many countries various barriers have been erected that prevent banks from converting Euro-dollar borrowings into local currencies, and these and other impediments to Euro-dollar borrowings were reinforced during periods of pressure on the dollar early this year and again following the currency crisis in June. As a result of these constraints and the decline in interest rates in European domestic loan markets, the demand for Euro-dollars in major European countries tended to be weak during most of the spring and summer. However, the contraction of demand from traditional sources was largely offset by a sharp rise of borrowings, mostly for distant maturities, by public and semipublic institutions in developing countries. Much of this expansion of loans to non-European borrowers reflected the aggressive efforts of major European banks that were flush with funds to find new takers for Euro-dollar loans. Eastern European countries also took advantage of the ample supply of Euro-dollar loans. These various borrowings tended to cushion rate pressures arising from the disappearance from the market of some major Euro-dollar borrowers. Nevertheless, for protracted periods, notably during the April-June period, overnight Euro-dollar rates remained substantially below the Federal funds rate, providing some of the New York agencies and branches of foreign banks with opportunities for arbitraging between the two markets. Some United States banks also took advantage of the relatively attractive rates to borrow overnight Euro-dollars.

On the supply side, both United States residents and non-United States holders of dollars found the market increasingly attractive during the early months of the year, when short-term interest rates in the United States dropped much more sharply than three-month Euro-dollar rates. Supplies from European official sources were held back as a result of the June 1971 agreement of the central banks of the Group of Ten countries not to place additional dollar balances in the market; however, supplies from non-European official sources expanded further, as monetary reserves of many countries continued to rise. The relative attraction of the market to European commercial banks also increased, as the relaxation of monetary policy by several Western European countries during the January-April period reinforced a general trend toward lower interest rates.

Against this background, Euro-dollar interest rates tended to move downward in sympathy with United States domestic interest rates early in the year. Then, rates began to rise sharply in a belated response to the turnaround in United States interest rates in late February. This rise proved short-lived, however; when the usual quarter-end pressures failed to materialize and domestic European money market rates declined further, rates on all Euro-dollar maturities began to drift lower once again.

In April, with United States interest rates moving up and with Euro-dollar rates remaining under pressure, the differential between the three-month Euro-dollar rate and that for United States CDs narrowed appreciably. The spread between the two rates had been in excess of 2 percent in the middle of January; it fell to less than 1 percent in April. During the remainder of the spring, conditions in the Euro-dollar market were generally more comfortable. Thus, by early June the Euro-dollar/CD spread had narrowed further to only 40 basis points.

The run on sterling, which developed in mid-June, at first had little direct impact on the Euro-dollar market. As sterling weakened, the central banks of the European Community intervened in the market by selling their own currencies. Several European currencies dropped to levels which the market considered unsustainably low in dollar terms. As a result, these currencies were

Chart X
INTEREST RATES IN THE UNITED STATES AND THE EURO-DOLLAR MARKET

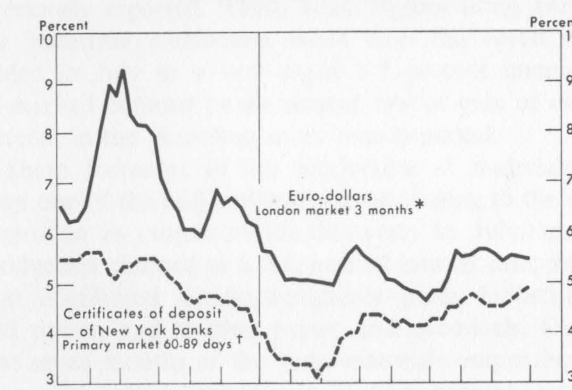
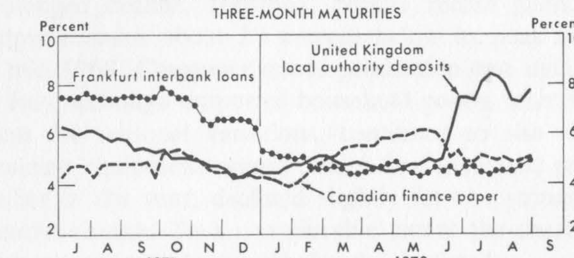


Chart XI
SELECTED INTEREST RATES IN THE UNITED KINGDOM, WEST GERMANY, AND CANADA
THREE-MONTH MATURITIES



* Weekly averages of daily rates.
† Wednesday data.

bought heavily with dollars. The financing of these purchases brought about a new demand for Euro-dollars which, coupled with some midyear demand, pushed rates up once again. On June 23, the day the British authorities yielded to the intense market pressure and allowed the pound to float, the three-month rate rose as high as 6 percent and seven-day Euro-dollars reached a peak of 7 percent. Then, with the passing of the immediate effects of the speculative buying of continental European currencies and of the midyear pressures, the rates on most Euro-dollar maturies eased somewhat. However, the Euro-dollar market remained susceptible to the anxieties of the foreign exchange market, and during the period of heavy pressure on the dollar in the exchanges in early July there were periodic scrambles for funds to cover short positions.

When the exchange markets turned calmer after mid-July following the resumption of Federal Reserve operations in defense of the dollar, Euro-dollar rates began to edge downward. After a brief squeeze at the month end, the market stabilized in early August, with the three-month rate fluctuating narrowly around 5½ percent per annum. The tone of the market was nevertheless fairly firm, as United States short-term rates tended to rise and some new demands came into the market. In particular, Italian public corporations resumed their borrowings of Euro-dollars in response to official encouragement, and the squeeze for sterling balances in London also tended to draw funds out of Euro-dollars.

The Business Situation

On balance, it appears that economic activity is continuing to expand briskly, although not so fast as the exceptionally rapid pace of the second quarter.[1] Retail sales posted a substantial and broadly based gain in July. At the same time, personal income surged, but this reflected the artificial depression of the June level by losses connected with the severe flooding in the East that accompanied tropical storm Agnes in late June. The storm also apparently caused a decline in inventories at wholesale and retail outlets in June. In the manufacturing sector, however, inventories advanced sharply in both June and July. Industrial production registered only small gains in both of these months, as output was undoubtedly held back to some extent by the storm. While employment rose strongly in August, the unemployment rate was virtually unchanged from the level of June and July, remaining significantly below the level that had prevailed since late 1970.

Recent data confirm that the pace of wage increases has slowed appreciably. For example, over the seven months ended in August, average hourly earnings of production and nonsupervisory workers in the private nonfarm economy advanced at a rate significantly slower than that posted over the past several years. The rise in consumer prices has also moderated thus far this year, although there was a spurt in food prices in July. The advance in prices of services and nonfood commodities, however, continued at a moderate pace by comparison with the experience of recent years.

