United States General Accounting Office

GAO

Report to the Secretary of the Treasury

September 1992

TREASURY TAX AND LOAN ACCOUNTS

Changes in Collateral Practices Could Reduce the Federal Government's Risk of Loss

147527

GAO

United States
General Accounting Office
Washington, D.C. 20548

Accounting and Financial
Management Division

B-248490

September 14, 1992

The Honorable Nicholas F. Brady
The Secretary of the Treasury

Dear Mr. Secretary:

This report presents the results of our review of controls over Treasury Tax and Loan (TT&L) account deposits. We examined whether (1) the Federal Reserve Banks adequately review, value, and monitor TT&L collateral and (2) Treasury's TT&L account collateral valuation method places enough emphasis on a security's inherent risk.

This report contains recommendations to you. The head of a federal agency is required by 31 U.S.C. 720 to submit a written statement on actions taken on these recommendations to the Senate Committee on Governmental Affairs and the House Committee on Government Operations not later than 60 days after the date of this letter and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of this letter.

We are sending copies of this report to the Director, Office of Management and Budget; Chairman, Board of Governors of the Federal Reserve System; interested congressional committees; and other interested parties. Copies will be made available to others upon request.

Sincerely yours,

Brian P. Crowley for

Donald H. Chapin
Assistant Comptroller General

Executive Summary

Purpose

Treasury collects the majority of the government's tax revenue using the Treasury Tax and Loan (TT&L) program, which is administered by the Federal Reserve Banks (FRBS) through almost 14,000 financial institutions designated as federal depositaries allowed to accept federal tax deposits. During fiscal year 1991, Treasury collected over $875 billion through TT&L accounts. Another $1.3 billion was earned in interest from these deposits. GAO believes that recent financial institution failures underscore the importance of securing TT&L accounts through sufficient collateral to protect the government from substantial losses. Therefore, GAO examined the security of TT&L accounts at 6 of the 12 FRBS to determine whether (1) FRBS adequately review, value, and monitor TT&L collateral and (2) Treasury's TT&L account collateral valuation method places enough emphasis on a security's inherent risk.

Background

If a TT&L depositary fails, GAO believes that the government could incur a potentially large loss. Treasury requires TT&L depositaries to pledge enough collateral to secure TT&L accounts, thus protecting the government's interest.

Treasury specifies (1) categories of securities that are acceptable as collateral and (2) the percentage of a security's face (or principal) value that may be used as collateral for each category. FRBS are responsible for seeing that TT&L account collateral is reviewed fully and promptly, valued correctly, and monitored properly.

Results in Brief

GAO found that FRBS (1) valued similar securities differently, (2) did not adequately monitor collateral to ensure that its value does not diminish, and (3) accepted as TT&L collateral securities that were not allowed by Treasury's guidelines. These problems which tend to increase Treasury's risk of loss were attributable to (1) reviews of TT&L collateral that were often incomplete and late, (2) valuation procedures that were inconsistent among FRBS, and (3) monitoring practices that were weak and based on inaccurate data contained in automated systems. As GAO made the FRBS aware of these problems, they initiated corrective actions.

Although Treasury told GAO it had not lost funds due to insufficient TT&L account collateral, Treasury's prescribed method for valuing the collateral did not place enough emphasis on a security's inherent risk and was difficult for FRBS to administer. Treasury's objective of protecting the government's interest would be more fully met if the Federal Reserve implemented additional measures. GAO pointed out that Treasury could heighten its focus on a security's risk by revising its TT&L account collateral valuation method. FRB officials agreed that adopting a TT&L account collateral valuation method that gives greater emphasis to risk would be feasible, not be difficult to implement, and better meet Treasury's objective.

Principal Findings

FRBs' Security Reviews Were Not Always Timely or Thorough

FRB reviews of securities before accepting them as TT&L account collateral were not always timely or thorough. As a result, millions of dollars pledged as collateral were either (1) unallowable by Treasury's guidelines or (2) undocumented, making them difficult to sell in the event of depositary failures. The procedures used to review collateral for acceptance varied at the FRBs included in GAO's review. In total, GAO's sample identified $160 million in securities which were not allowable under Treasury regulations but which had been accepted by FRBs. Also, the sample identified 194 securities valued at over $1.2 billion which were accepted by FRBs but were not adequately documented. This result indicated that Treasury was not assured that FRBs had accepted only allowable and documented securities as TT&L account collateral, thereby increasing the risk that depositaries' TT&L accounts were under collateralized.

FRBs Did Not Value Collateral Consistently

FRB procedures for valuing TT&L account collateral were not consistent. For example, one FRB maintained a list of companies whose commercial loans were acceptable as TT&L account collateral and assigned a rating that was uniformly applied in determining collateral values. Another FRB applied Treasury's guidelines to value commercial loans after first considering the loan risk assigned by TT&L depositaries' own loan risk rating systems, but without reviewing these systems. In one case, a depositary's loan risk rating system was not adequate. The depositary later failed but without loss to Treasury.

FRBs Did Not Have Complete and Accurate Information for Monitoring Collateral

FRB automated systems that provide information to monitor TT&L account collateral had inaccurate data, and other practices designed to help monitor collateral values were weak. GAO's sample showed over 400 instances, involving securities valued at more than $3 billion, where the

FRBs' automated records were in error, thus limiting their usefulness in monitoring the value of TT&L account collateral. Also, the sample identified instances where (1) FRBs could not locate trust receipts documenting securities held by others, (2) collateral held by third party custodians was not properly verified, and (3) FRBs did not know the face amount of securities. GAO believes that fundamental control information and procedures, such as knowing and verifying the location and face amount of TT&L account collateral, are essential to ensure that collateral exists and are necessary to ensure that its value has not deteriorated.

TT&L Collateral Method Needs to Place Greater Emphasis on Risk

GAO believes that Treasury's prescribed method for valuing TT&L account collateral is difficult for FRBs to administer because, for example, it requires them to subjectively decide the level (that is, percentage of face or principal value) at which a security is to be valued. In practice, the maximum allowable collateral percentages are used and no substantive risk evaluation is made for the vast majority of TT&L account collateral. GAO's review of 3,705 securities showed that over 85 percent had collateral percentages equal to the maximum Treasury allows. Thus, FRBs' implementation of Treasury TT&L account collateral guidelines has evolved into a formula-based process which does not emphasize a security's risk or fully meet Treasury's objective to value collateral at not more than its related risk.

Further, the method of valuing TT&L account collateral is not working well or consistently. For example, Treasury's prescribed percentages do not recognize varying credit risks within the same category of collateral. Also, some FRBs value almost all marketable commercial loans at 90 percent while other FRBs perform a credit analysis of individual securities.

A Revised Risk-Based Valuation Method Is Feasible

The problems associated with Treasury's TT&L account collateral valuation method can be overcome by requiring that FRBs value individual securities and rate them based on their risk. GAO proposed a method for doing this and made related improvement suggestions, such as (1) valuing Treasury and federal agencies' securities based on estimated fair market value and (2) using automated information from security risk rating agencies. By making these revisions, Treasury could have greater assurance that TT&L accounts are not undercollateralized. These revisions should also ensure accurate collateralization amounts for the pledged securities.

Recommendations

To help ensure that TT&L account collateral is sufficient to protect the government's interest, GAO recommends a number of actions to improve FRB review, valuation, and monitoring practices. These actions would include (1) accepting depositaries' securities prior to review only when prudent and warranted, (2) rejecting undocumented collateral, and (3) performing comprehensive monthly collateral assessments.

Also, GAO recommends that Treasury revise its prescribed TT&L account collateral valuation method to better emphasize the risk associated with the collateral.

Agency Comments

The Department of the Treasury and the Board of Governors of the Federal Reserve System provided written comments on a draft of this report. Both stated their belief that the program was reasonably managed and agreed with the thrust of GAO's recommendations. Nevertheless, the Federal Reserve characterized the problems GAO identified as isolated instances. GAO disagreed, stating that collectively, the problems it found showed that TT&L account collateral review, valuation, and monitoring can be improved. GAO's review found that 20 percent of the definitive securities reviewed, representing 28 percent of the collateral value sampled, had one or more of the problems discussed in this report (see appendix III). Therefore, GAO stated that these conditions are serious and require attention. The Federal Reserve said that it was pursuing an alternative to GAO's proposed approach for valuing TT&L collateral and expressed reservations about whether monthly evaluations of collateral would be cost effective. Although the Federal Reserve did not agree with GAO's specific recommendation regarding monthly revaluation of collateral values, it did agree with the intent of the recommendation and will explore cost-effective alternatives.

