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

October 8, 1974

CONFIDENTIAL (FR)

TO: Federal Open Market Committee

FROM: Arthur L. Broida ALB

Enclosed is a memorandum from the System Account Manager dated October 3, 1974, and entitled "Report on experience with bidding for Treasury bills on a noncompetitive basis." When the Committee, at its meeting on April 15, 1974, approved the Manager's recommendation for noncompetitive bidding in rolling over official holdings of bills, it was understood that the Manager would submit a report on how well the approach was working within 6 months.

This memorandum is not being listed on the agenda for the October 15 FOMC meeting in view of Mr. Holmes' conclusion that there has been no significant problem with the new procedure. If any member so desires, however, the subject can be listed for discussion at a later meeting.

Enclosure

October 3, 1974

CONFIDENTIAL--(F.R.)

TO: Federal Open Market Committee

SUBJECT: Report on experience with bidding for Treasury bills on a noncompetitive basis

FROM: Alan R. Holmes

At the April meeting of the Federal Open Market Committee, the Committee approved a change in the method of tendering for rollovers of Treasury bills held by System, Treasury and foreign accounts. Since the auction of April 29, the Desk has been submitting noncompetitive tenders to accomplish desired bill rollovers for the various official accounts. Competitive bids have been submitted to redeem System held issues and to increase the face amount owned by any other customer account. The change was agreed upon by the Committee with the understanding that I would report within six months on how well the new approach was working. The attached memorandum reviews and assesses our experience in bidding for three and six month bills since that time.

The most important benefit of the shift in bidding technique has been the ability to avoid unintended redemptions of Treasury bills in System and official customer accounts. An analysis of influences on the market in the recent past suggests that partial allotments to Desk tenders might have been more frequent if the former bidding method had been retained. The growth in System and other official account bill holdings to an average of just under 60 percent of weekly awards in recent months would have enlarged the potential complications and costs arising from bidding misses.

Treasury bill rates have been more volatile over the period since May, in comparison with earlier in the year. But, as indicated in the attached memorandum, this appears to be primarily attributable to various market factors affecting rate expectations, rather than the change in bidding techniques. At the time of the change last May, the Treasury began to publish the amounts of maturing issues held by the System and foreign accounts a few days prior to each auction. While this information has probably been helpful to participants in determining their auction bids, it may be added somewhat to the volatility of bill rates, a potential development that was noted in my discussion of this subject last April.

Based on the experience thus far, there has been no significant problem with the new procedure for noncompetitive rollovers of official holdings of Treasury bills. I should note, finally, that so far as I am aware the present procedures are also satisfactory to the Treasury and to the market.

Attachment

MISC. 3

OFFICE CORRESPONDENCE

October 2, 1974

TO Mr. Holmes

FROM Sheila Tschinkel ST

SUBJECT Review of experience in bidding for Treasury bills on a noncompetitive basis

This memorandum reviews and assesses experience with noncompetitive tendering in Treasury bill auctions for System and foreign accounts. The shift from Desk bidding on a competitive basis first occurred in the auction of April 29 and the analysis focusses on auction results and market developments since that time. The most significant benefit from bidding noncompetitively has been the ability to avoid unintentional misses on rollovers of System and foreign account issues. A review of several influences on the bill market in the recent past suggests that in the absence of the new technique the frequency of partial allotments could have been greater than previously. Undesired redemptions tend to complicate System open market operations and may be costly to our customer accounts. The publication of the amount of maturing bills held by System and other official accounts a few days prior to the auction has provided useful information to market participants; the impact of this information on market performance is not clearly determinate, although it may possibly have added, at times, to the volatility of bill rates.

An earlier examination of auction results over a period when the Desk tendered for bills on a competitive basis showed that its bids tended to exert a very small downward influence on the average rate paid by the Treasury and, as a result, lengthened the spread between the average and the "stop out" rate.[1] While it is

---

[1] Sheila Tschinkel, "Review of the Proposal to Bid for Treasury Bills on a Noncompetitive Basis", memorandum to Mr. Holmes, April 8, 1974.

not possible to determine auction rates that would have been set if the former bidding method had been retained, the difference between the average and the highest accepted rate has increased since noncompetitive bidding was adopted (see Table I). Analysis suggests that this arose because bill rates were even lower, relative to rates on other instruments, than they had been in the past. While average auction rates have shown more volatility since May, this probably results chiefly from developments in the secondary market where the amplitude of rate fluctuations increased by an even larger extent. Moreover, there was a pronounced increase in the volatility of auction and market rates in the third quarter of 1973, the first of several periods that have been characterized by marked swings in interest rate expectations.

Auction method and bill awards

The Treasury auctions new bills by first allocating the amount requested by all noncompetitive bidders and then distributing the remainder of the issue to competitive bidders according to price until the total amount of the issue is awarded. The average price is derived by weighting the price of the accepted competitive tenders by the quantity of bills awarded at each price. Noncompetitive bidders pay the average price. The difference between the average price and the lowest price accepted (or the average issuing rate and the highest rate accepted) is the "tail" in the auction. A long tail may indicate limited market demand for bills and upward pressure on bill rates--or a lack of consensus about rates. It may also reflect the low level of bill rates in comparison to other money market rates, such as the Federal funds and dealer loan rates.