[1] The second-quarter estimate of growth in real gross national product (GNP) has been revised upward from 8.9 percent (seasonally adjusted annual rate) to 9.4 percent—the largest quarterly percentage gain in real GNP since the fourth quarter of 1965 and, except for that quarter, the highest in thirteen years. Measured in current dollars, revisions in preliminary GNP and its components were small. The increase in the implicit GNP price deflator was revised downward to an estimated 1.8 percent annual rate from the 2.1 percent originally reported. Profits before taxes in the second quarter advanced $4.9 billion. This was about the same as the gain of the previous quarter despite the effects of flooding in June, which the Department of Commerce estimates reduced second-quarter profits by approximately $1.8 billion.

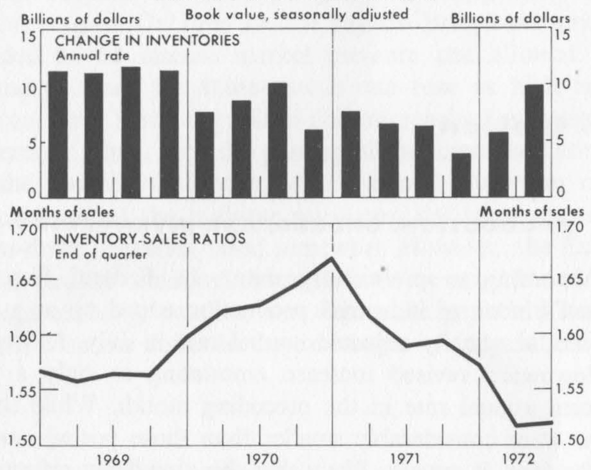
PRODUCTION, ORDERS, AND INVENTORIES

According to preliminary data, the Federal Reserve Board's index of industrial production edged up at a 3.2 percent seasonally adjusted annual rate in July, following a downward revised increase amounting to only a 1.1 percent annual rate in the preceding month. While these gains were considerably smaller than those posted earlier in the year, it appears likely that this slowdown reflects in part the effects of severe flooding in late June rather than any pronounced weakening in the economic advance. Along with the release of the July estimate, revised readings of industrial production for the months March through May were presented. During this period, increases in output are now estimated to have averaged 11.6 percent per annum, about 3 percentage points more than was previously reported. These latest figures bring growth in the industrial production index over the seven months ended in July to a very rapid 8.7 percent annual rate, in marked contrast to the annual rate of gain of only 1.1 percent in the preceding seven-month period.

Sharp increases in the production of materials have been one of the major elements contributing to the overall expansion in output so far this year. In July, materials production climbed at a 5.2 percent annual rate, with the gain distributed among equipment parts, industrial fuel and power, and textiles, paper, and chemicals. Over the first seven months of the year, materials output has risen at a very robust annual rate of 12.3 percent. Similarly, output of defense and space equipment has increased substantially thus far in 1972, following a period of prolonged decline. However, despite recent gains, such output remains about 27 percent below its peak reached in mid-1968. Consumer goods production was unchanged in July, although output of household goods, after adjustment for seasonal variations, continued to rise rapidly. Business equipment output, which had increased strongly earlier in the year, declined slightly for the second consecutive month. To a considerable extent the decrease in such output in July was probably flood related.

New orders placed with manufacturers of durable goods dropped $1 billion, or 2.8 percent, in July following the

Chart I
INVENTORY ACCUMULATION AND INVENTORY-SALES RATIOS FOR TOTAL BUSINESS



Note: Changes are from end of quarter to end of quarter.
Source: United States Department of Commerce, Bureau of the Census.

surge in June. The decline in July, like the previous month's rise, was centered in bookings of defense capital goods. Excluding such goods, new durables orders posted a moderate gain in July. Orders for nondefense capital goods were virtually unchanged, however, after substantial gains earlier in the year. Orders for capital goods have a considerable lead time over spending, and hence it appears that investment spending should continue to expand strongly in the months ahead despite the failure of new orders for these goods to rise further in July. Such an outcome would be consistent with the results of the latest Commerce Department survey of plant and equipment spending intentions, which was conducted during July and August. While expenditures on plant and equipment in the second quarter fell short of projected levels, firms were planning sizable increases in their expenditures during the second half of 1972. For the year as a whole, the survey indicates a substantial gain of 9.7 percent, down slightly from the 10.3 percent rise projected in the April-May survey. By comparison, plant and equipment outlays edged up by less than 2 percent in 1971.

After a long period of very sluggish growth, total business inventories, on a book value basis, advanced at a $9.9 billion seasonally adjusted annual rate in the April-June period, the largest quarterly gain in almost two years (see Chart I). Much of this second-quarter strength in inventory spending was concentrated in May. In June, aggregate inventory accumulation came to only $6.4 billion at an annual rate, less than one half the expansion of the preceding month. While manufacturers' inventories registered a sizable gain in June (and, according to preliminary data, in July as well), retail stocks edged down and wholesalers cut their holdings in June by more than $1.4 billion on an annual rate basis. Inventory spending may have been held back significantly in that month by the tropical storm which affected much of the East Coast. The storm probably hampered production of goods that otherwise might have gone into inventories. Moreover, businessmen seem to have promptly written off large quantities of damaged goods from their books, thus directly erasing some inventories from the total. Business sales were also relatively weak in June, falling at an annual rate of $7.7 billion. Over the April-June period as a whole, combined sales in manufacturing and trade advanced at a $5.9 billion annual rate, somewhat slower than the expansion of inventories. As a consequence, the inventory-sales ratio for all businesses reached 1.52 in June, up marginally from the level attained at the end of the first quarter but still below the 1.59 ratio prevailing a year earlier. The persistently low level of the inventory-sales ratio suggests that inventory spending may strengthen further in the months ahead as sales continue to expand.

PERSONAL INCOME, RETAIL SALES, AND RESIDENTIAL CONSTRUCTION

Personal income rose by a substantial $11.3 billion in July, after dropping by $1.1 billion in the preceding month. Both the July spurt and the June decline largely reflected the effects of Hurricane Agnes. Huge capital losses—representing damage to residential structures and proprietors' plant and equipment and inventories—were written off in June, so that rental and proprietors' income in that month fell by $6.5 billion. Since this was largely a once-and-for-all effect, such income rebounded by $7.0 billion in July. Excluding rental and proprietors' income, personal income increased by $4.3 billion in July, about $1 billion below the average monthly gain registered in the second quarter. Wage and salary disbursements—the principal component of personal income—rose by only $2.4 billion, down from an average monthly advance of $4 billion in the April-June period. The small July increase in wage and salary disbursements resulted largely from a decline in payroll employment which, in turn, stemmed partly from several strikes in the construction industry in addition to the effects of tropical storm Agnes.