Contents

Executive Summary		2
Chapter 1 Introduction		8
	TT&L Account Collateral	8
	Objectives, Scope, and Methodology	9
Chapter 2 Sufficient Collateral to Secure TT&L Accounts Is Not Assured		12
	Collateral Review Is Often Incomplete and Late	12
	Similar Securities Are Valued Differently	14
	Effectiveness of Monitoring Collateral Is Reduced by Inaccurate Data and Other Problems	16
	FRBs Are Taking Corrective Actions	18
	Conclusions	18
	Recommendations	19
	Agency Comments and Our Evaluation	19
Chapter 3 Alternative Collateral Valuation Method Can Better Assess Risk		21
	Treasury's Formula-Based Valuation Process Does Not Adequately Consider Risk	21
	A Revised Valuation Method Is Feasible	24
	Conclusions	27
	Recommendations	27
	Agency Comments and Our Evaluation	28
Appendixes	Appendix I: Comparison of Judgmental Sample and Universe of Definitive Securities	30
	Appendix II: Collateral Examined in Judgmental Sample of Definitive Securities	31
	Appendix III: Discrepancies in the Judgmental Sample of Collateral	32
	Appendix IV: Range of Investment Grades Acceptable for TT&L Account Collateral	33
	Appendix V: Comments From the Department of the Treasury	34
	Appendix VI: Comments From the Board of Governors of the Federal Reserve System to the Department of the Treasury	39
	Appendix VII: Major Contributors to This Report	48
Tables	Table 3.1: Categories of Collateral Acceptable for Treasury Tax and Loan Accounts and the Related Maximum Values	22

Table 3.2: Alternative Functional Areas for Valuing Treasury Tax and Loan Collateral 24

Figure

Figure 3.1: Comparison of Valuation Methods for a State Security 26

Abbreviations

FRB	Federal Reserve Bank
GAO	General Accounting Office
TT&L	Treasury Tax and Loan

Introduction

The Department of the Treasury collects the majority of the government's tax revenue through the Treasury Tax and Loan (TT&L) program. During fiscal year 1991, over $875 billion was collected through this program, which earned about $1.3 billion in interest from deposits held in TT&L accounts. If a TT&L depositary fails, the government could incur a large loss. To avoid this possibility, Treasury requires TT&L depositaries to pledge enough collateral to secure their TT&L accounts, thus protecting the government's interest.

The TT&L program is administered by the Federal Reserve system through its Board of Governors and 12 Federal Reserve Banks (FRBS). The FRBS have designated almost 14,000 financial institutions as federal depositaries allowed to accept federal tax deposits. These tax deposits come from a variety of sources, including collection of social security, income, and excise taxes. TT&L depositaries can include commercial banks, credit unions, and savings and loan institutions throughout the country.

As permitted by Public Law 95-147, Treasury also deposits operating funds in excess of its immediate needs in TT&L accounts. As funds are needed by Treasury to pay for goods and services, TT&L depositaries are notified through FRBS to transfer funds from TT&L accounts to the Treasury FRB accounts.

TT&L Account Collateral

According to TT&L Depositaries Regulations (31 CFR 203.15), depositaries must pledge securities of sufficient value to secure the anticipated balances in TT&L accounts before accepting deposits. Securities pledged as collateral can either be electronic securities or definitive securities. Definitive securities are supported by paper-based documentation, whereas electronic securities, commonly referred to as book entry securities, are not substantiated though paper-based transactions.

The collateral must be deposited with an FRB or FRB-designated custodian. Treasury specifies to FRBS (1) the categories of securities that are acceptable as TT&L account collateral and (2) the collateral value, expressed as a percentage, that may be applied to a security's face value for each category.[1] (See table 3.1 in chapter 3 for the Treasury guidelines.) Treasury's guidelines provide, for example, that (1) federal government securities are generally valued at 100 percent of face value, (2) state government securities may be valued up to 90 percent of face value, and

[1]The face value for some securities, such as commercial loans, is the principal amount due the lender.

(3) local government securities may be valued up to 80 percent of face value.

For commercial loans pledged by a depositary as TT&L account collateral, FRBs determine the actual collateral percentage to be applied based on a review of the risk associated with the particular security. Treasury relies on FRBs, in their capacity as fiscal agents, to ensure that collateral pledged is consistent with Treasury requirements and adequate to secure all TT&L accounts. Treasury officials stated that, to their knowledge, Treasury has not, to date, lost funds due to insufficient TT&L account collateral. Normally, the amount of collateral pledged by an institution is in excess of the TT&L account balance which further reduces Treasury's risk of loss.

Objectives, Scope, and Methodology

We believe that recent financial institution failures underscore the importance of Treasury's requirement that collateral pledged to secure TT&L accounts be sufficient to avoid potentially large losses if a TT&L depositary fails. Thus, our objectives were to determine whether FRBs (1) adequately review securities pledged by TT&L depositaries before accepting the securities as TT&L account collateral, (2) properly value collateral in accordance with Treasury guidelines upon acceptance, and (3) monitor collateral after acceptance to assure that its value has not diminished. An additional objective was to determine whether Treasury's prescribed TT&L account collateral valuation method adequately considers a security's inherent risk.

To examine TT&L account collateral review, valuation, and monitoring practices, we visited FRBs located in Boston, New York, Philadelphia, Richmond, Chicago, and San Francisco. These six FRBs were selected because they provide geographic coverage and include the three largest of the Federal Reserve's 12 banks. Also, the FRBs where we did our work processed about 70 percent of the funds collected through TT&L accounts during calendar year 1991.

At the time we selected securities for examination, which was between January 15, 1991, and March 28, 1991, the six FRBs we visited held 18,546 securities, valued at over $21 billion, as TT&L account collateral. At each FRB visited, we picked for examination all high-dollar value securities pledged as TT&L account collateral. (We judgmentally determined the high-dollar value cut off, which differed for each FRB and ranged from $100,000 at FRB Philadelphia to $2 million at FRB New York.) In addition, we chose a random sample of 15 securities of lesser value at each bank.

In total, we selected 3,975 securities for examination. We examined 3,705 securities, which were valued at almost $17 billion and represented 78 percent of the total collateral pledged to the FRBs included in our review.[2] Appendix I includes specific information on the sample selected for each bank and appendix II shows a listing of the type, number, and value of collateral examined. The securities we examined were selected from the data provided by the FRBs. To satisfy ourselves as to the reliability of the data base used, we performed substantive testing of the data during our examination of the securities.

We determined whether each of the securities in our sample was in a category acceptable to Treasury and valued in accordance with Treasury's guidelines. We compared the information in FRB collateral records to the securities held at the banks to determine if the FRBs' securities records were accurate in areas such as maturity dates, principal amounts, and collateral amounts. Also, we determined the FRBs' process for valuing collateral and whether documentation supporting the authenticity of securities pledged as collateral was readily available and adequate.

For book entry collateral, we accepted the amounts shown in FRB records as accurate because FRBs do not have documentation on this type of collateral, which is comprised of federal securities and securities issued or fully guaranteed by either the World Bank, Inter-American Development Bank, Asian Development Bank, or the African Development Bank. Also, for items in our sample that were held by third party custodians, we limited our review to FRB-held custody receipts because further review would have involved work at 50 custodians which we considered to be impractical. Further, the absence of readily available market values for commercial loans prevented us from determining if TT&L account collateral values accurately reflected the current realizable value of these securities.

We discussed TT&L account collateral procedures with cognizant representatives at Treasury's Financial Management Service, the Board of Governors of the Federal Reserve System, and the FRBs we visited. We also discussed with these organizations' representatives efforts to improve TT&L account collateral processes, including a new system to control and monitor collateral being developed by FRB Philadelphia. We discussed whether the system will address the problems we identified and what, if any, additional enhancements may be required.

[2]We did not examine 270 items in the sample because they had been redeemed by financial institutions.

We performed our field work from January 1991 through May 1992. Our audit was performed in accordance with generally accepted government auditing standards. We requested comments on a draft of this report from the Department of the Treasury. Treasury in turn requested comments from the Board of Governors of the Federal Reserve System. We have included both sets of comments in the report. They are evaluated in chapters 2 and 3 and are presented in appendixes V and VI.

Chapter 2 discusses weaknesses in TT&L account collateral review, valuation, and monitoring practices and the corrective actions taken by the Treasury and the Federal Reserve. Chapter 3 discusses an approach Treasury can use to ensure that the collateral valuation process is based on the risks associated with the accepted securities.

Sufficient Collateral to Secure TT&L Accounts Is Not Assured

To adequately protect the government's interest if a TT&L depositary fails, FRBS are responsible for seeing that TT&L account collateral is reviewed fully and promptly, valued correctly, and monitored properly. However, FRBS do not always review TT&L account collateral before it is accepted. And when it is reviewed, the reviews are often not complete. Also, FRBS are inconsistent in their valuation procedures, which allows the same types of securities to be valued differently. In addition, FRBS monitor accepted collateral using information that may be inaccurate, which precludes effective monitoring to ensure that collateral values do not diminish. We believe that unless improvements are made in these areas, Treasury does not have assurance that 100 percent of the billions of dollars it invests in TT&L accounts is secured by sufficient collateral. FRBS have efforts underway to improve their TT&L collateral practices.

Overall, our sample found 915 discrepancies, involving errors such as accepting unallowed securities and misapplying Treasury's valuation method, related to 759 securities held as TT&L account collateral valued at $4.7 billion. A summary of the sample results is shown in appendix III.

Collateral Review Is Often Incomplete and Late

FRBS do not always review securities in a timely or thorough manner before accepting them as TT&L account collateral. As a result, hundreds of millions of dollars in unallowable and undocumented securities are being pledged as collateral. To protect the government's interest, Treasury requirements preclude FRBS from accepting certain types of securities, such as foreign commercial loans, as TT&L account collateral. Although FRBS are not specifically required to do so by Treasury, we believe they should examine the documentation supporting a pledged security to determine whether it is allowable before accepting it as collateral. We also believe that without timely and thorough advance review of securities pledged as TT&L account collateral, Treasury risks TT&L depositaries' accounts being secured by unallowable collateral and containing undocumented securities, which would make liquidation of collateral difficult in case a depositary fails.

The procedures used to review collateral for acceptance varied widely at the six FRBS we reviewed. Only three of the six FRBS reviewed the commercial loans before they were accepted from TT&L depositaries as collateral. Three FRBS accepted some securities as collateral before their review. Two of these FRBS accepted commercial loans as collateral before performing a credit review. In some cases a credit review was not performed. For example, one FRB accepted securities with a principal value of over $1.1 billion as collateral and assigned a collateral value of over $1 billion even though it does not routinely perform credit reviews. Another FRB established a procedure whereby the collateral of several depositaries was reviewed on a sample basis once a year rather than in full prior to acceptance, as was done with the collateral of this FRB's other depositaries.

