



Office of Inspector General

July 2005
Report No. 05-025

The FDIC's Investment Policies

AUDIT REPORT



Background and Purpose of Audit

The Secretary of the Treasury requires the FDIC to invest its non-appropriated cash held in the Bank Insurance Fund, and Savings Association Insurance Fund (hereafter, the Funds) through the Government Account Series (GAS) Program.

The FDIC seeks to maximize investment returns, subject to overriding liquidity considerations. The FDIC considers liquidity requirements and current and prospective market conditions, including U.S. Treasury security yields when developing quarterly investment strategies.

PricewaterhouseCoopers, LLP (PwC) conducted this audit under the direction of the FDIC's Office of Inspector General.

The audit objective was to determine whether the FDIC's investment strategy and portfolio management procedures provide the highest possible investment returns for the FDIC, taking into consideration the applicable legal and regulatory framework established for investments of the Funds.

The FDIC's Investment Policies

Results of Audit

PwC concluded that the FDIC's Division of Finance generally performed well in managing the FDIC's investment portfolio in the context of the applicable legal and regulatory framework, stated investment strategy, interest rate environment, and assessment of certain insured institutions undergoing financial stress. Nevertheless, the FDIC could improve the return on its investments through two broad courses of action:

- In certain market environments, the FDIC should decrease holdings in overnight certificates and increase holdings in longer-maturity securities. Such holdings reduce the volatility of returns, but fail to enhance liquidity, because GAS Program investments enjoy virtually perfect transactional liquidity.
- Pursue fundamental changes in the FDIC's investment approach, such as expanding the universe of allowable investments.

In the course of performing its procedures (which were performed during the period November 2004 to February 2005), PwC identified no instances of non-compliance with applicable laws and regulations, which were limited to the Federal Deposit Insurance Act, the Department of the Treasury Operating Circular, and the FDIC's Corporate Investment Policy.

Recommendations and Management Response

The report contains five recommendations to improve the FDIC's investment activities.

- Perform an internal review of investment policies to enhance returns.
- Use of the portfolio market value for reserve ratio calculations.
- Establish goals based on volatility as opposed to liquidity.
- Adopt measurement techniques to compare plans with actual results.
- Retain outside expertise to conduct periodic reviews.

Management has taken or planned actions on two recommendations. The remaining three recommendations on performing an internal review of investment policies, adopting measurement techniques to compare plans with actual results, and retaining outside expertise to conduct periodic reviews are unresolved and will be presented to the designated audit follow-up official for a final management decision.



DATE: July 14, 2005

MEMORANDUM TO: Steven O. App
Deputy to the Chairman and Chief Financial Officer

Frederick S. Selby
Director, Division of Finance

FROM: Russell A. Rau [Electronically produced version; original signed by Russell A. Rau]
Assistant Inspector General for Audits

SUBJECT: *The FDIC's Investment Policies*
(Report No. 05-025)

Enclosed is a copy of the subject report prepared by PricewaterhouseCoopers LLP (PwC) under a contract with the Federal Deposit Insurance Corporation's (FDIC) Office of Inspector General. The firm's report is presented as Part I of this document. A summary of your response and our evaluation of it, along with your response in its entirety, have been incorporated into Part II of the report.

Recommendation 2 is resolved, dispositioned, and closed. Recommendation 3 is resolved but remains undispositioned and open for reporting purposes. Recommendations 1, 4, and 5 are unresolved and will be presented to the designated audit follow-up official for a final management decision.

If you have questions concerning the report, please contact Stephen M. Beard, Deputy Assistant Inspector General for Audits, at (202) 416-4217, or Marilyn Rother Kraus, Director, Resources Management, at (202) 416-2426. We appreciate the courtesies extended to the audit staff.

Attachment

cc: James H. Angel, Jr., OERM

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Part I

Report by PricewaterhouseCoopers



The FDIC's Investment Policies

Prepared for the
Federal Deposit Insurance Corporation
Office of Inspector General



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Memorandum

To: Russell A. Rau, Assistant Inspector General for Audits
Federal Deposit Insurance Corporation, Office of Inspector General

From: PricewaterhouseCoopers LLP

Date: June 30, 2005

Subject: Federal Deposit Insurance Corporation, Office of Inspector General
The FDIC's Investment Policies (Delivery Order No. 04-00321-C-DS)

Under the direction of the Federal Deposit Insurance Corporation (FDIC) Office of Inspector General (OIG), PricewaterhouseCoopers LLP (PwC) has completed an audit of the FDIC's investment policies and procedures. The audit services provided by PwC were performed in accordance with the Performance Audit Standards under Generally Accepted Government Auditing Standards. Additional details on our objective, scope, and methodology are provided in the Appendix I.