According to an advance estimate, retail sales climbed by a brisk 1.9 percent in July. The rise was broadly based, as sales of durables and nondurables shared in the gain.

Automobile sales accounted for most of the strength in durables. Sales of new domestic-type automobiles accelerated to a seasonally adjusted annual rate of almost 10 million units in July, the fastest pace since last October when demand was stimulated by the price freeze. Sales of imported cars were at a 1.6 million unit annual rate, about the same rate that has prevailed on average over the past eighteen months.

During the first seven months of this year, total retail sales advanced at an annual rate of 12 percent, 2 percentage points above the gain registered in 1971 and 7 percentage points above the rate of increase posted in 1970. Moreover, thus far in 1972 consumer prices have risen at a slower pace than that experienced in the past several years. Hence, a smaller fraction of the recent gains in consumer spending has been accounted for by price increases. Prospects for further strong gains in consumer spending in the months ahead appear to be good, particularly in light of the increase in social security benefit payments beginning in October.

Recent data confirm that the rate of residential construction, which was exceptionally strong earlier in the year, has begun to taper off to some extent. Private housing starts have declined irregularly since reaching a peak of 2.7 million units at a seasonally adjusted annual rate in February (see Chart II). During July the number of housing starts dropped by 100,000 units from the June reading to an annual rate of 2.2 million units, about 19 percent below the February level. Moreover, the inventory of unsold single-family homes in the hands of the nation's builders has risen sharply in the last several months, suggesting that a further decline in residential construction activity may be in the offing. On the other hand, it should be noted that, despite the decline in starts in recent months, they still remain high by historical standards. For example, July marked the fifteenth consecutive month that starts have exceeded 2 million units at an annual rate. By comparison, over the decade of the 1960's, housing starts averaged 1.4 million units per year and, in early 1970 following a period of monetary restraint, the annual rate of starts stood as low as 1.1 million units.

Chart II
PRIVATE HOUSING STARTS AND MOBILE HOME SHIPMENTS

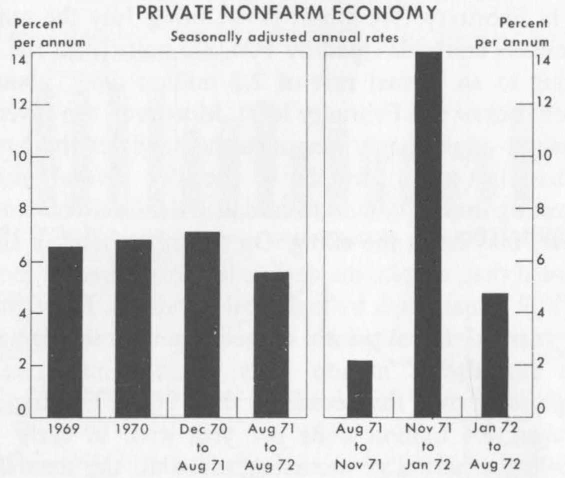
Sources: United States Department of Commerce, Bureau of the Census; Mobile Home Manufacturers Association.

While housing starts have moderated in recent months, shipments of mobile homes have continued near their record pace set earlier in the year. In June, the latest month for which data are available, shipments on an annual rate basis advanced 32,000 units to 604,000 units. In longer run perspective, mobile home sales have risen sharply from 104,000 units in 1960 to an annual rate of 585,000 units during the first half of this year, as such homes have become increasingly popular both for recreation and as permanent residences. Combining mobile home sales and the pace of housing starts, total housing units were apparently being added at close to a 3 million unit annual rate in the first half of the year, compared with an average yearly rate of 1.6 million units during the 1960's.

EMPLOYMENT, WAGES, AND PRICES

Nonagricultural payroll employment rose sharply in August after remaining essentially flat in the two preceding months. According to the Bureau of Labor Statistics survey of employers, about 280,000 workers were added to nonfarm payrolls on a seasonally adjusted basis, a substantial 4.6 percent annual rate of increase. The gain was broadly based although manufacturing employment, which had been depressed in July by the effects of tropical storm Agnes, merely recovered to its June 1 level after posting substantial gains over the first half of the year. Taking a somewhat longer view, nonfarm payroll employment has risen by a rapid 3.3 percent since August 1971. In contrast, during the preceding nine-month period beginning November 1970—the month tentatively identified by the National Bureau of Economic Research as marking the trough of the 1969-70 recession—employment advanced at an

Chart III
CHANGES IN AVERAGE HOURLY EARNINGS
PRIVATE NONFARM ECONOMY
Seasonally adjusted annual rates



Note: Changes are adjusted for overtime (manufacturing only) and for interindustry employment shifts.
Source: United States Department of Labor, Bureau of Labor Statistics.

annual rate of only 1 percent.

The most recent survey of households indicates that civilian employment also rose sharply in August, advancing by 290,000 workers on a seasonally adjusted basis—the largest monthly increase in five months. At the same time, the civilian labor force also rose very rapidly by 390,000 workers. Consequently, the unemployment rate edged up to 5.6 percent from the 5.5 percent level of June and July. Prior to these three months the rate of unemployment had hovered near 5.9 percent since late 1970. While the overall unemployment rate has remained virtually steady since June, there have been significant changes in its composition. The decline in the rate of unemployment in June was almost entirely accounted for by a drop in joblessness among teen-agers and men and women between twenty and twenty-four years of age. This, in turn, stemmed partly from a much smaller than seasonal influx of young people into the labor force. Since June, jobless rates for young people have risen, particularly the rate for teen-agers which now stands above its May reading. Meanwhile, the unemployment rate for persons twenty-five years of age and older fell significantly in July and moved slightly lower in August as well, extending further the gradual downturn evident since the end of last year. Notably, the rate of unemployment for married men declined from 2.9 percent in June to 2.6 percent in August, its lowest level since mid-1970.