Regardless of when reviews were performed, they were not always completed in a manner that assured the collateral was allowable and documented. For instance, one FRB accepted a foreign commercial loan, which is not permitted by Treasury regulations, from a depositary as collateral valued at over $12.8 million. In another case, a $4.3 million domestic commercial loan pledged to secure a TT&L account had a maturity date of September 30, 1995, which was 3 years beyond Treasury's 2-year maturity limitation for such loans.[1] In total, our sample identified $160 million in securities which were not allowable under Treasury regulations but which had been accepted by FRBs.

We identified 194 securities valued at over $1.2 billion which were accepted by banks but were inadequately documented. For example, one FRB accepted collateral with a TT&L account value of over $264 million without requiring the depositary to submit the original notes, which are necessary to assure the FRB that the notes had not been redeemed and to dispose of the pledged assets if the pledging depositary fails. Subsequently, this FRB changed its procedures to require pledging depositaries to submit original loan agreements and documentation supporting all loans used as collateral.

In addition, we identified 43 securities valued at $88.9 million that were not properly documented or had transfer restrictions preventing their assignment to an FRB. In these cases, the securities did not show that they were pledged as security to the FRB, or powers of attorney executed by the depositaries were not documented. We believe that without such documentation, it would be difficult for an FRB to obtain a realistic valuation of these securities and sell them to a third party should the institution fail. We also believe that a third party would require original loan documentation before it purchased a security that had been used as collateral. Thus, the FRBs' control of collateral would be improved if Treasury required that undocumented collateral be rejected.

[1]On February 13, 1992, Treasury removed the requirement that limited the acceptance of commercial paper with a maturity date of 2 years or less.

We believe that the timeliness and quality of FRB reviews of collateral securing TT&L accounts could also be enhanced if Treasury required that FRBs only accept depositaries' collateral prior to review when circumstances warrant, such as when a depositary has capital ratios exceeding a threshold consistent with that of a healthy financial institution. In such cases, a timely subsequent review, such as within 5 days, could also be required.

Similar Securities Are Valued Differently

TT&L account collateral is not always consistently valued. FRBS use different methods for valuing commercial loans such as promissory notes because Treasury has not required consistent valuation of similar securities. Also, FRB representatives told us they have difficulty valuing Treasury securities at market. We believe that one reason the objective of valuing Treasury securities at market has not been achieved is that FRBS are attempting to value these securities individually, whereas an overall estimate would suffice. In our opinion, when TT&L account collateral is inconsistently or improperly valued, FRBS cannot be assured that TT&L depositaries pledging collateral are treated fairly, and Treasury cannot be assured that TT&L account collateral is being correctly valued.

Treasury assists FRBS in valuing TT&L account collateral through general guidelines, such as those which prescribe the extent, usually expressed as a percentage, to which the face amount of various categories of securities are to be valued. (See table 3.1 in chapter 3.) Treasury has not prescribed specific procedures for FRBS to follow in establishing values for TT&L account collateral below the maximum allowed. Thus, individual FRBS use local procedures for valuing TT&L account collateral. Although 46 percent of the TT&L account collateral held by the FRBS we visited was commercial loans, the FRBS used different procedures to accept and value this type of collateral. For example, one FRB maintains a list of companies reviewed by the credit department. These companies are assigned a rating which is used to apply an overall TT&L collateral value to each company's commercial loans.

Another FRB applied Treasury's percentages to value commercial loans after first considering the loan risk assigned by TT&L depositaries' own loan risk rating systems. However, we were told that the FRB did not review the depositaries' systems, although the Office of the Comptroller of the Currency cautioned that one depositary's loan risk rating system was inadequate. This depositary later failed.

We were told by several FRB representatives that Treasury securities are another type of TT&L account collateral that is difficult to value. The Federal Reserve has proposed a policy to value these securities at market. This proposed policy has been partially implemented. In our opinion, the FRBs' present manual process for valuing Treasury securities at market is time consuming, error prone, and costly. For example, in order to determine the market value for a portfolio of Treasury securities, the market value for each security must be determined manually. Officials at four FRBs told us that as a result, they applied the policy only to identified troubled depositaries. Officials at one FRB told us that adjustments were made to bring a depositary's total TT&L account collateral to market value for Treasury securities, rather than adjusting values of individual collateral items.

Treasury and Federal Reserve Board officials told us that in the near future, FRBs will be required to value all forms of TT&L account collateral at market. We believe that this will be difficult for FRBs to achieve, considering their experience in applying the market value concept to Treasury securities. To help meet this requirement, FRBs plan to obtain automated information on security market values from national rating services for those securities for which the information is available. Subscribing to an automated security rating system from a recognized rating agency would help FRBs value securities consistently and facilitate determining market value for many, but not all, types of securities.

FRBs plan to use a manual approach to determine market values for securities—including Treasury and federal agencies' securities and commercial loans—that cannot be obtained in an automated form. In our opinion, changing interest rates are the principal risk for Treasury and federal agency securities. Therefore, the market value for these securities could be estimated by comparing a security's stated interest rate and maturity date to the current market interest rate for comparable securities and, using standard formulas, calculating the change routinely. We presented the details of using such an estimating technique to FRB officials, who readily agreed that this approach would be easier and more economical than the planned method. (Chapter 3 discusses how market values would be determined for the other types of securities.)

Effectiveness of Monitoring Collateral Is Reduced by Inaccurate Data and Other Problems

The value of many types of securities pledged as TT&L account collateral changes, as would be the case for loans involving monthly payments of principal and interest. Accordingly, monitoring their value is a vital part of ensuring that accounts are adequately collateralized. We found that FRBS do not have a complete and accurate picture of TT&L account collateral values. Although FRBS monitor the value of TT&L account collateral to help ensure that these accounts are sufficiently collateralized, the FRBS' automated systems that provide information as a basis for monitoring individual securities pledged as collateral contain inaccurate data, and other practices designed to help monitor collateral values are weak. We believe that the government's risk increases if the value of TT&L account collateral is not examined using current and correct financial information and other strong monitoring practices.

Automated systems contain data on each security pledged as TT&L account collateral and, thus, provide a primary source of information for carrying out FRBS' monitoring responsibility. These systems contain an array of pertinent records, such as (1) the outstanding principal on a loan pledged as collateral, (2) the percentage of a pledged security's face value allowable by Treasury, and (3) a security's maturity date.

Our sample showed over 400 instances, involving securities valued at more than $3 billion, where the FRBS' automated records contained erroneous data, thus limiting the records' usefulness in monitoring the value of TT&L account collateral. We identified the following problems with data in FRB automated TT&L account collateral data bases.

- The outstanding principal on $740 million in loans pledged as collateral was overstated. Based on information provided by depositaries, FRB records of the outstanding principal amounts on its collateral are to be adjusted, at least semiannually, when debtors repay principal to TT&L depositaries, thereby ensuring that FRB TT&L account collateral records do not show a value greater than the value of a security. However, we found, for instance, that in February 1991 one FRB had recorded no principal reductions on a mortgage with collateral value of over $18 million, despite the underlying loan requiring principal repayments beginning 6 months earlier in September 1990.[2] The procedures used by this FRB required such

[2]If principal repayments had been made by the debtor to the TT&L depositary, as required by the terms of the mortgage, but the FRB had not reduced its records of the outstanding balance related to this collateral, the FRB's records of the outstanding balance would have been overstated, possibly resulting in the depositary's TT&L account being undercollateralized. Conversely, if the principal repayments had not been made, the loan would have been in default and, therefore, we believe should no longer be eligible for TT&L collateral.

securities to be revalued monthly. In another case, an FRB's records of a revolving line of credit, in which a TT&L depositary shared an interest along with other financial institutions, was overstated by $14.5 million on December 31, 1990. Because the line of credit required the debtor to make principal repayments in specified amounts and on particular dates, the TT&L depositary's interest in the line of credit should have been reduced from $59.7 million to about $45.2 million.

- Our sample identified 58 securities, with a total TT&L account collateral value of about $647 million, for which the allowable collateral percentages were erroneously shown on FRB automated records. (Table 3.1 identifies maximum allowable percentages related to various categories of securities.) When this information is incorrect, collateral values will be overstated or understated because these percentages are used, along with the face values of securities, to calculate collateral values. For instance, one FRB's automated records showed that 100 percent of a $477 million commercial loan pledged by a depositary had been accepted as collateral to secure a TT&L account. Treasury requirements allow a maximum of 90 percent of the face value of a commercial loan to be eligible as collateral; thus, in this case, the collateral's value was overstated by $47.7 million.
- For 202 securities valued at about $1.5 billion, a review of the FRB data bases showed incorrect or omitted maturity dates or securities that had matured which Treasury does not allow to be pledged as collateral. Matured securities have either been redeemed or are in default. We believe that maturity errors in the data bases seriously diminish the value of automated systems to ensure that TT&L account collateral does not include matured or other ineligible securities, which would cause the overall value of collateral to be overstated.

In addition to inaccuracies in the data bases, other problems further reduce the FRBs' ability to adequately monitor TT&L account collateral value. For example, one FRB could not locate trust receipts documenting that others held TT&L account collateral of $9 million in securities pledged by a depositary. Also, although collateral held by third party custodians represents about 37 percent of TT&L account collateral, FRBs used inconsistent procedures for independently confirming the existence and verifying the value of this type of collateral. According to FRB officials, two FRBs required monthly confirmations, two others performed semi-annual or annual confirmations, and the remaining two FRBs required no confirmations. Further, we found instances where two FRBs did not know the face amount of securities. Basic information, such as knowing a security's location and face value and confirming its existence if third parties are involved, is fundamental to exercising adequate control over

TT&L account collateral and necessary to facilitate the sale of collateral if the depositary were to fail.