Objective

The audit objective was to determine whether the FDIC's investment strategy and portfolio management procedures provide the highest possible investment returns for the FDIC taking into consideration the applicable legal and regulatory framework established for investments by the Banking Insurance Fund, Savings Association Insurance Fund, and FSLIC Resolution Fund. The three major components of the FDIC's investment strategy, listed in order of priority, are:

1. Maintain adequate liquidity to meet anticipated and some level of unanticipated cash flow requirements;
2. Seek to control fund balance volatility by managing the amount, types, maturities, and/or modified durations of Available for Sale (AFS) security purchases; and
3. Maximize investment returns, subject to overriding liquidity considerations.

Background

FDIC's investment authority is in Section 13(a) of the Federal Deposit Insurance Act (FDI Act): "Funds held in the Bank Insurance Fund (BIF), the Savings Association Insurance Fund (SAIF), or the FSLIC Resolution Fund (FRF) that are not otherwise employed shall be invested in obligations of the United States or in obligations guaranteed as to principal and interest by the United States." The Department of Treasury's policies require the FDIC to invest its non-

appropriated cash held in the FDIC's U.S. Treasury accounts through the Government Account Series (GAS) program. Accordingly, the FDIC can invest in the following instruments:

- Conventional Treasury bills, notes and bonds (currently no holdings in bills)
- Zero-coupon Treasuries (currently no holdings)
- Treasury Inflation Protected Securities (TIPS)
- One-day repurchase certificates (based on the one-day repurchase rate as determined by the New York Fed)

These instruments are not available for purchase by the general public. However, except for the overnight certificates, they have the same coupon and redemption characteristics as the U.S. Treasury securities offered to the public. FDIC's Corporate Investment Policy mandates that FDIC will attempt to hold all investments (both held-to-maturity (HTM) and available-for-sale (AFS) securities) to maturity. The FDIC may, however, sell securities to achieve investment objectives as provided in the Corporate Investment Policy. The need to meet liquidity needs through security sales is to be met through AFS security sales before HTM security sales.

The Chief Financial Officer (CFO) prepares the Corporate Investment Policy, which is approved and adopted by the Board of Directors. In addition to the Board, the FDIC has established an Investment Advisory Group (IAG) consisting of the CFO, who serves as Chairman of the IAG, the Director of the Division of Finance (DOF), and three other members appointed by the Chairman of the FDIC. The IAG convenes four times per year to review the overall investment results and market conditions for the previous quarter, the macroeconomic and Treasury market outlook, and cash flow projections for each of the primary investment portfolios. The Funding and Investment Section (FIS) of the DOF Treasury Management Branch proposes and executes the investment strategy for each corporate portfolio on a quarterly basis, within the constraints set by the Corporate Investment Policy, which is subject to the review and approval of the CFO.

The BIF and SAIF (herein referred to as "Funds") are the FDIC's primary investment portfolios. As per the FDIC's 2004 Financial Statement, the reported value of BIF and SAIF at December 31, 2004 was \$34,786,605,000 and \$12,722,188,000, respectively. The Funds are invested in both overnight certificates and longer-term securities. Subject to overriding liquidity considerations, the FDIC seeks to maximize investment returns of the Funds (i.e., the policy's objective is to meet any need to disburse cash without selling HTM securities). New purchase amounts (overnights and longer-term securities) for each Fund are set on a quarterly basis. In accordance with the investment objectives and guidelines contained in the Corporate Investment Policy, FDIC's investment managers consider liquidity requirements and current and prospective market conditions for Treasury security yields when developing quarterly investment strategies. The FDIC seeks to control fund balance volatility by managing the amount, types, maturities, and/or modified durations security purchases as well as their designation as AFS or HTM.

The FDIC monitors the likelihood of insured institutional failures continuously. Periodic reports identify institutions at risk of failure, and provide institutions' sizes in terms of both assets and the insured deposits. The FDIC compiles statistics to summarize historic institutional failure

rates and associated loss rates with historic institutional failures. The potential requirement to disburse cash is generally determined by allowing for the FDIC's operating expenditures, and estimating funds needed to accommodate anticipated institutional failures.

The FDI Act requires that the ratio of deposit insurance fund balances to estimated insured deposits is maintained at or greater than 1.25 percent. Under the FDI Act, the FDIC's Board of Directors has authority to set semi-annual assessment rates through a risk-based assessment system to insure that this ratio, known as the Designated Reserve Ratio, remains at or greater than 1.25 percent. Measured and reported on a quarterly basis, if this ratio falls below 1.25 percent, the Board of Directors is required to initiate steps to set semi-annual assessment rates that are sufficient to increase the ratio to the Designated Reserve Ratio.