The pace of wage increases has slowed appreciably in recent months. In August, seasonally adjusted average hourly earnings of production and nonsupervisory workers in the private nonfarm economy, adjusted for overtime hours in manufacturing and for shifts in the composition of employment among industries, rose at a modest 4.4 percent annual rate. Since August 1971—the inception of wage and price controls—earnings have advanced by 5.6 percent, substantially below the increases registered in the past several years when earnings rose annually at rates close to 7 percent (see Chart III). Increases in earnings have varied considerably over the past year. During the wage-price freeze from August to November 1971, earnings rose very modestly but then spurted at an annual rate of 14 percent in the two succeeding months, largely as a result of a clustering of wage increases that would otherwise have occurred during the months covered by the freeze. Over the seven months following January, the increase in earnings has slowed to an annual rate of 4.8 percent.

The consumer price index climbed at a 5.1 percent seasonally adjusted annual rate in July, the sharpest increase in five months. Almost two thirds of the July rise resulted from higher prices of food, which surged ahead at an annual rate of more than 7 percent. Meat prices showed the steepest advances, but there were also increases in prices of eggs and fresh fruits and vegetables. The large July rise in consumer food prices had been presaged by recent price developments at the wholesale level. Prices of farm products and processed foods and feeds, for example, advanced at about a 6 percent annual rate in June and then jumped by over 24 percent per annum in July. Since changes in wholesale prices are often reflected in prices of consumer goods with a lag, it seems likely that consumer food prices will continue under upward pressure in the near term. In July, prices of nonfood commodities at the consumer level advanced at a 3.1 percent annual rate while prices of services (not seasonally adjusted) rose at an annual rate of 3.7 percent. Both increases were slightly above those registered over the first half of the year.

In the eleven months since wage and price controls were first introduced in August 1971, consumer prices as a whole have risen at an annual rate of 2.9 percent, compared with increases of 6.1 percent in 1969, 5.5 percent in 1970, and 3.8 percent over the January-August 1971 period.

The Money and Bond Markets in August

Short-term interest rates moved higher in August. The rate on Federal funds rose in response to a somewhat less generous supply of nonborrowed reserves in relation to the demand of member banks for reserves. Other short-term rates responded in similar fashion and, by the end of August, rates on most short-term instruments were ⅛ to ¾ percentage point higher than a month earlier. To some extent, the reversal in the direction of short-term rates was an indirect consequence of the strengthening of the dollar on the foreign exchange markets, which sharply diminished foreign official demand for Treasury bills. In addition, expectations of increased private demands for credit as the economic recovery continues to gather momentum helped to raise interest rates. Finally, market participants looked forward with some apprehension to the large cash needs of the Federal Government in prospect for the next several months. Underscoring the potential impact that these demands may have on the markets, Treasury bill rates rose sharply upon the disclosure by the Treasury of plans to raise $1.8 billion by late October in conjunction with a restructuring of the monthly bill auctions.

The bond market resisted until late in the month the upward pressures on yields emanating from the money market. Indeed, long-term rates continued to drift downward until after midmonth. Underwriters of corporate and municipal bonds took advantage of the seasonally light calendar of flotations to price new issues aggressively. Many issues failed to sell out quickly, however, and investor resistance to the aggressive pricing in both sectors became more intense as the month progressed. By the end of August, long-term bond yields had joined short-term rates in moving upward. They remained, however, far below the levels that had prevailed before the initiation of the Economic Stabilization Program on August 15, 1971. The decline in interest rates that has occurred since then has reflected both a reduction in the inflation premium demanded by investors and a moderation of demands placed on the bond market by borrowers.

BANK RESERVES AND THE MONEY MARKET

Conditions in the money market grew somewhat firmer during August. The average effective Federal funds rate rose to 4.80 percent, 25 basis points above the July average and the highest monthly average rate since November 1971. The upward pressure on the Federal funds rate was symptomatic of the less generous supply of nonborrowed reserves available to member banks in relation to their demand for reserves in the wake of the surge in deposits during July. Money market conditions typically firmed toward the end of statement weeks during August, as banks which found themselves short of reserves needed to meet their requirements bid up the Federal funds rate. As the rate rose well above the 4½ percent Federal Reserve discount rate, banks turned to the discount window to satisfy more of their reserve needs. Over the five weeks ended August 30, such borrowings averaged $372 million, up $151 million from the four weeks ended in July. Net borrowed reserves averaged $153 million in the five weeks of August (see Table I), compared with $27 million in the four preceding weeks.

With the less generous provision of nonborrowed reserves being partly offset by increased borrowings at the discount window, daily average reserves available to support private nonbank deposits (RPD), seasonally adjusted, increased at an annual rate of about 9 percent in August, slightly greater than the 8.6 percent rate of growth in July. The fact that the sharp deceleration in the growth rates of the monetary aggregates in August, which is discussed below, was not reflected in RPD is partly a consequence of the way in which reserve requirements are assessed. In general, member banks are required to hold in each statement week reserves equal to a percentage of their average deposit liabilities of two weeks previously. Hence, the July surge in deposits resulted in higher levels of required reserves in August as well as in July. The relatively rapid growth of RPD recorded for August also stemmed in part from the convention of computing growth rates on the basis of monthly averages of daily figures. Inasmuch as the spurt in deposits in the first two weeks of July was not reflected in required reserves until the last two weeks of the month, the average level of reserves for the month as a whole was low in relation to the month-end level. This tended to exaggerate the growth of reserves in August on a daily average basis.

Table I

FACTORS TENDING TO INCREASE OR DECREASE MEMBER BANK RESERVES, AUGUST 1972

In millions of dollars; (+) denotes increase (—) decrease in excess reserves

Factors	Changes in daily averages—week ended: Aug. 2	Aug. 9	Aug. 16	Aug. 23	Aug. 30	Net changes
"Market" factors						
Member bank required reserves	+ 64	— 106	— 90	+ 309	+ 22	+ 199
Operating transactions (subtotal)	— 236	— 106	+ 387	+ 311	+ 217	+ 573
Federal Reserve float	— 495	+ 106	+ 12	+ 425	— 510	— 462
Treasury operations*	+ 75	— 41	+ 435	+ 366	+ 172	+1,007
Gold and foreign account	+ 121	— 9	— 8	— 10	— 6	+ 88
Currency outside banks	+ 164	— 138	— 217	— 444	+ 625	— 10
Other Federal Reserve liabilities and capital	— 101	— 24	+ 166	— 24	— 65	— 48
Total "market" factors	— 172	— 212	+ 297	+ 620	+ 239	+ 772
Direct Federal Reserve credit transactions						
Open market operations (subtotal)	+ 88	+ 123	— 57	— 329	— 276	— 451
Outright holdings:						
Treasury securities	— 8	— 6	— 63	— 191	— 295	— 563
Bankers' acceptances	— 2	+ 4	— 1	+ 2	— 1	+ 2
Federal agency obligations	— 11	+ 83	+ 18	—	— 80	+ 10
Repurchase agreements:						
Treasury securities	+ 92	+ 42	— 17	— 117	+ 75	+ 75
Bankers' acceptances	+ 9	+ 7	+ 1	— 17	+ 8	+ 8
Federal agency obligations	+ 8	— 7	+ 5	— 6	+ 17	+ 17
Member bank borrowings	+ 191	— 76	+ 94	— 31	+ 127	+ 305
Other Federal Reserve assets†	+ 56	+ 53	— 153	— 442	+ 59	— 427
Total	+ 335	+ 100	— 116	— 800	— 90	— 571
Excess reserves	+ 163	— 112	+ 181	— 180	+ 149	+ 201