FRBs Are Taking Corrective Actions

FRB officials at each of the six banks we visited agreed that the discrepancies we identified constituted review, valuation, and monitoring problems. The FRBs were extremely responsive and, almost concurrently with our audit, began to address these issues. For example, each of the FRBs took immediate actions to correct problems related to specific securities included in our sample. Also, two FRBs completely verified selected portions of their data bases, and two others made significant changes to their procedures for processing collateral.

In addition, FRB Philadelphia is developing a new system to provide information to help value and monitor definitive securities. The system, which was under development before our review, would address several of the problems we identified. For example, FRB officials explained that the system, if implemented as intended, would automatically identify (1) collateral that provides for principal repayments and (2) incorrect percentages assigned to pledged securities. According to FRB officials, most FRBs plan to implement the new system during 1992 and 1993.

Even with the new system for definitive securities and the corrective actions initiated by FRBs, some of the inconsistencies we noted may continue. We believe that while standardized TT&L account collateral review, valuation, and monitoring procedures would not be necessary, there may be opportunities for more uniform FRB practices in some areas. For example, the benefits and protection afforded by timely reviews could be communicated among FRBs.

Conclusions

FRBs can improve TT&L account collateral review, valuation, and monitoring and have begun making improvements. Review of securities pledged as TT&L account collateral is not timely or thorough, even though prompt and complete reviews would help ensure that FRBs accept only TT&L account collateral that is allowable and properly documented. Also, FRBs are not consistent in valuing pledged securities, which is necessary to help ensure that depositaries' TT&L accounts are not undervalued. Further, the effectiveness of monitoring practices to ensure that the value of accepted TT&L account collateral does not diminish is reduced by automated systems that contain inaccurate information. Accurate data on the collateral are fundamental to determining whether TT&L account collateral is maintained at a level to avoid losses in case of depositary failures.

Recommendations

To help ensure that TT&L accounts are secured by sufficient collateral to protect the government's interests, we recommend that the Secretary of the Treasury direct the Federal Reserve Banks to

- review securities offered as collateral prior to acceptance, accept depositaries' securities as collateral prior to its being reviewed only when circumstances indicate that delayed review is prudent and warranted, and reject collateral when FRB reviews show that pledged securities are not allowable or adequately documented;
- use automated information from security rating services to determine the market value of those securities for which such information is available;
- estimate the market value for Treasury and federal agency securities pledged as TT&L account collateral by comparing the securities' stated interest rates and maturity dates to the current market interest rate for comparable securities;
- perform monthly collateral assessments, which would include verifying the accuracy of records used to monitor collateral and confirming the location of securities pledged as collateral; and
- share among FRBs information on effective TT&L account collateral review, valuation, and monitoring practices.

Agency Comments and Our Evaluation

In commenting on a draft of this report, the Department of the Treasury and Federal Reserve agreed with the thrust of our recommendations and referred to their on-going efforts to maintain the quality, flexibility, and viability of the TT&L collateral program. Overall, Treasury found our recommendations valuable for improving what it considers a reasonably managed collateral program.

The Federal Reserve stated that the problems we reported characterized a small percentage of TT&L collateral pledged, occurred randomly in a few of the FRBs visited, and did not represent prevailing conditions. It noted that corrections had already been made or that the collateral in question had been reconsidered and subsequently accepted. We disagree. Our review found that 20 percent of the definitive securities reviewed, representing 28 percent of the collateral value sampled, had one or more of the problems discussed in this chapter (see appendix III). The problems our analysis of TT&L collateral identified (1) involved 6 of the 12 FRBs, including 3 of the largest, (2) represented the highest dollar value definitive securities pledged as collateral at each of the FRBS, and (3) covered about 20 percent of the securities the FRBS held as collateral and 78 percent of the total collateral dollar value at the time of our work. While problems of a particular nature did not involve all the securities reviewed at every location visited, the weaknesses we found show that TT&L account collateral review, valuation, and monitoring can be improved. Thus, notwithstanding the FRBS' prompt actions to correct the individual problems we brought to their attention, the existence of these problems demonstrates that changes in TT&L collateral practices could reduce the federal government's risk of loss.

While expressing the view that the FRBS' procedures for valuing commercial loans protect Treasury balances overall, the Federal Reserve agreed that the FRBS did not use uniform valuation procedures and stated that it would explore with Treasury whether a uniform approach is feasible. As this chapter points out, we believe that a uniformly applied valuation process would help ensure that depositaries' TT&L accounts are properly collateralized.

The Federal Reserve did not agree with our recommendation for the monthly revaluation of collateral values. The Federal Reserve expressed concern that the efforts to verify the accuracy of records used to monitor collateral and confirm the location of securities pledged as collateral should not cost more than the benefit derived from the assessment. Variations of detailed monthly assessments are possible and could be explored to find an appropriate cost-benefit approach.

Alternative Collateral Valuation Method Can Better Assess Risk

Treasury's objective is that TT&L collateral values not exceed the related risk, thus assuring that the government's interests are fully protected. However, Treasury's prescribed method for valuing TT&L account collateral does not adequately protect the government because (1) it does not recognize varying risks within categories of collateral, (2) it is difficult to administer, and (3) the FRBs' implementation of the method has evolved into a formula-based process. Using Treasury's prescribed method for valuing TT&L account collateral can result in TT&L account securities being undercollateralized. By revising its method to emphasize a more risk-based valuation approach, Treasury could have greater assurance that TT&L account collateral values fully recognize risk associated with the underlying securities. Also, securities with similar risks would be valued consistently among the FRBS.

Treasury's Formula-Based Valuation Process Does Not Adequately Consider Risk

Treasury's prescribed method of valuing TT&L account collateral based on risk is not working well. In practice, the maximum collateral valuation percentages prescribed by Treasury are used and no substantive risk evaluation is made for the vast majority of TT&L account collateral. Our review of 3,705 securities showed that over 85 percent were assigned collateral percentages that equaled the maximum collateral percentage allowed for that type of security. Thus, it appears that the FRBS generally use the prescribed formula and do not analyze the risk associated with a specific security.

We believe that a key to maintaining acceptable levels of collateral lies in analyzing the risks of securities that are presented by depositaries as collateral. In addition, analyzing a security's risk is a complex matter which demands that the security's value as collateral not be placed (1) too high, in which case the government could lose in the event a depositary forfeits collateral, or (2) too low, in which case a depositary's assets could be needlessly restricted through FRB requests for additional collateral. As discussed in chapter 2, we found examples where collateral was overvalued. We also found cases where similar securities were valued differently among the FRBS. For example, municipal bonds issued by one entity had collateral percentages ranging from 50 to 80 percent although the bond ratings did not justify the difference.

Table 3.1 shows the Treasury guidelines in effect when our review was performed and specifies the maximum percentages that may be applied.

Table 3.1: Categories of Collateral Acceptable for Treasury Tax and Loan Accounts and the Related Maximum Values

Security category	Maximum collateral valuation[a] (Percentage)
Securities issued, or fully insured or guaranteed, by the U.S. government or a U.S. government agency or obligations of government-sponsored corporations	100
Securities issued or fully guaranteed by the World Bank, Inter-American Development Bank, Asian Development Bank, or African Development Bank	100
Securities partially insured or guaranteed by a federal agency	100[b]
Student loans[c]	100
General obligations issued by states	90
General obligations of Puerto Rico	90
Obligations of counties, cities, and other governmental authorities	80
Obligations of domestic corporations and private mortgage-backed securities which may be purchased by national and state-chartered Federal Reserve member banks as investment securities for their investment portfolios	80
Commercial and agricultural paper and bankers' acceptances	90
Zero-coupon U.S. government obligations	100[d]

[a]Percent of face value except where noted. Face value is defined as the principal amount of the security less principal payments made.

[b]Based on 100 percent of insurance or guarantee amount.

[c]Federal Student Loan Guarantee Program. These loans can only be held until payment begins.

[d]Based on the value determined by Treasury.

On February 13, 1992, Treasury revised its guidelines and generally lowered its maximum allowable percentages. This action was taken to ensure that the TT&L collateral valuations were consistent with Federal Reserve System guidelines for valuing the same types of securities pledged to secure borrowings from the FRBs. The maximum percentages in both sets of guidelines appear to be based on the risks associated with the categories of security.

FRBs have discretion in deciding appropriate percentages for individual securities up to and including the maximum valuation authorized. However, Treasury's guidelines do not provide guidance on how to consider a particular security's risk in deciding on the appropriate percentage to be used.

For example, Treasury's percentages do not inherently recognize that varying credit risks exist within the same category of collateral. Securities issued by counties, cities, and other municipal authorities have different investment grades, ranging from a AAA rating for the least risky to BBB for those with greater risk. See appendix IV for a description of the various investment grade ratings. In our opinion, therefore, each FRB must decide the extent to which, or whether, these securities' investment ratings will be a factor in assigning a value.

Further, state securities can be valued at Treasury's maximum percentage provided the securities are based on the full faith and credit of the state. However, not all state securities carry such a provision and, without considerable research, it can be difficult for an FRB to determine whether such a provision exists. Rather than judging how this risk factor might lessen a security's value, FRBS applied the maximum percentage for all state securities in our sample.

Also, Treasury's method gives FRBS latitude in valuing commercial loans. Some FRBS value almost all commercial loans at 90 percent of the principal amount. Other FRBS perform a credit analysis of individual securities and, based on anticipated risk, choose a percentage to apply, with 90 percent as a maximum.