A high cost of financing inventories may influence dealers to scale bids over a broad range of prices.

Starting in May of this year, the Federal Reserve Bank of New York began to enter bids on a noncompetitive basis to roll over maturing issues in the System and official foreign accounts. The officers at the Trading Desk still determine a competitive bid for most auctions since tenders to increase the face amount of holdings for any foreign account, or to redeem some of the System's maturing issues, must be submitted with a price. The new method of bidding has assured that desired rollovers are accomplished readily.

Secondary market and auction rates

Short-term interest rates rose rapidly over most of the period since last May, but have declined in recent weeks. During this period of several months bill rates became more volatile; a phenomenon which appears to reflect market conditions rather than bidding techniques. The increased size of the bill rate fluctuations is evident even when bill rates are averaged over a week and typical day-to-day variability is removed.

Table II illustrates this for both changes in auction rates and in weekly average market yields on the three- and six-month issues. Some measures of volatility are provided but their results are not conclusive for a comparison of recent behavior with the past.

Weekly changes in market yields and in auction rates on the three- and six-month issues were larger in the weeks after May than in the preceding period of the same length. But the absolute changes in rates and their variance do not appear unusually large in comparison with the third quarter of 1973. It also appears that the volatility of market rates for the three-month issues increased by more than rates set in the auctions. For the six-month issue, the reverse occurred. The variance of the six-month issue, both auction and market yield was below that observed in the third quarter of 1973. This suggests that the change to a noncompetitive method of bidding had less to do with the increased variation in rates than other factors.

Both market and auction rates have always been highly responsive to changing market assessments about the course of short-term rates. While there have been significant changes in such expectations over the past few months, the thin supplies of bills in the market have acted to exaçerbate rate fluctuations as shifts in supply or demand have a relatively larger impact. Increases in both official holdings of bills and in small investor demand have worked to deplete supplies in the primary and secondary market. Desk tenders for bills(System and customer accounts) accounted for 58 percent of issues awarded in the third quarter of 1974, up from just over 50 percent in the first three months of the year (see Table III). When noncompetitive tenders submitted by the general public are included, the proportion rises to 75 percent between June 30 and September 23, a substantial increase over the 64 percent awarded to the comparable group of bidders in the first quarter. Dealers also reported increases in "odd lot" demand over much of the recent period.

These purchases further eroded available market supplies as smaller investors tend to hold bills until maturity.

The increased participation of investors that are less sensitive to yields on alternative instruments has, over recent years, tended to depress bill rates. Over a good part of the period since May, the relative downward pressure was intensified by concern over liquidity pressures on financial and nonfinancial corporations which made some investors willing to hold bills in preference to other market instruments even at increasingly unfavorable yield spreads.

In these circumstances, the difference between the average issuing and the stop out rate could be expected to rise. The frequent depletion of secondary market supplies apparently led dealers to bid at relatively low rates, in comparison to returns on other instruments, for the amounts that they wanted to be sure of obtaining. At the same time, the high negative cost of carry made them reluctant to purchase any more than they were reasonably certain of selling to customers before the payment date--unless they could win them at rates that were well above the auction average and reflected to a larger extent, the level of money market rates. Thus, competitive bidders probably tended to scale bids over a broader range of rates and such behavior worked to lengthen the difference between the average and highest accepted rates.

The developments that led to more pronounced rate fluctuations since May made it more difficult for market participants to determine prices on their tenders. Given uncertainties about the size of potential market supplies of bills, the publication of the size of System and foreign account holdings was useful to market participants since it provided additional information to use in assessing potential demand from this source. The knowledge that unplanned redemptions of a portion of these large holdings would not occur and that the Desk would bid competitively to redeem issues was also helpful. While unintended misses in Desk bids in the past were rare and often small--there were occasions when the amounts involved were substantial. The secular growth in official holdings relative to total awards implies that the size of unplanned redemptions was likely to increase if the Desk were to continue to bid competitively. The increased volatility of rates suggests that their frequency could also have risen. Consequently, an important benefit of the shift to noncompetitive tendering by the Desk has been the absence of unintended redemptions. At the same time, it is possible that more widespread knowledge of the extent of official participation in the auction has highlighted for some market participant the possibilities for taking advantage of the lessened availability of market supplies--a circumstance that may have contributed at times to increased volatility in bill rates. On balance, however, it is believed that by far the greater influence making for increased volatility has been the underlying market conditions described above, rather than the Treasury's modification in its bidding technique.