	Daily average levels					Monthly averages
Member bank:						
Total reserves, including vault cash	33,139	33,133	33,404	32,915	33,042	33,127‡
Required reserves	32,897	33,003	33,093	32,784	32,762	32,908‡
Excess reserves	242	130	311	131	280	219‡
Borrowings	363	287	381	350	477	372‡
Free, or net borrowed (—), reserves	— 121	— 157	— 70	— 219	— 197	— 153‡
Nonborrowed reserves	32,776	32,846	33,023	32,565	32,565	32,755‡
Net carry-over, excess or deficit (—)§	58	118	92	132	52	90‡

Note: Because of rounding, figures do not necessarily add to totals.
* Includes changes in Treasury currency and cash.
† Includes assets denominated in foreign currencies.
‡ Average for five weeks ended August 30, 1972.
§ Not reflected in data above.

The downward drift of short-term interest rates that had begun in July continued into early August. For example, rates on commercial paper edged lower during the first few days of August, triggering reductions in the floating prime commercial loan rates of a few large banks by ¼ percentage point to 5¼ percent. Subsequently, however, short-term rates reversed direction and ended the month generally higher on balance. Increases in commercial paper rates were followed by upward adjustments in floating prime rates during the latter half of the month. On August 24, a major New York City bank that does not pursue a floating prime rate policy raised its rate ¼ percentage point to 5½ percent. By the end of the month, most of the other major banks had followed suit. Rates on commercial paper sold through dealers closed generally ¼ percentage point higher over the month, and bankers' acceptance rates were ⅛ percentage point higher.

The general advance in short-term interest rates was accompanied by a moderation in the growth of the monetary aggregates in August following the large increases in July. Nevertheless, the growth of these aggregates remained quite substantial over the three-month period that ended in August. For example, the narrowly defined money supply (M_1)—adjusted private demand deposits plus currency outside banks—increased at a seasonally adjusted annual rate of 8½ percent over the three months ended in August (see Chart I), according to preliminary data that are partly estimated for August. The growth of M_1 over the six months ended in August was also substantial, averaging 8 percent at an annual rate. Taking a longer perspective, however, the rise in M_1 was a more moderate 5½ percent over the year ended in August.

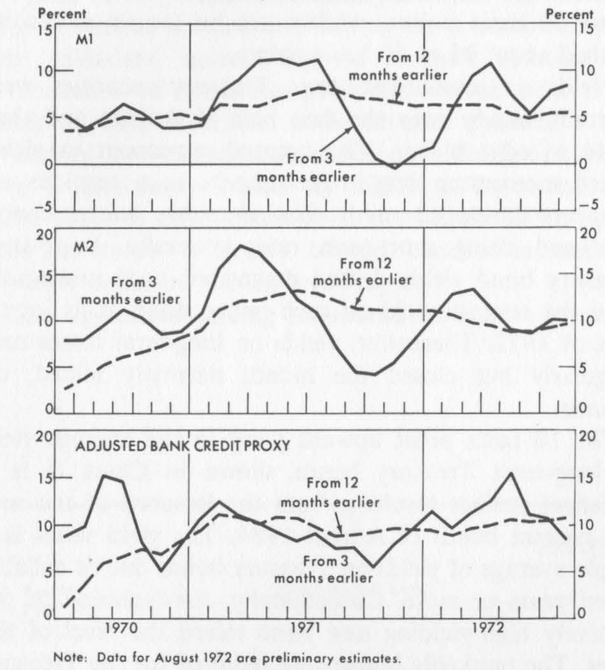
The growth of the broad money supply (M_2)—defined as M_1 plus time deposits at commercial banks other than large negotiable certificates of deposit (CDs)—also slowed somewhat in August from the large July increase. The moderation of M_2 growth was less pronounced than that of M_1, however, because of a pickup in the growth of consumer-type time and savings deposits following a slowing of the growth of these deposits in July. Over the three months ended in August, M_2 rose at a seasonally adjusted annual rate of about 10 percent, according to preliminary estimates. The growth of M_2 was about 9½ percent over the past year.

The adjusted bank credit proxy—which consists of daily average member bank deposits subject to reserve requirements and certain nondeposit liabilities—behaved similarly to M_2 in July and August. Over the three months ended in August, the proxy rose at an estimated seasonally adjusted annual rate of 8½ percent. During the year ended in August, the proxy increased by about 11 percent. In relative terms, the strongest component in the growth of the proxy in recent months has been CDs issued in amounts of $100,000 or more. Banks have been bidding actively for such funds, and a number of increases in offering rates on CDs were posted during August as other market rates rose. CDs outstanding at weekly reporting banks, seasonally adjusted, rose by $3 billion over the three months ended in August. Over the twelve months ended in August, outstanding large CDs expanded by $8½ billion, or 27½ percent.

Chart I

CHANGES IN MONETARY AND CREDIT AGGREGATES

Seasonally adjusted annual rates



Note: Data for August 1972 are preliminary estimates.
M1 = Currency plus adjusted demand deposits held by the public.
M2 = M1 plus commercial bank savings and time deposits held by the public, less negotiable certificates of deposit issued in denominations of $100,000 or more.
Adjusted bank credit proxy = Total member bank deposits subject to reserve requirements plus nondeposit sources of funds, such as Euro-dollar borrowings and the proceeds of commercial paper issued by bank holding companies or other affiliates.
Sources: Board of Governors of the Federal Reserve System and the Federal Reserve Bank of New York.