In addition to the subjective nature of Treasury's TT&L account valuation method, a further problem is presented in using a security's face (or principal) value in the valuation formula. A failed TT&L depositary's collateral would be sold (1) in market conditions that prevail at the time of sale and (2) with the possibility that potential buyers may be unwilling to assume the risks of an unfamiliar borrower. To compensate for this situation, Treasury and Federal Reserve officials told us that the Federal Reserve Board plans to require FRBS to begin determining and using fair market value as the basis for applying the prescribed percentages to value securities.

We believe that at least for commercial loans, the federal government probably could not recover a security's fair market value as shown on the institution's books. Our reviews have found that the flexibility of current accounting rules contributes to inflated values when an institution is experiencing financial difficulties and when regulators are required to dispose of a failed institution's assets. As a rule, regulators dispose of those assets under existing market conditions, which result in much lower fair market values than those that result from using the hypothetical fair market value definition in existing accounting standards.[1]

A Revised Valuation Method Is Feasible

We believe that many of the problems associated with valuing TT&L account collateral based on Treasury's prescribed method can be overcome by valuing individual securities using only three functional areas, along with the valuation improvements recommended in chapter 2. Table 3.2 outlines the functional areas and related valuation rates and bases which provide an alternative to Treasury's current TT&L account collateral valuation process.

Table 3.2: Alternative Functional Areas for Valuing Treasury Tax and Loan Collateral

Functional area	Assigned collateral rate	Value basis
Treasury and federal agency securities[a]	90 or 100 percent[b]	Fair market
Securities rated by rating services	Variable	Fair market
Other securities	Variable	Principal

[a]This category includes Treasury issued securities and securities issued or guaranteed by a U.S. government agency.

[b]These collateral percentages are consistent with Treasury's present TT&L account valuation method.

The following discussion further explains this option, which would improve the FRBS' TT&L account collateral valuation by providing for more consistency in valuing collateral based on a security's inherent risk. In addition, simplifying and automating the valuation of some security types could allow resources to be diverted to valuing other types of securities that require individual analysis.

Officials of all six FRBS we visited agreed that these functional areas are reasonable and risk-based and that implementation would not be difficult. Other alternative methods, functional areas, or valuation rates may be feasible as well. However, in revising the TT&L account collateral valuation method, we believe the key is to place greater emphasis on a security's risk.

Treasury and Federal Agency Securities

In our opinion, Treasury and federal agencies' securities could be valued at 90 or 100 percent of fair market value, essentially the same as is done

[1]Comprehensive Deposit Insurance Reform and Taxpayer Protection Act of 1991: Observations on Accounting Reforms and Funding for the Bank Insurance Fund (GAO/T-AFMD-92-3, December 11, 1991).

under Treasury's current procedures. However, Treasury's present procedures bases the valuation of these securities on their face values, which does not consider the risk associated with changing interest rates. To allow for this risk, Treasury and the Federal Reserve Board are planning to require that these securities' valuation be based on their fair market values. We believe that the fair market value of these securities could be estimated in a manner such as the one we recommended in chapter 2. This category would also include loans which are guaranteed by the federal government, international banks, or government-sponsored corporations.

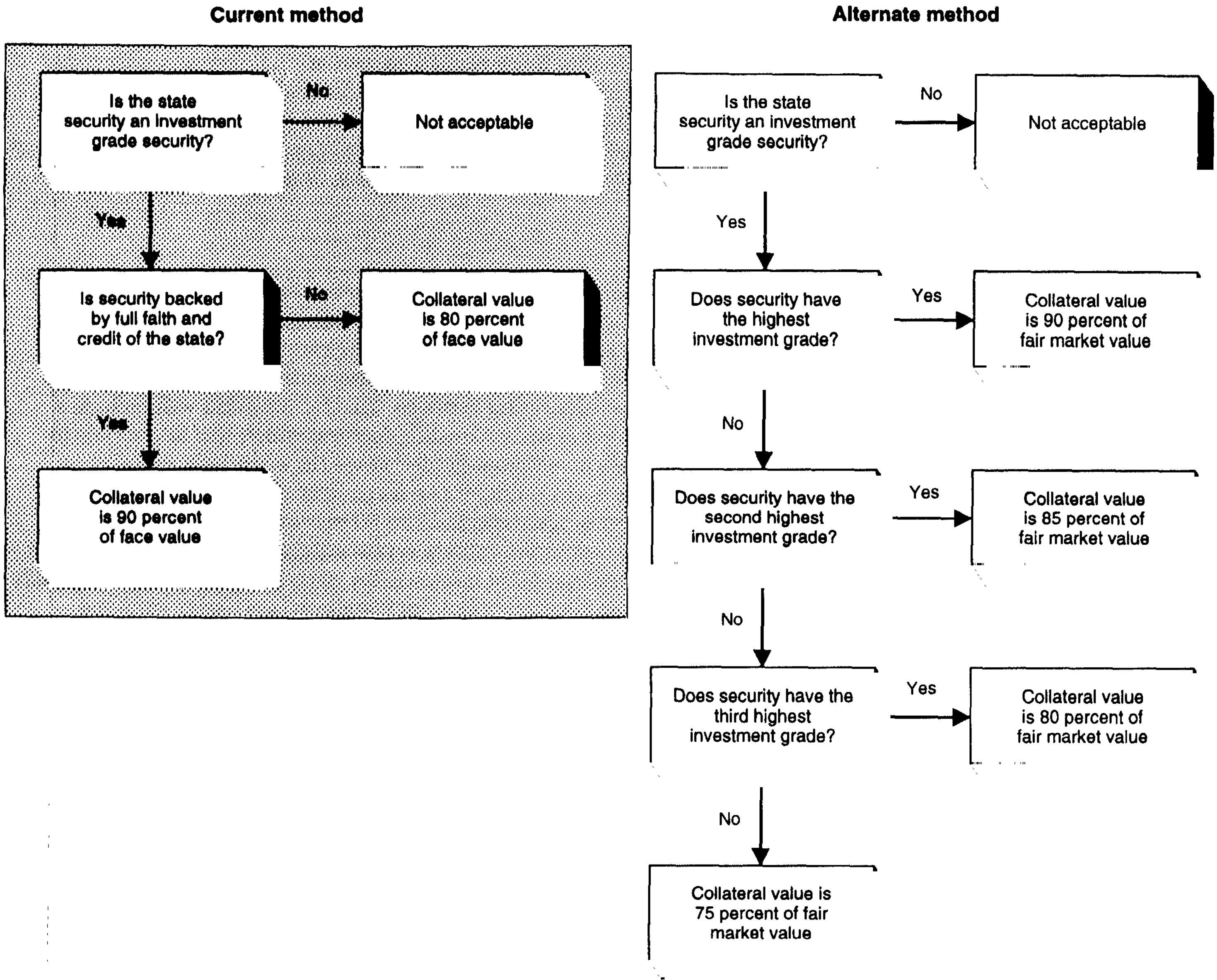
Securities Rated by Rating Services

We believe that securities rated by rating services, such as many types of municipal securities, would have different valuation percentages applied depending on the risk rating assigned by the rating service. As noted in chapter 2, FRBs plan to value securities using automated information, as available, from security rating services. This information will include a security's market value and risk rating factors, which will allow FRBs to identify a security's investment grade.[2] Once the security's rating is identified, such as a AAA rating, it can be translated into an appropriate collateral valuation percentage, such as 90 percent. As security ratings become lower, so would the valuation percentages assigned to them. For example, a 5 percentage point decrease for each lower rating would result in a 75 percent TT&L account collateral valuation rate assigned to the lowest acceptable investment grade rating.

Applying the approach outlined in table 3.2 to a particular security can yield a much different result than that resulting from the current method. For example, as illustrated in figure 3.1, a state-issued security backed by the full faith and credit of the state with a fair market value of $100,000 and the lowest investment grade rating would have a collateral value of $90,000 using the current method. Under the suggested alternate method, assuming that only investment grade securities are acceptable, its value would be reduced to $75,000.

[2]According to an FRB official, while the market value reported by a rating agency theoretically reflects relative risk, FRBs should not use these market values exclusively to value TT&L account collateral because many securities in this functional area are not actively traded and, therefore, may not carry realistic market values.

Figure 3.1: Comparison of Valuation Methods for a State Security



Other Securities

Other securities, such as commercial loans, make up over 51 percent of the $17 billion of TT&L account collateral in our sample. We are unaware of any risk rating service data which could be directly used to value these securities. Therefore, we believe the FRBS would need to evaluate them individually to assess their associated risk. The FRBs should also use the examination results from the institution's regulators to assist them in this process. Treasury and the Federal Reserve Board could develop a standard rating system and methodology for the FRBs to use for valuing individual securities in this functional area. Once a security's risk rating was determined, this evaluation approach would be similar to that for securities rated by rating services. For example, a security receiving an FRB's highest rating might be valued at 90 percent of its principal amount, with a 5 percentage point decrease for each lower rating. Assuming that 5 different loan categories would be acceptable, this approach would result in a 70 percent TT&L account collateral valuation rate assigned to the securities with the lowest acceptable rating. The difference in collateral valuations resulting from a rating procedure of this nature and Treasury's prescribed TT&L account collateral method would be similar to that illustrated in figure 3.1.

Conclusions

Treasury's method for valuing collateral is difficult to administer and results in inconsistent collateral valuations for securities with similar risk. The present methodology emphasizes subjective decisions made in a formula-driven environment rather than on risk. Coupled with the valuation improvements presented in the preceding chapter, it is feasible for Treasury to revise its TT&L account collateral valuation method to one which stresses a security's risk. Making this change would provide greater assurance to Treasury that TT&L accounts are not overcollateralized, which can needlessly restrict depositaries' assets, or undercollateralized, which can leave the government unnecessarily vulnerable to loss.

