

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

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CLASS II - FOMC

TO: Federal Open Market Committee

FROM: Murray Altmann M. O.

Attached is a memorandum from John Wilson of the Board's Division of International Finance, Dated December 17, 1979, and entitled "The Bundesbank's Foreign Exchange Swaps: Recent Experience."

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FEDERAL RESERVE BANK OF NEW YORK

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OFFICE CORRESPONDENCE

Го	Mr. Pardee	SUBJECT The Bundesbank's Foreign Exchange	
FROM	John F. Wilson	Swaps: Recent Experience	

During the past eight months the Deutsche Bundesbank has frequently employed foreign-exchange swaps to influence liquidity conditions in the German economy. As such operations were used only rarely before early 1979, 1/2 their repeated use now suggests a significant policy innovation. Judging from the intensity of the recent swap activity, it appears that the Bundesbank intends to keep making use of this new instrument. The present note, therefore, surveys the Bundesbank's use of foreign-exchange swaps during the past several months and provides some analysis on the way these swaps affect liquidity in the German market.

Like other central banks the Bundesbank has an array of instruments to influence domestic monetary conditions. Among the standard tools in the Bundesbank's kit are the power to set and vary the discount and Lombard rates and to set and change reserve requirements. The Bundesbank also controls the rediscount quotas to which German banks have access in accordance with their capitalization. Until recently Lombard loans in Germany had no formal upper limit, except that implied by a bank's holdings of eligible paper, although Lombard loans are intended only for short-term financial bridging. Among other instruments, "open market operations" have traditionally had a different meaning in Germany than in the United States. The Bundesbank maintains a

^{1/} Between late 1958 and early 1971 the Bundesbank often maintained a foreign-exchange swap facility whose use was at the discretion of the banks. The recent swaps are activated at times and in amounts determined by the Bundesbank itself.

list of buying and selling rates on certain kinds of "money market paper", and transactions are initiated by the banks themselves. Only seldom in the past has the Bundesbank itself initiated U.S.-style open market transactions.

As is evident from the above, the traditional monetary policy tools in Germany are less suited to short-term or easily reversible adjustment of money-market conditions than the instruments used by U.S. authorities. Over the last few years the Bundesbank has made a conscious effort to develop a broader range of money-market operations. On various occasions between April, 1973, and the present, for instance, the Bundesbank has offered special short-term repurchase facilities on discountable bills, often at times when the banks were at or near their rediscount ceilings.

The foreign-exchange swap is a familiar central bank operation in some foreign countries, notably Switzerland and the Netherlands, but is a fairly new tool in the Bundesbank's armory of policy instruments. The table on the following page provides an overview of such swap transactions reported by the Bundesbank between early April and mid-December. A foreign-exchange swap between the Bundesbank and German commercial banks is similar to swaps conducted between the banks themselves. The Bundesbank either buys or sells spot dollars against German marks, making a simultaneous commitment to unwind the transaction on a specific future date at a specified exchange rate. A spot purchase of dollars (sale of DM) provides more liquidity to the German banking system, whereas a spot sale of dollars (purchase of DM) withdraws high-powered money,

Bundesbank Foreign Exchange Swaps Summary (\$ million or equivalent)

Dates (1979)	Swaps Initiated 1/		
	Liquidity Provided	Liquidity Withdrawn	Swaps Maturing
April	+2500		
May	+1500		-250
July			-1450
August 1-27 28 29	+1700	-1000 -1000*	-2000
September 10-26 26-27		-5156.6*	+2000
October 1-19 17-26	+3346.8		+3593.1 -2500
November 1-15 16-19 16-27		-3400 -2010*	+4160
20 December 3-10 10	+ 575	-1000	+2250

Source: Deutsche Bundesbank. + = liquidity provided to German banks; - = liquidity withdrawn.

^{1/} Published Bundesbank figures on net liquidity supplied to German banks via swaps through September suggest this transaction record is not complete.

^{*} denotes outward "swaps" of dollars which have been financed via "participations" in the Bundesbank's holdings of U.S. Treasury securities.

As the table indicates, since the spring of 1979 swaps have been used both to expand and contract the supply of high-powered money available to German banks. During this interval swaps have often, but not always, been used to roughly sterilize the domestic liquidity effects of exchange-market 2/ intervention by the German or U.S. authorities. The initiative for, and amount of, each swap transaction always comes from the Bundesbank. There is no exchange-risk to the commercial banks in doing swaps with the Bundesbank, but the supply of high-powered money is temporarily changed because the central bank is the other party to the transaction. In effect, the Bundesbank creates or destroys a certain quantity of marks for a period of time known in advance. Swaps initiated since April have had maturities ranging between one week and three months; some have been rolled over to future dates when they matured.

