



American Revolution Bicentennial

# FEDERAL RESERVE BANK OF DALLAS

DALLAS, TEXAS 75222

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## A PERSPECTIVE ON RETURNED CHECKS

TO ALL BANKS IN THE  
ELEVENTH FEDERAL RESERVE DISTRICT:

The volume of unpaid items has been increasing at a substantial rate over the past few years, particularly in the Eleventh Federal Reserve District. As a result of this noticeable increase in return items and the attention brought to the problem by recent Bank Administration Institute studies, the Federal Reserve Bank of Dallas conducted a survey of its own to determine the characteristics of the return item volume processed at the Dallas Office.

The results of the survey are discussed in the attached report, "A Perspective on Returned Checks." The document points out the areas where efforts of the banking community should be concentrated to reduce the return item volume and suggests possible ways to achieve this reduction. We hope the report will stimulate some initiatives in the banking community which might ultimately lead to reductions in the trend of return item growth.

Sincerely yours,

T. W. Plant

First Vice President

Enclosure

Federal Reserve Bank of Dallas

A  
Perspective  
on

# RETURNED CHECKS



# A Perspective on RETURNED CHECKS

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The Federal Reserve Bank of Dallas experiences a disproportionately large number of returned checks (return items, unpaid items) in comparison with other offices of the Federal Reserve System. Furthermore, there has been no improvement in the trend of return items at the Dallas office of the Eleventh Federal Reserve District, although there has been some improvement nationally.

In both 1973 and 1974, for example, the Federal Reserve Bank of Dallas had the third largest volume of return items processed among all Federal Reserve offices, including branches. In 1974, the Dallas office received 13.58 return items per 1,000 checks processed, while the entire Federal Reserve System received an average of 9.17 and the 174 banks surveyed by the Bank Administration Institute in 1973 received an average of 10.84. The proportion of return items to checks processed at the Federal Reserve Bank of Dallas was greater than all but one of the other Federal Reserve head offices and was eighth highest among all Federal Reserve offices, including branches.

The Bank Administration Institute has been studying the check collection system, including the return item problem, for several years and published a research report "The Impact of Exception Items on the Check Collection System" in 1974. The BAI classifies as exception items all MICR rejects, returned checks, and cash letter adjustments.

The BAI found that in 1973, return items accounted for 2/3 of 1 percent of all checks processed; however, return item processing accounted for about 11 percent of total expenditures for check processing. In comparison, at the Dallas Head Office, return items accounted for 1.3 percent of all checks processed in 1974 and return item processing accounted for 5.3 percent of the total expenditures for check processing.

Our consideration of the problem has led to awareness that certain factors probably foster the disproportionately large number of return items received at the Dallas office. One is the generally higher degree of over-the-counter acceptability of checks in this part of the country than in other areas. Another is the growing importance of "free" checking, which might be encouraging a larger number of marginal checking accounts than would be likely if minimum balance requirements were still strict.

Because of the higher than normal rate of returns and the attention drawn to the return item problem by BAI studies, the Federal Reserve Bank of Dallas was prompted to develop its own perspective. It is clear, however, that return item processing is a joint problem that must be minimized through the efforts of the entire banking community.

## **THE OUTLOOK**

The Federal Reserve Bank of Dallas is currently processing approximately 5 million return items annually. Ten years ago, the annual volume of return items was 2.5 million; thus, the average annual growth rate has been approximately 7 percent. Over the same period, the cost of processing return items at the Dallas office has increased at an average annual rate of 11 percent. If the return item volume and processing cost continue to rise at their current rates, the average annual processing cost will increase 50 percent by 1980.

Clearly, return item processing costs will be increasing even faster than they are now. If action is not taken by the commercial banking community before 1980, the Head Office of the Federal Reserve Bank of Dallas alone will be processing approximately 6.1 million return items annually at a cost of over \$310,000. Commercial banks can expect similar growth in volume and in processing costs.

A national study by the Joint Committee on the Check Collection System found that in 1952, 2/3 of 1 percent of all items presented for payment were returned unpaid. This amounted to approximately 50 million return items that year.

According to data submitted by banks participating in the BAI's exception item study, the return item rate for 1973 was about the same as in 1952, even though the check volume has increased threefold. The incidence of return items remained about the same, but the cost of processing them increased more than eightfold, or over two times faster than the check volume.

As the return volume has increased, the banking industry has had to devote more and more effort to processing these items. If the check volume and return item frequency continue their present trends, according to the BAI study, there will be 42.5 billion checks by 1980 and more than 283 million return items annually.