Recommendations

We recommend that the Secretary of the Treasury direct the Chairman, Board of Governors of the Federal Reserve System, to implement a revised TT&L account collateral valuation method which would increase the focus on the risk associated with the collateral. In revising its prescribed method, Treasury should consider adopting a method which uses market values for securities in functional areas that include (1) Treasury and other federal agencies' securities, (2) securities rated by rating services, and (3) all other securities. Along with adopting these functional areas, Treasury should develop (1) collateral percentages for securities rated by rating services that are based on the risk ranking assigned by the services and (2) a uniform methodology for rating other types of securities.

Agency Comments and Our Evaluation

Treasury said that the valuation method this chapter presents is worth consideration and will be explored with the Federal Reserve. The Federal Reserve agreed with the intent of our recommendation but indicated that it is pursuing an alternative remedy. The FRBs are developing new definitive and book-entry security safekeeping systems, which will include the ability to value collateral at market. The Federal Reserve said that, in some cases, this will provide a more precise and efficient method of valuing collateral than our proposal. While we believe that the option we set forth would increase the FRBs' focus on the risk associated with collateral value, other options could conceptually accomplish this same objective.

Comparison of Judgmental Sample and Universe of Definitive Securities

Dollars in millions

	Securities		Dollars	
Federal Reserve Bank	**Total**	**Sampled**	**Total**	**Sampled**
Boston	1,816	528	$ 1,585.6	$ 944.5
Chicago	7,445	770	6,053.6	4,459.7
New York	2,275	435	7,543.6	6,910.5
Philadelphia	1,489	546	1,440.2	1,277.5
Richmond	3,111	1,024	2,373.6	1,946.7
San Francisco	2,410	672	2,371.3	2,020.6
Total	**18,546**	**3,975**	**$21,367.9**	**$17,559.5**

Notes: Securities sampled represented 21.4 percent of the total securities and 82.2 percent of the total dollar value.

For securities sampled, we did not examine 270 collateral items that had been redeemed by the financial institutions.

Collateral Examined in Judgmental Sample of Definitive Securities

Dollars in millions

Type of collateral	Quantity	Value
Promissory notes, revolving lines of credit, and bankers acceptance	1,155	$ 7,032.1
Municipal securities	1,015	1,668.0
Collateral held by third party custodians	628	4,667.2
Federal agency and federal agency guaranteed securities	355	508.9
Real estate mortgages and construction loans	192	900.2
Trade notes (notes backed by accounts receivable/inventories)	137	620.2
Collateralized mortgage obligations and similarly based securities	114	1,104.9
Municipal-industrial and economic development revenue bonds	109	182.4
Total	**3,705[a]**	**$16,683.9**

[a]We did not examine 270 collateral items that had been redeemed by the financial institutions.

Discrepancies in the Judgmental Sample of Collateral

Dollars in millions

Type of discrepancy	Number of errors	Value of collateral with errors
Improper security classification codes	188	$1,072.3
Unallowable securities pledged as collateral	21	160.1
Inadequate documentation	194	1,208.6
Improper assignment or transfer restrictions	43	88.9
Principal payments required but not made or posted[a]	123	739.6
Principal amount greater than face amount	33	371.9
Improper collateral percentages	58	646.6
Maturity date errors	202	1,470.3
Inadequate audit trail to locate securities	12	9.1
Other errors	41	303.6
Total	**915[b]**	

[a]Treasury requires FRBs to adjust the collateral balances whenever conditions warrant or at least semiannually to reflect principal payments. All FRBs had procedures which also required principal payments to be posted. Three of the FRBs were required to post principal payments monthly, two required quarterly postings, while the remaining FRB require principal payments to be posted as they were made.

[b]The 915 errors applied to 759 securities valued at $4.7 billion. Some securities had more than one error.

Range of Investment Grades Acceptable for TT&L Account Collateral

The following information describes bond rating categories based on Standard & Poor's and Moody's rating systems.

Rating	Description
AAA	This category has the highest rating for a debt obligation. The securities carry the smallest degree of investment risk, interest payments are protected by a large and exceptionally stable margin, and the principals are secure. The capacity to pay interest and repay principal is extremely strong.
AA	Securities in this category differ from AAA rated securities because the margins of protection are not as large and other elements may be present that make long- term risks appear somewhat larger than the highest rated securities. These securities have a very strong capacity to pay interest and repay principal.
A	These securities possess many favorable investment attributes. The capacity to pay interest and repay principal is strong. However, elements may be present which suggest susceptibility to impairment and have a greater impact on securities than those rated AAA or AA.
BBB	This category is the lowest rating of investment grade securities. Adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity than for AAA, AA, or A rated securities. These securities lack outstanding investment characteristics. The capacity to pay interest and repay principal is adequate.

Investment grade ratings are generally regarded as eligible for bank investment under commercial bank regulations issued by the Comptroller of the Currency. Standard and Poor's has six other rating categories below investment grade. Securities falling in these categories are regarded as predominantly speculative with respect to capacity to pay interest and repay principal. The characteristics of securities in these categories include large uncertainties or major risk exposures to adverse conditions and protection of interest and principal payments is moderate to nonexistent. The lowest category, for example, represents bonds in default.

Comments From the Department of the Treasury

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

DEPARTMENT OF THE TREASURY
WASHINGTON

ASSISTANT SECRETARY

July 24, 1992

Mr. Donald H. Chapin
Assistant Comptroller General
U.S. General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Chapin:

We appreciate the opportunity to review the June 1992 draft report, "Treasury Tax and Loan Accounts" (GAO/AFMD-92-54), which you sent to Secretary Brady on June 12. Our comments deal with the "Results in Brief" and "Principal Findings" sections of the Executive Summary and the series of recommendations included in the body of the report.

RESULTS IN BRIEF:

See comment 1.

We do not agree with the statement that: "Treasury does not have assurance that the billions of dollars it collects in TT&L accounts are secured by sufficient collateral." Current practices in the TT&L program provide for overlapping coverage. First, for the greater part of the year the balances available for investment are well below the collateral levels pledged by banks. Your draft report acknowledges this on page 10, stating that, "Normally, the amount of collateral pledged by an institution is in excess of the TT&L account balance which further reduces Treasury's risk of loss." Second, the bulk of funds deposited tend to be in more secure banks. Third, the Federal Reserve System applies special handling to banks known to be in trouble, by requiring more stringent collateral requirements in these cases. Fourth, although the audit discovered errors, on balance, we remain confident that the Federal Reserve Bank review of collateral is carried out in significant depth and by experienced FRB staff. Further, in your draft report on page 26, you state, "The FRBs were extremely responsive and, almost concurrently with our audit, began to address these issues."

Now on p. 9.

Finally, there is another way of evaluating risk and that is looking at the level of loss experienced in the operation of a program. In the body of your draft report, but not in the Executive Summary, you refer to this result. On page 10, you note, "Treasury officials stated that, to their knowledge, Treasury has not, to date, lost funds due to insufficient TT&L account collateral." That is true. Based on information supplied to us by the Federal Reserve, we believe that the experi-

Now on p. 9.

2

ence of the last 12 years is a significant measure of successful performance of the collateral program. During that period, 1,417 banks with $256 billion in assets failed. Under Treasury and Federal Reserve System management, the TT&L program incurred no losses. During that entire period, only on one occasion, was it necessary to seize and sell collateral to protect the Treasury's account. The collateral seized in that one case was sold and did cover the Treasury account.

See comment 1.

We request that the Results in Brief section reflect both the reality of the past 12 years and your view of risk for the future.

PRINCIPAL FINDINGS:

This section describes the findings of the audit team while on site in the Federal Reserve Banks selected for review. The Office of the Fiscal Assistant Secretary sent staff members to observe some portions of the GAO reviews and concluding discussions with several banks. Based on observations of GAO's initial findings, OFAS asked the Federal Reserve System to improve the document handling function and to make the Philadelphia collateral examination check list available to all banks. Based on comments in your draft report, it appears the banks have improved the handling of collateral documentation.

Now on p. 18.

See comment 2.

There is, however, disagreement over the significance of the findings related to the overall condition of collateral management. In your report, on page 26, you state that Reserve Bank officials agreed that the discrepancies constitute significant review, valuation, and monitoring problems. In a July 17 letter to Deputy Fiscal Assistant Secretary Page, commenting on the draft report, the Federal Reserve Board takes the position that, while errors were found, they do not represent a systemic set of problems. We are enclosing a copy of the Federal Reserve Board letter. They have suggested a meeting with your audit staff to resolve this difference of opinion. We would be happy to arrange such a meeting.

RECOMMENDATIONS:

See comment 3.

While we do not agree with the characterization of the program contained in the "Results in Brief" section, we do find the recommendations valuable for improving what is currently a reasonably managed collateral program. We feel that the audit team highlighted several areas that needed a good shake and has offered an imaginative alternative for collateral valuation.

(1) Recommendation:

Review securities offered as collateral prior to acceptance, accept depositaries' securities as collateral prior to its being reviewed only when circumstances indicated that delayed review is prudent and warranted, and reject collateral when FRB reviews show that pledged securities are not allowable or adequately documented.

Response:

We agree with this recommendation. While the intent of established policy is similar, application of it needs periodic reinforcement.

(2) Recommendation:

Use automated information from security rating services to determine the market value of those securities for which such information is available.

Response:

We agree with this recommendation. It is our understanding that information from security rating services is currently used by several banks for troubled depositaries. In addition, the Federal Reserve has two automation projects underway which will facilitate this for all FRBs.