Table I

Treasury Bill Auction Results

	Three month issue				Six-month issue		
	Average Issuing Rate	Highest Rate Accepted	Difference or "Tail"		Average Issuing Rate	Highest Rate Accepted	Difference or "Tail"
1973							
Dec. 6	7.358	7.429	.071		7.666	7.801	.035
13	7.386	7.425	.039		7.530	7.548	.018
20	7.366	7.382	.026		7.164	7.198	.034
27	7.346	7.441	.095		7.315	7.350	.035
1974							
Jan. 3	7.406	7.453	.047		7.371	7.399	.028
10	7.615	7.647	.032		7.560	7.568	.008
17	7.983	8.019	.036		7.867	7.880	.013
24	7.995	8.003	.008		7.819	7.825	.006
31	7.778	7.793	.015		7.516	7.526	.010
Feb. 7	6.951	6.975	.024		6.747	6.791	.044
14	7.081	7.109	.028		6.882	6.919	.037
21	7.018	7.046	.028		6.787	6.808	.021
28	7.188	7.240	.052		7.081	7.095	.014
Mar. 7	7.675	7.722	.047		7.566	7.584	.018
14	7.920	7.932	.012		7.637	7.669	.032
21	8.047	8.098	.051		7.882	7.924	.042
28	8.300	8.379	.079		8.231	8.248	.017
Apr. 4	8.358	8.390	.032		8.211	8.219	.008
11	8.648	8.668	.020		8.393	8.409	.016
18	8.051	8.074	.023		8.084	8.088	.004
25	7.857	8.007	.150		7.995	8.136	.141
Average	7.682	7.725	.044	Avg.	7.591	7.618	.028

Table I (cont'd)

Treasury Bill Auction Results

	Three month issue			Six month issue		
1974	Average Issuing Rate	Highest Rate Accepted	Difference or "Tail"	Average Issuing Rate	Highest Rate Accepted	Difference or "Tail"
May 2	8.909	9.051	.142	8.796	8.951	.155
9	9.036	9.071	.035	9.006	9.022	.010
16	8.023	8.090	.067	8.031	8.088	.057
23	8.197	8.339	.142	8.440	8.543	.103
30	7.983	8.082	.099	8.205	8.254	.049
Jun. 6	8.300	8.355	.055	8.426	8.456	.030
13	8.260	8.285	.028	8.324	8.337	.013
20	8.177	8.185	.008	8.175	8.185	.010
27	7.841	7.940	.099	8.003	8.102	.099
Jul. 5	7.808	7.848	.040	8.055	8.101	.040
11	7.892	7.952	.060	8.480	8.527	.047
18	7.702	7.746	.044	7.576	7.948	.072
25	7.604	7.631	.027	7.700	7.746	.046
Aug. 1	7.698	7.785	.087	8.055	8.134	.079
8	8.505	8.652	.147	8.660	8.701	.041
15	8.763	8.794	.031	8.719	8.731	.012
22	8.846	8.901	.055	8.899	8.966	.067
29	9.908	10.041	.133	9.930	9.987	.057
Sept 5	9.166	9.253	.087	9.283	9.320	.037
12	9.099	9.154	.055	8.980	8.996	.016
19	8.185	8.217	.032	8.203	8.278	.075
26	7.002	7.101	.099	7.928	7.946	.018
Avg.	8.314	8.385	.071	Avg. 8.462	8.515	.052

Table II

Auction and market rates

	Three month issue				Six month issue			
	Changes in market rates[1]		Changes in auction rates[2]		Changes in market rates[1]		Changes in auction rates[2]	
	Mean	Variance	Mean	Variance	Mean	Variance	Mean	Variance
1973 QI	.134	.009	.142	.017	.150	.006	.159	.013
QII	.150	.012	.156	.021	.123	.009	.172	.023
QIII	.328	.105	.318	.158	.269	.060	.278	.104
QIV	.210	.040	.288	.100	.247	.030	.283	.042
1974 QI	.215	.027	.244	.047	.206	.031	.257	.041
QII	.262	.051	.346	.115	.171	.031	.298	.079
QIII	.391	.178	.432	.190	.336	.049	.422	.087
11/30/73-4/26/74	.185	.023	.215	.044	.184	.024	.233	.030
5/3/74-9/27/74	.355	.125	.408	.166	.284	.047	.398	.088

[1] Five day averages of closing bid prices for weeks ended on Fridays

[2] Average issuing rate established in weekly auctions on Mondays

Both series report absolute changes.

Table III

Desk Tenders* as Percent of Bills Sold

	1962	1967	1970	1973	1974
QI	24.52	29.77	32.31	52.87	50.28
QII	21.68	34.99	29.28	51.58	56.37
QIII	21.68	32.33	34.73	50.71	57.78
QIV	23.13	34.32	35.11	50.63	

12/6/73 - 4/26/74 52.06

5 /3/74 - 9/26/74 54.34

* For System, foreign official and Treasury trust accounts

Accepted Noncompetitive, System, Treasury and Foreign Account Tenders as Percent of Bills Sold

	1970	1973	1974
QI	55.79	59.16	64.04
QII	53.39	60.81	72.73
QIII	54.08	65.29	70.45
QIV	53.72	64.50	