THE GOVERNMENT SECURITIES MARKET

Along with other short-term rates, Treasury bill rates continued to decline at the beginning of August, but rates on the shorter maturities soon reversed direction. The early strength in the bill market reflected the absence of a short-term option in the Treasury's August refunding[1] and the expectation that sellers of rights issues would seek bills for temporary lodgment of funds. Against this background, participants bid aggressively for bills in the weekly auction held on July 31. The three-month bills were sold at an average issuing rate of 3.794 percent, 25 basis points below the rate established in the previous week's auction.

After August 2, as demand for bills generated by the refunding subsided, rates on issues maturing within six months began to edge higher. The upward movement of rates was spurred by the firming in the Federal funds market and by the prospect of sizable Treasury cash financing in the short-term area of the market in coming months. The relatively wide spread between rates on bills and rates on other short-term instruments was also conducive to rising bill rates. In this atmosphere, bidding was generally cautious in the weekly bill auctions held during August, and rates climbed at each successive auction. At the auction held on August 14, the average issuing rate for the three-month issue was 3.956 percent (see Table II), 16 basis points higher than the rate set two weeks earlier.

On August 18, the Treasury announced the first steps toward restructuring the monthly bill auctions through the establishment of regular auctions of 52-week bills to replace eventually the nine- and twelve-month bills. At the same time, the Treasury announced plans to raise a total of $1.8 billion in the monthly auctions of August, September, and October. Accordingly, at the maturity of the $1.7 billion of monthly bills due August 31, 1972, the Treasury issued $1.8 billion of bills to mature on Tuesday, August 28, 1973 and $500 million of bills to mature on May 31, 1973. The Treasury also intends in

[1] For a description of the securities involved, together with the preliminary results, see this *Review* (August 1972), page 198. The final results were slightly better than the preliminary results. The rate of attrition of the publicly held issues maturing August 15 was revised downward to 25.9 percent. The public subscribed for $3.9 billion of the new notes due February 1976, $3.1 billion of the new notes due August 1979, and $1.2 billion of the new bonds due August 1984. The subscriptions for the bonds included $41 million of sales to individuals for cash.

Table II
AVERAGE ISSUING RATES*
AT REGULAR TREASURY BILL AUCTIONS
In percent

Maturities	Weekly auction dates—August 1972			
	Aug. 7	Aug. 14	Aug. 21	Aug. 28
Three-month	3.928	3.956	4.058	4.332
Six-month	4.431	4.464	4.623	4.818
	Monthly auction dates—June-August 1972			
	June 23	July 25	Aug. 24	
Nine-month	4.754	4.731	5.040	
One-year	4.854	4.918	5.178†	

* Interest rates on bills are quoted in terms of a 360-day year, with the discounts from par as the return on the face amount of the bills payable at maturity. Bond yield equivalents, related to the amount actually invested, would be slightly higher.
† This was the first auction of a 52-week bill.

coming months to repeat the offerings of $1.8 billion of slightly less-than-one-year bills to mature on Tuesdays at four-week intervals from August 28, 1973. In late September and again in late October 1972, the Treasury plans to sell $0.5 billion of nine-month bills maturing in June and July 1973, respectively. These final sales of nine-month bills will result in equal amounts of maturities of monthly bills through July 1973. These plans will result in the raising of $0.6 billion of new cash at the end of August and $0.6 billion at the end of each of the next two months. The Treasury also indicated that it is studying the desirability of having weekly auctions of 52-week bills and of converting its offerings of six-month bills from a Thursday to a Tuesday maturity to coincide with the weekly maturities of such 52-week bills.

Bill rates spurted upward in reaction to the Treasury announcement. Rates on the longer maturity bills, which until then had been drifting downward since the end of June, joined in the advance. In the first auction under the new program described above, held on August 24, the 362-day bills were sold at an average issuing rate of 5.178 percent, 26 basis points above the rate set on one-year bills in the July 25 auction and the highest comparable rate since September 1971. Rates continued to push higher over the remainder of the month, partly reflecting firmer day-to-day money rates and Federal Reserve sales on behalf of customer accounts and the System Account. At the month's final weekly auction, held on August 28, the three-month bills were sold at an average issuing rate of 4.332 percent. Over the month as a whole, rates on outstanding bills maturing within six months rose about 50 to 80 basis points, while rates on longer maturities climbed about 35 to 50 basis points.

Yields on intermediate-term Treasury securities were generally steady over the first half of August and then began to edge higher. The upward movement in yields gained momentum late in the month, as a cautious atmosphere developed amidst firming money market conditions and rising short-term rates generally. Long-term Treasury bond yields drifted downward until midmonth, when the average yield on such issues stood at its lowest level of 1972. Thereafter, yields on long-term issues rose irregularly but closed the month narrowly mixed, on balance.

The 10 basis point upward jump in the average yield on long-term Treasury bonds shown in Chart II is a statistical artifact resulting from the issuance of the new 6⅜ percent bonds of August 1984. The yield series is a simple average of yields on Treasury bonds due or callable in ten years or more. Consequently, the inclusion of the relatively high-yielding new issue raised the level of the series. The markedly higher rate required for the Treasury to issue long-term bonds, compared with the rates on older outstanding issues, reflects in part the substantial discounts from par at which the older bonds trade because of their relatively low coupons. In consequence, a significant part of the return on the older issues is in the form of capital gains, which for most investors are taxed at preferential rates. Furthermore, many of the older Treasury bonds are accepted at par value in payment of Federal estate taxes. This feature, which generates demand for some of these issues irrespective of their yields to maturity, is no longer offered on newly issued bonds.