(3) Recommendation:

Estimate the market value for Treasury and Federal agency securities pledged as TT&L account collateral by comparing the securities' stated interest rates and maturity dates to the current market interest rate for comparable securities.

Response:

See comment 3.

The current valuation method of using a standard schedule of haircuts to collateral classes has served Treasury well for many years. We would agree that as collateral classes and variations have expanded and the number of financial institution failures has increased, there is a need to select a more effective valuation system. Over a year and a half ago, Treasury and the Federal Reserve began talking about an improved valuation system. As an initial move, the Federal Reserve began to apply marked to market valuation to collateral for troubled banks. Additional targets, depending on completion of automation projects include marked to market for definitive Treasury securities by 1993 and Treasury book entry by 1995. The alternative method that you present in Chapter 3 is worth consideration

See comment 4.

and will be explored by Treasury and the Federal Reserve.

(4) Recommendation:

Perform monthly collateral assessments, which would include verifying the accuracy of records used to monitor collateral and confirming the location of securities pledged as collateral.

Response:

See comment 3.

We would agree that collateral that remains pledged for longer periods should be periodically re-evaluated. We will explore this follow-up evaluation as well with the Federal Reserve.

(5) Recommendation:

Share among FRBs information on effective TT&L account collateral review, valuation and monitoring practices.

Response:

We agree. The same sort of information sharing that happened as a result of the audit should continue. All of the banks can benefit from the experiences of individual banks particularly in dealing with new variations of collateral papers.

Sincerely,

Gerald Murphy

Gerald Murphy
Fiscal Assistant Secretary

Enclosure

The following are GAO's comments on the Department of the Treasury's letter dated July 24, 1992.

GAO Comments

1. We have modified the executive summary to reflect Treasury's comments and recognize that no losses have been incurred.

2. The Federal Reserve's comments are discussed in the "Agency Comments and Our Evaluation" sections of chapters 2 and 3 and are included in full in appendix VI.

3. Discussed in "Agency Comments and Our Evaluation" section of chapter 2.

4. Discussed in "Agency Comments and Our Evaluation" section of chapter 3.

Comments From the Board of Governors of the Federal Reserve System to the Department of the Treasury

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

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

DIVISION OF
RESERVE BANK OPERATIONS
AND PAYMENT SYSTEMS

July 17, 1992

Mr. Marcus W. Page
Deputy Fiscal Assistant Secretary
Department of the Treasury
1500 Pennsylvania Ave., NW
Washington, DC 20220

Dear Marc:

I am responding to your letter of June 18 to Dave Frost inviting us to comment on the General Accounting Office (GAO) draft report, "TREASURY TAX AND LOAN ACCOUNTS." The comments that follow were prepared by Board staff with the cooperation of all 12 Districts' Treasury Tax and Loan (TT&L) operations officers, securities collateral experts, and internal auditors.

The GAO's reviews of a sampling of definitive TT&L collateral held at six Federal Reserve Banks were thorough and the discussions held with those six Reserve Banks were constructive. We share the GAO's concern that Treasury balances be adequately protected and were therefore pleased that the GAO's observations and questions led to further improvements by Treasury to the TT&L collateral program, to some modifications by the Reserve Banks in their administration of the details of that program, and to some corrective measures with respect to specific collateral deposits held at the Reserve Banks. Federal Reserve personnel deemed the recommendations discussed with them by GAO to be a conscientious attempt on the part of the GAO to address some of the difficult problems inherent in any collateral program.

See comment 1.

The GAO's draft report, however, does not reflect, in tone or content, the prevailing conditions in the Reserve Banks with respect to collateral, the GAO's discussions held with Reserve Bank officials following each review, or the Federal Reserve's strong, on-going commitment to ensuring the quality, integrity, and safety of the TT&L program. Questions thought to have been adequately addressed during on-site discussions have reemerged in the GAO report as problems. The written assessment of conditions in the Reserve Banks and of the Reserve Banks' handling of TT&L collateral is very different from the highly complimentary assessment presented by the GAO to the Reserve Banks in the closing discussions. And, the GAO's overall conclusion as presented in those closing discussions, namely that further modification to the TT&L collateral program is appropriate, appears to have evolved in the draft written report to an assertion that Reserve Bank administration of that program is problematic and the overriding

See comment 2.

See comment 3.

issue. The draft report is disappointing; the executive summary in particular lacks balance and perspective and is not reflective of discussions with or overall conditions in the Reserve Banks. Perhaps further discussion with the GAO before the report is finalized will resolve these formidable inconsistencies; we would welcome the opportunity.

The comments that follow address the portions of the report as presented in the Executive Summary; these are the Background, Results in Brief, Principal Findings, and the Recommendations.

BACKGROUND

See comment 1.

The Background section does not reflect the on-going efforts of the Federal Reserve and the Treasury Department to maintain the quality, flexibility, and thus viability of the TT&L collateral program over the years. The following supplemental background is presented as further evidence of the Federal Reserve's on-going commitment to this program.

Since the late 1970s and early 1980s, the number of new and creative financial instruments has mushroomed and the issuers of these instruments and the depository institutions (DIs) that purchased them have rushed to qualify these instruments as TT&L collateral. The Federal Reserve and the Treasury Department have worked closely through the years assessing the eligibility of the new instruments as TT&L collateral and determining the appropriate haircuts for each one. Federal Reserve and Treasury efforts are on-going to ensure that excess Treasury funds can be placed in interest bearing accounts at depository institutions without putting those funds at risk and without placing undue burden on the depository institutions.

In 1981, there were 10 bank failures; in 1984, there were 80 bank failures. As bank failures increased, the Federal Reserve became increasingly concerned that the stated haircuts for TT&L collateral did not ensure adequate protection for TT&L balances. Reserve Districts where bank failures were especially problematic began to require additional collateral from the seriously troubled TT&L depositories. With bank failures continuing, the Federal Reserve and the Treasury formalized procedures that now place more stringent collateral requirements on TT&L depositories that, due to changing financial condition, have moved into the category of "covered", i.e. troubled, institutions.

RESULTS IN BRIEF

See comment 2.

The conclusion in Results in Brief, that "Treasury does not have assurance that the billions of dollars it collects in TT&L accounts are secured by sufficient collateral" is not a fair statement. A program for collateralizing TT&L balances is in

3

place, that program has evolved as conditions warranted, and the experience of the past twelve years confirms that the Reserve Banks have administered that program effectively. Elsewhere in the report, a passing reference is made to the fact that Treasury has incurred no losses due to inadequately collateralized TT&L balances. We believe that the Federal Reserve and the Treasury can be proud of the fact that the TT&L program incurred no losses in twelve years despite 1,417 bank failures involving $256 billion in assets. We also believe that the vigilance and diligence of the Reserve Banks and their judicious administration of the TT&L program is responsible for this successful record.

See comment 1.

The GAO, basing its blanket conclusion on a sampling of definitive collateral pledged to TT&L (definitive collateral represented 36.6 percent of the dollar value pledged to TT&L at that time), supports its conclusion as follows: "FRBs (1) accept as TT&L collateral securities that are not allowed by Treasury's guidelines, (2) value similar securities differently, and (3) do not adequately monitor collateral to ensure that its value does not diminish." The GAO attributes these problems to: "(1) reviews of TT&L collateral that are often incomplete and late, (2) valuation procedures that are inconsistent among FRBs, and (3) monitoring practices that are weak and based on information from automated systems with inaccurate data." We do not believe that the frequency or severity of the GAO's observations support their conclusion; observations are discussed in the Principal Findings section, which follows.

<u>PRINCIPAL FINDINGS</u>

1. **"FRBs' Security Reviews Are Not Timely or Thorough."** Specific references related to depositing the collateral (a) before checking eligibility for pledge and (b) before checking accompanying documentation.

See comment 1.

This statement suggests systemic problems, but in fact represents random occurrences in a minority of the Reserve Banks visited. It is the policy of the Federal Reserve to examine collateral to the extent necessary before accepting it as collateral. The GAO did identify one Reserve Bank that was failing to reexamine some collateral pledged to the discount window before permitting it to be transferred to TT&L; this was a recurring problem which was corrected immediately. Lacking more specific information in the GAO report, we reviewed the comments made to the Reserve Banks in the GAO's closing discussions and must conclude that the other occurrences referenced represented isolated instances of clerical error which were corrected.

In summarizing this category, the draft report states that "In total, our sample identified $160 million in securities which were not allowed under Treasury regulations..." and 194 securities "... which were accepted by banks but inadequately documented." The $160 million represented 0.9 percent of the total dollar value sampled; interestingly, this total also includes securities that the Treasury has since reconsidered and decided to accept as collateral, namely, commercial notes with maturity periods longer than two years. However, we agree that some of the collateral sampled was ineligible[1] and had been accepted because of clerical error.

See comment 1.

The GAO cited 194 securities as inadequately documented. We cannot agree that GAO's citations, which represented 4.9 percent of the securities sampled, are valid in all instances. Specifically, the GAO questioned the fact that some commercial loans were accepted as collateral without all of the customary supporting documentation and individual review. The Reserve Banks explained that there is a Treasury-approved, formal program wherein a loan, pledged by a larger depository institution with an internal credit grading system, does not have to receive the same detailed review as other loans being pledged as long as the Reserve Bank and the primary regulator of that institution have reviewed the adequacy of the institution's internal grading system and found it to be acceptable and if annual reexaminations of that grading system are conducted. Even though Treasury-approved, the GAO did not agree with this program and reflected these items among its findings.

See comment 1.

All errors were immediately corrected; some Reserve Banks also concluded that procedural changes were needed in their individual operations to prevent a recurrence and changes were instituted. The collateral examination checklist developed by the Philadelphia Reserve Bank and modified based on GAO suggestions was also circulated to the Reserve Banks for their consideration. Finally, Reserve Bank staff responsible for TT&L collateral are now working more closely with the Banks' credit experts.