As the table also shows, from early April through late August, the Bundesbank generally provided high-powered money by swapping in dollars and swapping out marks with the banking system. During the April-May interval, especially, the German mark was under downward pressure in the foreign exchanges. Both the U.S. and German authorities were buying marks in their intervention activities, leading to withdrawals of DM liquidity which sometimes exceeded Bundesbank objectives. The spring swaps, therefore, compensated for these withdrawals by temporarily providing additional reserves to the German banking system. On several occasions later in the year, notably in the period around the U.S. policy measures of early October, the Bundesbank likewise used swaps to ease liquidity conditions, mainly to relieve pressure on domestic interbank rates.

It should be noted that the swaps sometimes also are used in conjunction with domestic developments and changes in the Bundesbank's coarser policy instruments. During the period under review, the Bundesbank reset many of its domestic policy instruments (e.g., rediscount quotas were changed on several occasions and the discount and Lombard rates were adjusted repeatedly). Thus, foreign-exchange swaps have been used to make finer adjustments in domestic liquidity conditions in response to these and other developments, such as periodic tax deadlines.

All the Bundesbank swaps prior to late August were of the liquidity-providing variety. This changed at the end of the month. In the aftermath of excessively heavy use by the banks of a short-term repurchase facility opened by the Bundesbank, the central bank turned to foreign-exchange swaps to mop up high-powered money. On August 28, and again on August 29, the Bundesbank initiated liquidity-absorbing swaps of \$1 billion equivalent each. The first of these transactions was conducted in the traditional fashion; the Bundesbank provided covered dollars to the banks, absorbing in return the DM equivalent. Beginning with the August 29 operation, however, the Bundesbank introduced a technical innovation. Rather than giving the banks covered dollars, financed by sales of some of the Bundesbank's holdings of U.S. Treasury securities, the Bundesbank instead gave the banks a relatively non-negotiable, DM-denominated claim in exchange for their marks. In essence, the Bundesbank's dollar holdings were only used to collateralize the transaction.

This form of liquidity-absorbing operation has come to be known as a "participation" and, as is evident, is more like a reverse repurchase transaction than a genuine foreign-exchange swap. Notably, as the Bundesbank's foreign assets are only used as collateral in such an operation, when swaps are done via "participations" there is no need to sell or purchase U.S. Treasury securities. As indicated in the table, since late August the Bundesbank has switched back and forth several times between liquidity-absorbing swaps done in the traditional fashion and those done via "participations". This is due to a variety of problems, partly legal and partly cost-related, encountered with the new style of procedure. As of late November, the last time the Bundesbank used swaps to absorb high-powered money, the German central bank had reverted to the traditional method of swapping out covered dollars.

The Bundesbank's recent close management of domestic liquidity conditions by foreign-exchange swaps has several problematic features. One is the possible exchange-market consequences. As noted, swaps and participations have sometimes been used to partially sterilize the monetary effects of central bank interventions in the exchange-market. By providing marks to the banks at times when the mark was under downward pressure, the Bundesbank thus resisted the domestic tightening that would have been induced by central bank purchases of marks in the exchanges. Other things equal, this would lead to lower interest rates than would have obtained in the absence of sterilization. To the extent that German interest rates are a partial determinant of exchange-market pressures, sterilization therefore may have indirectly contributed to mark weakness at such times. Conversely, at times when the mark has been under upward pressure (with central banks selling marks), Bundesbank swap operations have helped maintain firm liquidity conditions. This contributes to the firmness of domestic interest rates and, to some extent, the upward pressure on the mark.

Another potential problem arises from the impact of the Bundesbank's swap operations on the Federal Reserve's domestic desk operations. Except in the case of swaps via "participations", Bundesbank swap initiatives generally result in Federal Reserve desk transactions for customer account in the New York market, either to provide dollars committed by the Bundesbank or to invest dollars received by that institution. The amounts are sometimes substantial. By virtue of the way swap decisions are taken in Germany, the notice given to U.S. authorities is typically very short. Although problems with this procedure have been overcome so far, some potential for difficulty exists should large swap-related orders come to the market at the same time as Treasury refundings, other customer transactions

^{3/} An exception is that, occasionally, the Bundesbank invests the dollar receipts from inward swaps in other forms than U.S. government securities (e.g., they may be redeposited with German or U.S. banks).

(e.g., intervention-related) or open-market operations. Also, since each foreign-exchange swap ultimately gives rise to two transactions for the Bundesbank's account (a purchase and sale, or vice versa), heavy use of this new instrument by the Bundesbank naturally increases the frequency of Desk operations to backstop German liquidity management.