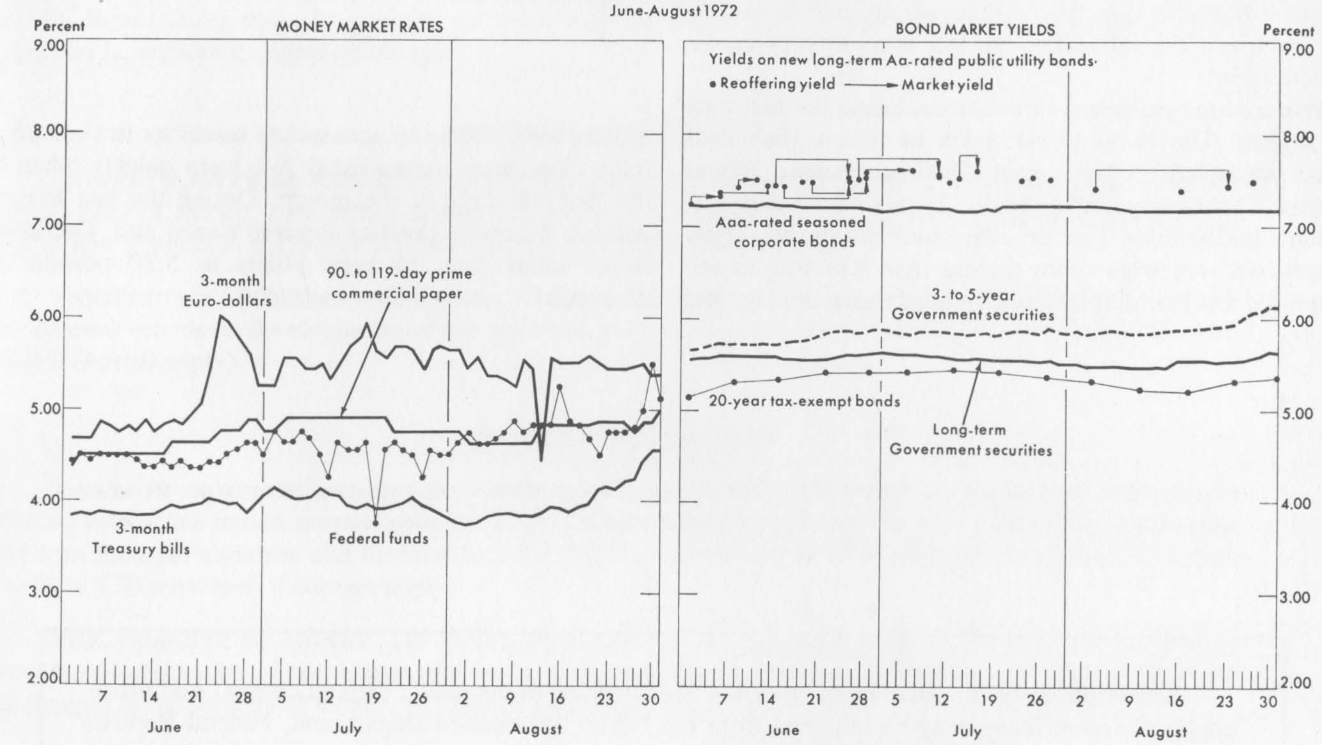
The structure of yields on Treasury securities in the middle of August is depicted in Chart III, together with a comparative yield curve for one year earlier, just prior to President Nixon's announcement of the New Economic Policy. Both curves show a fairly sharp positive slope for yields on near-term maturities with a hump in the intermediate-term area and a decline on longer maturities. The most striking difference between the two yield curves is in their respective levels, which depict the declines in yields throughout the maturity spectrum over the past year. The three-month wage and price freeze from August to November 1971 and the subsequent Phase Two controls have helped to reduce the inflation premium in interest rates. In addition, a decline in the rate of borrowings in the bond market relative to last year's record pace has contributed to the downward shift in the yield curve.

OTHER SECURITIES MARKETS

Prices of corporate and municipal bonds continued to edge upward in the first half of August. A combination of light calendars, normal for the summer months, and maintenance of syndicate price restrictions held down yields on new securities, while investor demand in the secondary market reduced returns on older issues. However, a price reversal after the middle of the month signaled some investor dissatisfaction with available yields. This resistance to terms offered became increasingly apparent in the last ten days of August.

The aggressive pricing associated with new issues of corporate bonds during August was exemplified by two issues rated Aaa. One, an electric utility issue awarded on August 1, was reoffered to yield 7.42 percent. The other, a forty-year debenture of a Bell Telephone subsidiary offered on August 8, was priced to yield 7.375 percent; this was the lowest yield on a Bell issue since May. Initial reception was cool in both cases. However, the scarcity of new high-grade securities and the successful distribution of some Aa-rated issues offered at the end of July encouraged the offering syndicates to hold firm, even though the yields were less favorable than those obtainable in the secondary market. On August 27, the underwriters finally released the unsold portion of the

Chart II
SELECTED INTEREST RATES
June-August 1972



Note: Data are shown for business days only.

MONEY MARKET RATES QUOTED: Bid rates for three-month Euro-dollars in London; offering rates (quoted in terms of rate of discount) on 90- to 119-day prime commercial paper quoted by three of the four dealers that report their rates, or the midpoint of the range quoted if no consensus is available; the effective rate on Federal funds (the rate most representative of the transactions executed); closing bid rates (quoted in terms of rate of discount) on newest outstanding three-month Treasury bills.

BOND MARKET YIELDS QUOTED: Yields on new Aa-rated public utility bonds (arrows point from underwriting syndicate reoffering yield on a given issue to market yield on the same issue immediately after it has been released from syndicate restrictions); daily averages of yields on seasoned Aaa-rated corporate bonds; daily averages of yields on long-term Government securities (bonds due or callable in ten years or more) and on Government securities due in three to five years, computed on the basis of closing bid prices; Thursday averages of yields on twenty seasoned twenty-year tax-exempt bonds (carrying Moody's ratings of Aaa, Aa, A, and Baa).

Sources: Federal Reserve Bank of New York, Board of Governors of the Federal Reserve System, Moody's Investors Service, and The Bond Buyer.

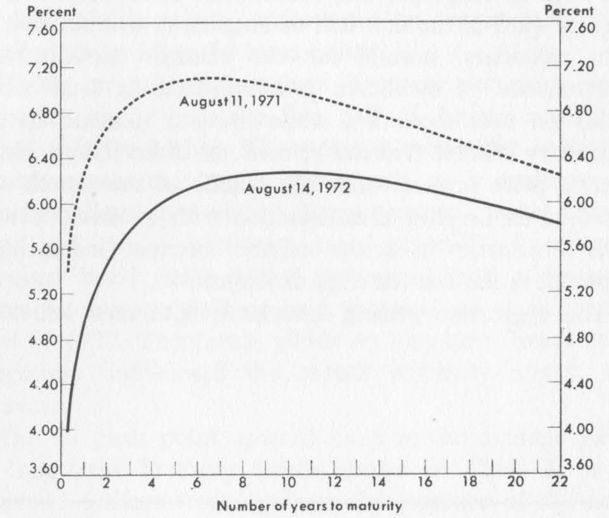
telephone bonds from price restrictions, with a resultant upward yield adjustment of about 10 basis points.