As check volume increases, continuing improvements in check-sorting computer hardware and software enable the banking system to stay reasonably current in terms of processing schedules and throughput. Simultaneously, however, problems created by the slower return-item processing procedures are magnified. In the future, the automated check collection system may begin "creating" return items at a rate that would make it difficult for manual systems to function without incurring prohibitive processing costs.

Currently, the Federal Reserve Bank of Dallas is using low-speed proof machines for processing return items. A manual system is utilized since there is limited uniquely designed

automated equipment available that is economically feasible in the light of current volumes. Equipment manufacturers have not directly addressed the return item problem—and it is not expected that they will in the near term—for two reasons:

1. The return item volume is relatively low compared with regular check volume.
2. The nature of sorting return items—by endorsement—is not exactly adaptable to automated processing at high speeds.

It is generally expected that there will be a reduction in the return item volume and processing costs as the Nation converts more and more to electronic funds transfer systems (EFTS). With the development of automated clearinghouses and point-of-sale systems, procedures for processing unpaid items will probably change, as will the media used in processing them. However, the effects of EFTS on the return item volume will not be felt for at least 5 to 10 years for two reasons:

1. EFTS will first concentrate on company payroll checks and drafts, which account for a very small volume of return items. Most unpaid items are personal checks with "not sufficient funds."
2. EFTS will first be implemented in large urban centers, with later expansion to include the rural areas. Since banks with net demand deposits under \$12 million generate the largest volume of returns, electronic funds transfer systems could not resolve the return item problem until they are more universal.

It is obvious that the banking community can neither wait for EFTS to resolve the return item problem nor rely on equipment manufacturers to develop an automated processing system. These are long-term solutions. The banking community itself needs to take remedial action now to slow the rate of increase in return item volume and processing costs.

### **HEAD OFFICE STUDY**

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To gain further insight into the problem, return item cash letters deposited for credit with the Federal Reserve Bank of Dallas were studied during a one-week period in September 1974. Data were collected for each commercial bank in the Dallas Head Office Territory for one day that week.

The study was made to determine why the items were returned unpaid by the banks and to pinpoint their distinguishing characteristics. It is hoped that the findings of this study are of help to commercial banks in developing a better perspective of the problem and determining where their efforts might be concentrated to reduce the number of return items.

The accompanying tables summarize the data from the study according to bank size. Bank size was determined on the basis of demand deposits of individuals, partnerships, and corporations at the end of 1973.

For the week the information was collected, Table 1 shows the number of banks in each size category, the average number of cash items processed and cleared for the banks, the average number of items returned, and the number of return items per 1,000 items processed. The lower part of the table gives a breakdown of the reasons why items were returned.

Table 1 shows, for example, that the Federal Reserve Bank of Dallas processed an average of 1,018 cash items drawn on each of the 93 banks having demand deposits of \$5,010,000 to \$6,500,000. These banks returned an average of 19.19 items. They had 18.85 return items per 1,000 cash items processed. Of the 19.19 returns per bank, 14.55 were returned because of insufficient funds, 1.88 because of improper endorsement, and 1.28 because the account was closed; the remaining 1.48 items were returned for various other reasons.

Table 2 focuses on the average number of returns, for each bank-size category, broken down according to the type of account and item amount. For example, for the 93 banks with \$5,010,000 to \$6,500,000 in demand deposits, 16.14 of the 19.19 returns per bank were individual, or personal, checks. In the lower part of the table, it is shown that 13.45 of the 19.19 checks were for \$50 or less.

On the basis of these tables and the study, some general observations can be made:

1. The largest volume of unpaid items was returned by banks with demand deposits of \$6,510,000 or more.
2. The number of returns per 1,000 items processed was significantly larger for banks with demand deposits of \$20 million or less than for larger banks.
3. Insufficient funds checks accounted for 79 percent of the returns, and 82 percent of all returns were less than \$100. In comparison, the BAI found that insufficient funds checks comprised 72 percent of the return items volume and 65 percent of all returns were less than \$100.
4. Most unpaid items were individual checks, with company checks and insurance drafts ranking second and third.
5. Banks with less than \$20 million in demand deposits processed a disproportionate number of returns due to insufficient funds in relation to their demand deposits.
6. Although banks with demand deposits over \$100 million processed the largest volume of returns for lack of endorsement, banks with demand deposits under \$3 million processed a disproportionate volume in relation to their demand deposits.

#### **COMMERCIAL BANK SURVEY**

Even before its September 1974 study, the Federal Reserve Bank of Dallas gained insight into the return item problem directly from the banks. A circular letter was sent to all commercial banks in the Eleventh Federal Reserve District on June 26, 1974, citing the high volume of returns and requesting comments and suggestions as to possible solutions for the problem.