Further, to summarize our position with respect to this first finding, we agree that some problems were noted, we believe that they represented isolated occurrences which warranted, and received, immediate attention. Corrective measures have been taken in those instances where a problem existed, and, the corrective actions taken have been confirmed either by GAO itself or by Reserve Bank auditors.

2. **"FRBs Do Not Value Collateral Consistently."** GAO indicates that FRBs use different methods for valuing commercial loans.

See comment 1.

The GAO is correct. Reserve Banks' procedures for valuing commercial loans are not uniform, but do achieve the goal

[1] In the event of a bank failure, the ineligible collateral would have been liquidated and the proceeds credited to the Treasury Department.

of protecting Treasury balances by taking into account the financial condition of the pledging institution and the quality of the institution's rating system. Collateral policing is not an exact science, but one that requires judgement, expertise, and some flexibility to deal with changing circumstances. The differing practices alluded to in the draft report represent the judgements of the System's collateral experts. Whether these practices, for TT&L pledges, should be identical is a question that the Federal Reserve will discuss in depth with the Treasury Department. Any approach to this issue, particularly one that lacks flexibility, should be carefully considered in that it could have unintended effects on credit availability and might also reduce the pool of TT&L collateral without any meaningful reduction in risk. However, if one, best way to handle commercial loans pledged to TT&L can be identified by the Federal Reserve and the Treasury, we will fully support a change and we look forward to examining this issue with Treasury in a systematic, coordinated manner through the System TT&L and collateral groups on which Treasury participates.

3. **"FRBs Do Not Have Complete and Accurate Information for Monitoring Collateral."**

The GAO's third and final point is that monitoring practices are weak and based on information from automated systems with inaccurate data. We agree that collateral monitoring practices for collateral of fluctuating or declining value pledged at some of the Reserve Banks could be improved and were improved as a result of the GAO visit. We also agree that some deposit information reflected on the automated systems of some of the Reserve Banks was in error. However, these occurrences were not the result of systemic problems.

See comment 4.

The specific problems cited by the GAO in this category were overstated principal amounts, erroneous collateral percentages, incorrect or omitted maturity dates, and inconsistent procedures for confirming collateral pledged with third-party custodians. Regarding overstated principal amounts, the GAO noted that 33 deposits, or 0.8 percent of the sample, reflected overstated principal amounts. Some of these resulted because revised information, regarding principal amounts on fluctuating value securities, was being received in groups from the pledging institutions and was being entered into the automated record keeping system over a two- to three-day period; this lag has been eliminated. The GAO cited 58 instances, 1.5 percent of the sample, when deposits had been assigned incorrect collateral percentages. Corrective measures were taken immediately. Working more closely with Reserve Bank credit personnel when reviewing certain collateral deposits should further reduce the frequency of clerical errors such as these. The GAO also cited 202 maturity date errors, representing 5.1 percent of the sample; a few of these involved clerical oversight, but most involved notes with a maturity date of "due on demand". The Reserve Banks take different approaches to

See comment 1.

6

reflecting these items on their record keeping systems; each of these alternatives has advantages. We will review the alternatives for recording demand notes to see if there is a best alternative that all Reserve Banks should use.

Finally, reference is made to one Reserve Bank that could not locate 12 collateral trust receipts. The Reserve Bank involved was in the process of updating its trust receipts at the time of the GAO's review; the receipts were not missing, but had been removed from their usual location in the files. New, updated trust receipts were received shortly thereafter and placed in the files.

See comment 5.

RECOMMENDATIONS

Our comments regarding the specific recommendations are as follows:

1. **"review securities offered as collateral prior to acceptance, accept depositaries' securities as collateral prior to its being reviewed only when circumstances indicate that delayed review is prudent and warranted, and reject collateral when FRB reviews show that pledged securities are not allowable or adequately documented;"**

Response: We agree. This recommendation is consistent with established policy.

2. **"use automated information from security rating services to determine the market value of those securities for which such information is available;"**

Response: We agree. Two automation development efforts underway prior to the GAO reviews, one for book-entry securities and one for definitive securities, will have the capability to mark to market.

3. **"estimate the market value for Treasury and federal agency securities pledged as TT&L account collateral by comparing the securities' stated interest rates and maturity dates to the current market interest rate for comparable securities;" "...Treasury should consider adopting a method which uses market values for securities in functional areas that include (1) Treasury and other federal agencies' securities, (2) securities rated by rating services, and (3) all other securities. Along with adopting these functional areas, Treasury should develop (1) collateral percentages for securities rated by rating services that are based on the risk rating assigned by the services and (2) a uniform methodology for rating other types of securities."**

Response: We agree in part. As noted previously, the Reserve Banks are in the process of developing new definitive and book-entry security safekeeping systems. These new applications will include

See comment 6.

the ability to mark collateral to market. For all securities falling into category (1) and most of the securities coming under category (2), mark-to-market is a more precise and efficient method of valuing collateral than the alternative proposed by GAO. Other securities that cannot readily be marked to market, for example small municipal issues for which market information is not available, would warrant individual credit review or sufficient analysis to make some determination of credit quality. Customer notes are not technically securities because they lack certain generic qualities, and they present different issues. We agree that the application of a fixed margin without consideration of credit quality, which can vary greatly, is not appropriate. Assets that are not considered to be of banking quality (those that would be classified by regulators) are not taken for TT&L pledge. A common approach to this quality assessment offering a variety of acceptable methods, such as individual analysis of assets or validation of loan rating systems, is preferred. While it could be argued that application of a graduated margin grid to customer notes of varying credit quality would produce a more accurate result, the primary objective should be to assure that notes taken are of banking quality. The benefit of a more refined approach should be assessed.

4. **"perform monthly collateral assessments, which would include verifying the accuracy of records used to monitor collateral and confirming the location of securities pledged as collateral;"**

See comment 1.

Response: Requires further study, particularly in light of the definitive and book-entry system changes being made. It is not clear to us what the GAO means by monthly collateral "assessments", but, if broadly defined, the cost of such an undertaking could be considerable. Even taken in its narrowest definition, i.e. confirming the dollar value of fluctuating-value collateral and confirming the location of off-premises collateral monthly, could increase the cost and reporting burden for depository institutions; these must be weighed against the benefits to be realized from such a change.

5. **"share among FRBs information on effective TT&L account collateral review, valuation, and monitoring practices."**

Response: We agree. As the GAO reviews have demonstrated, there are further opportunities to share information among Reserve Banks. System-wide initiatives are underway to increase communication, explore collateral valuation methodologies, and to improve the collateral-related education tools used by the System.

In conclusion, we believe that the GAO reviews were constructive and useful. The GAO identified some collateral errors; these were corrected immediately and, where needed, procedural changes were implemented to prevent a recurrence. We

8

appreciated the complimentary assessments the GAO made in their closing meetings regarding Reserve Banks' administration of the TT&L collateral program. We believe that the GAO's conclusion in those closing meetings, namely that the TT&L collateral program can be improved, is a valid one and that the recommendations they have made to achieve that end, with only one exception, merit careful consideration by the Treasury and the Federal Reserve.

See comment 2.

See comment 3.

Finally, to repeat our earlier concern, we do not believe that the executive summary in the draft report fairly represents conditions in the Reserve Banks. The Treasury's balances have not been at risk at any time before, during, or after the GAO reviews and to state otherwise contradicts twelve years of banking history. We again would offer to meet with the GAO before its report is finalized.

Thank you for the opportunity to comment on the draft report.

Sincerely,

Charles W. Bennett
Assistant Director

The following are GAO's comments on the Board of Governors of the Federal Reserve System's letter to the Department of the Treasury dated July 17, 1992.

GAO Comments

1. Discussed in "Agency Comments and Our Evaluation" section of chapter 2.

2. We have modified the report to reflect the Federal Reserve's comments.

3. We met with Federal Reserve representatives to discuss their comments and have incorporated their oral comments where appropriate.

4. We did not characterize these errors as resulting from systemic failures that would require a redesign of the FRBS' automated TT&L account systems. The Federal Reserve cited a number of corrective actions that had been taken or were underway to improve the reliability of these systems. For example, the lag time associated with entering some information has been eliminated and alternatives for recording demand notes will be reviewed. These actions are consistent with the intent of our recommendations and, if properly implemented, should address our concerns.

5. The important point is not whether the FRB was able to locate these receipts, but whether the receipts were readily available upon request. We gave the FRB 2 weeks to give us these receipts before determining that the receipts were not readily available.

6. Discussed in "Agency Comments and Our Evaluation" section of chapter 3.

Major Contributors to This Report

Accounting and Financial Management Division, Washington, D.C.	John C. Martin, Assistant Director Louise E. Mullen, Senior Auditor Norma J. Samuel, Auditor
Norfolk Regional Office	Everett O. Pace, Auditor-in-Charge Joseph J. Radosevich, Senior Auditor
Cincinnati Regional Office	Deborah Y. Smith, Evaluator Barbara L. Centers, Evaluator
Philadelphia Regional Office	Margaret A. Klucsarits, Evaluator
San Francisco Regional Office	Kenneth J. Townsend, Evaluator Gerard C. Vroomman, Evaluator
Atlanta Regional Office	Michelle E. Malone, Auditor

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are $2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

U.S. General Accounting Office
P.O. Box 6015
Gaithersburg, MD 20877

Orders may also be placed by calling (202) 275-6241.

United States
General Accounting Office
Washington, D.C. 20548

Official Business
Penalty for Private Use $300

First-Class Mail
Postage & Fees Paid
GAO
Permit No. G100