Three new issues of Aa-rated utility bonds were reoffered at the end of July to yield slightly more than 7½ percent. In the first half of August, two comparable issues were priced to yield 7.44 percent and 7.40 percent. Reductions in short-term interest rates, including bank prime lending rates, in late July and early August lent support to the bond market. However, the reversal of these movements late in August prompted accompanying adjustments in the bond market. Consequently, the final Aa-rated utility issue of the month was priced to yield 7.50 percent, but the offering was not enthusiastically received by investors.

In addition to its effects on interest rate expectations in general, the accelerating economic recovery raised the possibility of a larger volume of new issues on top of the usual seasonal increase in supply during the final quarter. Some investors, therefore, preferred to postpone purchases until terms improved. The price declines which occurred in the secondary market during the last week of August reflected both the reduction in demand and increased supply from professional selling and the dissolution of syndicate restraints.

Chart III

YIELDS ON UNITED STATES GOVERNMENT SECURITIES



Prices of tax-exempt securities rose during the first part of August. The Bond Buyer index of twenty municipal bond yields fell 10 basis points between August 3 and August 17. Over this same period, dealers added only $55 million to the Blue List of advertised inventories. New issues sold somewhat more rapidly than was true in the corporate market, despite similarly aggressive pricing, and dealers were willing to accumulate securities in their portfolios. Two large issues rated A-1 were quickly taken in the first ten days of the month. During the last half of August, however, investor interest waned and The Bond Buyer index rose 16 basis points to 5.38 percent on August 31.

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STRICTLY CONFIDENTIAL (FR)

SWAP ARRANGEMENTS BETWEEN THE SYSTEM
AND FOREIGN CENTRAL BANKS
October 11, 1972

Listed below as of October 11, 1972, are the swap arrangements concluded on behalf of the Federal Reserve System with foreign banks.

Foreign Bank	Amount of Agreement (millions of dollars)	Maturity of latest authorized renewal
Austrian National Bank	200	December 1, 1972
National Bank of Belgium	600	December 22, 1972
Bank of Canada	1,000	December 30, 1972
National Bank of Denmark	200	December 1, 1972
Bank of England	2,000	December 1, 1972
Bank of France	1,000	December 28, 1972
German Federal Bank	1,000	December 15, 1972
Bank Of Italy	1,250	December 29, 1972
Bank of Japan	1,000	December 1, 1972
Bank of Mexico	130	December 1, 1972
Netherlands Bank	300	December 29, 1972
Bank of Norway	200	December 1, 1972
Bank of Sweden	250	December 1, 1972
Swiss National Bank	1,000	December 1, 1972
B.I.S.	1,600 (600) (1,000)1/	December 1, 1972 December 1, 1972
Total	11,730	

1/ This reciprocal arrangement provides for swaps of dollars against authorized European currencies other than Swiss francs.

As of October 11, 1972, drawings on the above arrangements are outstanding in the amounts indicated below:

	Drawings Outstanding on Swaps		
Arrangements with	Initiated by System (millions of dollars equivalent)	Initiated by foreign bank	Date since facility has been in continuous use
National Bank of Belgium	435	--	June 30, 1970
Swiss National Bank	680	--	May 19, 1971
B.I.S.	635	--	
Swiss francs	(600)		August 12, 1971
Belgian francs	(35)		August 18, 1971
Total	1,750	--	

STRICTLY CONFIDENTIAL (FR)

SWAP ARRANGEMENTS BETWEEN THE SYSTEM AND FOREIGN CENTRAL BANKS
November 15, 1972

Listed below as of November 15, 1972, are the swap arrangements concluded on behalf of the Federal Reserve System with foreign banks.

Foreign Bank	Amount of Agreement (millions of dollars)	Maturity of latest authorized renewal
Austrian National Bank	200	December 1, 1972
National Bank of Belgium	600	December 22, 1972
Bank of Canada	1,000	December 30, 1972
National Bank of Denmark	200	December 1, 1972
Bank of England	2,000	December 1, 1972
Bank of France	1,000	December 28, 1972
German Federal Bank	1,000	December 15, 1972
Bank Of Italy	1,250	December 29, 1972
Bank of Japan	1,000	December 1, 1972
Bank of Mexico	130	December 1, 1972
Netherlands Bank	300	December 29, 1972
Bank of Norway	200	December 1, 1972
Bank of Sweden	250	December 1, 1972
Swiss National Bank	1,000	December 1, 1972
B.I.S.	1,600 (600)	December 1, 1972
	(1,000)1/	December 1, 1972
Total	11,730	

1/ This reciprocal arrangement provides for swaps of dollars against authorized European currencies other than Swiss francs.

As of November 15,1972, drawings on the above arrangements are outstanding in the amounts indicated below:

Arrangements with	Drawings Outstanding on Swaps: Initiated by System (millions of dollars equivalent)	Initiated by foreign bank	Date since facility has been in continuous use
National Bank of Belgium	415	--	June 30, 1970
Swiss National Bank	600	--	May 19, 1971
B.I.S.	635	--	
Swiss francs	(600)		August 12, 1971
Belgian francs	(35)		August 18, 1971
Total	1,650	--	

STRICTLY CONFIDENTIAL (FR)

SWAP ARRANGEMENTS BETWEEN THE SYSTEM
AND FOREIGN CENTRAL BANKS
December 13, 1972

Listed below as of December 13, 1972, are the swap arrangements concluded on behalf of the Federal Reserve System with foreign banks.

Foreign Bank	Amount of Agreement (millions of dollars)	Maturity of latest authorized renewal
Austrian National Bank	200	December 3, 1973
National Bank of Belgium	600	December 22, 1972
Bank of Canada	1,000	December 29, 1972
National Bank of Denmark	200	December 3, 1973
Bank of England	2,000	December 3, 1973
Bank of France	1,000	December 28, 1972
German Federal Bank	1,000	December 14, 1973
Bank of Italy	1,250	December 29, 1972
Bank of Japan	1,000	December 3, 1973
Bank of Mexico	130	December 3, 1973
Netherlands Bank	300	December 29, 1972
Bank of Norway	200	December 3, 1973
Bank of Sweden	250	December 3, 1973
Swiss National Bank	1,000	December 3, 1973
B.I.S.	1,600 (600)	December 3, 1973
	(1,000) 1/	December 3, 1973
Total	11,730	

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Arrangements with	Drawings Outstanding on Swaps: Initiated by System (millions of dollars equivalent)	Initiated by foreign bank	Date since facility has been in continuous use
National Bank of Belgium	435	--	June 30, 1970
Swiss National Bank	570	--	May 19, 1971
B.I.S. (Swiss francs)	600	--	August 12, 1971
Total	1,605	--	