A number of bankers commented on a wide range of problem areas and provided some ideas for reducing the return item volume. The problem areas mentioned most often, in order of frequency, were:

1. "Free" checking.
2. Submarginal checking accounts.
3. Service charge on return items.
4. Counter checks.

TABLE 1

	Bank size (Demand deposits—IPC, millions of dollars)										
	\$1 or less	\$1.01 to \$2	\$2.01 to \$3	\$3.01 to \$4	\$4.01 to \$5	\$5.01 to \$6.50	\$6.51 to \$9	\$9.01 to \$12	\$12.01 to \$20	\$20.01 to \$100	\$100.01 or more
Number of banks on which cash items were drawn . . . . .	35	121	86	69	68	93	80	68	66	59	9
Average number at Federal Reserve Bank of Dallas on sample day											
Items processed and cleared for each bank . . . . .	339	627	668	856	1,026	1,018	1,610	1,759	1,928	4,119	19,330
Return items for each bank . . . . .	9.54	11.50	13.22	16.95	20.55	19.19	31.82	29.39	33.86	39.36	82.78
Returns per 1,000 items processed . . . . .	28.14	18.34	19.79	19.80	20.03	18.85	19.76	16.71	17.56	9.56	4.28
Reason for return											
Insufficient funds . . . . .	7.97	8.59	9.45	13.71	16.51	14.55	26.94	24.76	28.36	30.95	42.12
Endorsement . . . . .	.54	.95	1.65	1.14	1.22	1.88	1.75	1.56	1.50	2.25	21.45
Account closed . . . . .	.58	.83	.84	.76	.88	1.28	1.36	1.29	1.88	2.20	3.00
Payee missing . . . . .	.11	.55	.62	.13	.19	.36	.26	.24	.31	.17	.56
Payment stopped . . . . .	.31	.21	.22	.42	.47	.41	.66	.68	.79	1.51	5.11
Signature . . . . .	---	.12	.14	.17	.16	.25	.10	.35	.20	.78	4.00
Unable to locate account . . . . .	.03	.07	.23	.26	.39	.26	.30	.24	.32	.27	1.44
Postdated . . . . .	---	.04	.02	.03	---	.01	.04	.01	.04	.07	.11
Refer to maker . . . . .	---	.04	.01	.01	---	.04	.01	.04	.12	.22	1.22
Uncollected funds . . . . .	---	.04	---	.04	.68	.04	.15	.09	.20	.31	.23
Guarantee/verify amount . . . . .	---	.03	.03	.03	.03	.09	.11	.09	.02	.47	.33
Balance held . . . . .	---	.02	---	.25	.01	.01	.11	.04	.03	.03	.44
Papers not attached . . . . .	---	.01	---	---	---	---	---	---	---	.02	.44
Account garnisheed . . . . .	---	---	.01	---	---	---	.01	---	---	---	---
Authority canceled . . . . .	---	---	---	---	---	---	---	---	.02	---	.67
Maker deceased . . . . .	---	---	---	---	---	.01	.01	---	---	.02	---
Maker says return . . . . .	---	---	---	---	---	---	---	---	.02	.02	.11
Send as collection . . . . .	---	---	---	---	.01	---	.01	---	.02	.05	.33
Stale date . . . . .	---	---	---	---	---	---	---	---	.03	.02	.33
Stolen . . . . .	---	---	---	---	---	---	---	---	---	---	.89



TABLE 2

	Bank size (Demand deposits—IPC, millions of dollars)										
	\$1 or less	\$1.01 to \$2	\$2.01 to \$3	\$3.01 to \$4	\$4.01 to \$5	\$5.01 to \$6.50	\$6.51 to \$9	\$9.01 to \$12	\$12.01 to \$20	\$20.01 to \$100	\$100.01 or more
Number of banks on which cash items were drawn . . . . .	35	121	86	69	68	93	80	68	66	59	9
Average number at Federal Reserve Bank of Dallas on sample day											
Return items for each bank . . . . .	9.54	11.50	13.22	16.95	20.55	19.19	31.82	29.39	33.86	39.36	82.78
Type of account											
Individual checks . . . . .	8.02	10.20	11.48	14.32	16.72	16.14	26.66	24.53	27.48	28.08	36.44
Company checks . . . . .	.89	.94	1.19	1.66	2.65	1.84	3.05	2.47	3.85	4.95	25.00
Insurance drafts . . . . .	.60	.30	.45	.77	.78	1.09	1.83	1.97	2.26	5.04	17.78
Bank money orders . . . . .	.03	.05	.07	.03	.01	.04	.06	.37	.04	1.05	.89
Payroll checks . . . . .	---	.01	.03	.17	.38	.03	.16	.04	.23	.14	1.56
Cashiers' checks . . . . .	---	---	---	---	.01	.05	.06	.01	---	.10	.11
Travelers' checks . . . . .	---	---	---	---	---	---	---	---	---	---	1.00
Item amount											
\$50 or less . . . . .	7.27	8.64	9.69	12.10	13.53	13.45	22.71	20.90	23.27	24.70	43.22
\$50.01 to \$100 . . . . .	.95	1.32	1.78	2.20	2.85	2.62	3.85	3.62	4.39	5.70	12.45
\$100.01 to \$300 . . . . .	.86	1.10	1.25	1.83	2.81	2.03	3.45	3.29	4.11	5.62	17.78
\$300.01 or more . . . . .	.46	.44	.50	.82	1.36	1.09	1.81	1.58	2.09	3.34	9.33



Free checking, or service-charge-free checking accounts, was the most often mentioned cause of insufficient funds checks. The respondents believed that free checking accounts attract the small depositor that maintains an active account with a low average balance. If free-checking service is a primary factor in generating insufficient funds checks, a change to a realistic service charge policy could have a significant impact on the return item problem since at least 70 percent of all returns are NSF items.

The return item service charge was a subject about which the bankers had diverse opinions. Some thought that a stiff service charge for each return item would help reduce the number of returns. Others seemed to think that, because of the amount of income derived from return item service charges, some banks do little to discourage the customer that writes insufficient funds checks. Some of these respondents believed that banks following this practice may not realize that substantial expense is incurred by the other banks in the return item chain. In this connection, one of the bankers said:

I personally believe that this [return item volume] will continue to be a mounting problem until such time that bankers stop relying on the return check charge as a major source of their income. Many of the banks now in the \_\_\_\_\_ area charge \$5.00 for a return check and by advertising the "no service charge checking" they attract the accounts that are more likely to write insufficient checks and more than make it up on these charges.

Many of the bankers thought that a more thorough investigation of individuals should be made before opening new accounts. The consensus of the respondents was that more credit investigations and follow-ups on previous banking connections should be required to help hold submarginal checking accounts to a minimum.

The use of counter checks, according to the bankers citing this problem area, only invites the writing of bad checks. Personalized checks provide better identification, and they signify that the check writer has a bank account.

## **CONCLUSION**

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Generally, then, it is evident that the volume of return items could be reduced, or at least controlled, by making some policy changes. Changes recommended by the BAI in its 1974 exception item study were:

1. Increase the fees charged to customers for return items.
2. Promote the use of overdraft services.
3. Prohibit the return of insufficient funds checks and "refer to maker" items in certain classifications.

The BAI believes that the return item volume could be reduced substantially if such policy changes were made by the banking community.

Taking another approach to the problem, there are at least two types of systems in operation that could also minimize the number of return items. One is being used in Minnesota and Wisconsin. The system works this way: A central service group requires participating banks to report all accounts that are closed as a result of bad account experience. The service maintains a fast-access file of these accounts and can provide information to an inquiring bank in about

10 seconds. The system is used primarily to check on applicants for new accounts. The bank thereby avoids the cost of opening, servicing, and then closing the account of a customer that is likely to write bad checks.

Since this system's inception in the Minneapolis-St. Paul area in 1971, the rate of bad-check clearings has steadily declined. Many of the local grocery and discount store chains have reported that in spite of increased sales volume, NSF items passed in their stores have decreased approximately 20 percent. The Federal Reserve Bank of Minneapolis reported 9.34 returns per 1,000 checks processed in 1970 but an average of only 7.64 in 1973. This system for screening prospective customers was a major factor in reducing the volume of return items.

Other systems that are in operation provide information about a customer's check-writing history, with each individual being assigned a rating based on the frequency of his overdrafts. A system of this type is being used in the Dallas area, primarily by large chain discount and grocery stores. An individual wanting to cash a check at a participating store provides some form of identification that is transferred to a central service bureau. The customer's rating is transmitted back a few seconds later via computerized network, and the likelihood of the store cashing a bad check is minimized. This same system could be utilized by banks. It is relatively inexpensive and would be effective in preventing bad checks from entering the check collection system.

Bankers are urged to review their return item policies and practices, especially in the area of individual checks for less than \$50 that are returned because of insufficient funds. Return item processing costs can represent an unnecessary drain on bank profits, but adoption of more definitive policies would help eliminate a major portion of these costs.

Bankers are also encouraged to recognize that policies to reduce the return item volume must be adopted by all banks before they can be fully effective. Implementation of the recommendations made by the BAI, for example, will require individual banks to change their procedures in the belief that others will change theirs.

Policies to limit return items could result in near-term benefits for the entire banking industry. In addition, however, they would give the industry time to encourage equipment manufacturers, EFTS committees, and related groups to develop return item processing methods that are less labor-intensive.