The FDIC also has existing investment reporting practices that provide current portfolio activity and investment results to the FDIC management officials who provide oversight of the FDIC's investment decisions. The FDIC prepares an annual performance plan in which individual divisions and offices establish performance measures by which actual productivity can be evaluated. Separate and apart from the FDIC's overall performance plan, the DOF establishes performance goals and guidelines that serve to govern and measure their own performance.

Results of Audit

Based on the results of our procedures, our review of actual investment performance, and our understanding of the applicable legal and regulatory framework established for the Funds, we have concluded that the investment staff of the Division of Finance generally performed well in managing the FDIC's investment portfolio in the context of the stated investment strategy, interest rate environment, and assessment of certain insured institutions undergoing financial stress.

In the course of performing our procedures (which were performed during the period from November 2004 to February 2005), we identified no instances of non-compliance with applicable laws and regulations, which were limited to the Federal Deposit Insurance Act, the Department of the Treasury Operating Circular, and the FDIC's Corporate Investment Policy.

Also, with respect to internal control relevant to FDIC's investment strategy and portfolio management policies and procedures, we obtained an understanding of the design of significant internal controls and, in the course of performing our procedures during the November 2004 to February 2005 period, we identified no instances of non-compliance with FDIC's investment strategy and portfolio management policies and procedures.

We believe that the FDIC's opportunities to improve the return on its investments consist of two broad courses of action:

1. The recent history of the Funds (BIF and SAIF) has been characterized by large holdings in overnight certificates for substantial periods. While a large allocation to overnight certificates reduces the volatility of returns, it does not enhance liquidity, since all

holdings in the Government Account Series (GAS) program enjoy virtually perfect transactional liquidity. In certain market environments, returns would be increased with smaller holdings in overnight certificates and larger holdings in longer-maturity securities.

2. More fundamental changes in the FDIC's investment approach, such as expanding the universe of allowable investments, may require statutory changes, concurrence of the U.S. Department of Treasury, and/or FDIC Board approval.

In addition to the actions noted above, the current method for reporting the value of the Funds is based on a convention that is approved by the Financial Accounting Standards Board but may not fully serve the FDIC's purposes with respect to its quarterly Reserve Ratio calculation. To promote complete financial transparency in the Reserve Ratio calculation and more accurately communicate the FDIC's true economic and financial condition as it relates to assessments, the FDIC should include a Reserve Ratio calculation in its financial reports that reflects a market-value approach for valuing the HTM portion of the Funds.

The oversight of the investment Funds has been confined to the FDIC Board and the IAG, neither of which includes or contracts for independent investment experts. Contracting with an external investment management firm to perform periodic assessments of fund performance would provide the FDIC with an independent review of the management and performance of the Funds.

FINDINGS AND RECOMMENDATIONS

FINDING A: INVESTMENT PERFORMANCE AND RETURN MAXIMIZATION

The FDIC's investment performance and ability to maximize returns was impacted by maintaining holdings in overnight certificates that were greater than necessary for liquidity purposes and reduced investment returns during a period marked by a strongly positively sloped yield curve.¹

Background

PwC created and executed hypothetical investment strategies to derive theoretical results of the FDIC's BIF portfolio with both permitted and restricted investments. Although our analysis was limited to the BIF portfolio, the conclusions are applicable to the SAIF since the investment guidelines and restrictions for the SAIF are identical to those of the BIF. The start of the Investment Period (January 1, 2001 through October 31, 2004) coincides with the implementation date for the PORTIA system, which the DOF uses to compute investment performance. The performance of these hypothetical investment strategies was computed using a proprietary simulation model that calculated returns in a manner identical to PORTIA. The starting point of the simulations was the FDIC's BIF portfolio as it existed on December 31, 2000. The exact securities and positions at December 31, 2000 were replicated in the simulator. Beginning January 1, 2001, any new purchases were made based on the hypothetical strategy being simulated. As existing positions in Treasury securities matured, these securities were replaced with purchases according to the simulated strategy. Based on our review of those results, we had observations related to (a) short-term cash-equivalent investments, (b) investment options, (c) maturity limits, and (d) insights from a benchmarking study.

Short-term Cash-equivalent Investments

The BIF portfolio returns during the Investment Period were adversely affected by holdings in "cash" investments (e.g., one-day or overnight investments, also known as the short-term segment of the portfolio) that were larger than necessary for the Fund's operational cash needs. In general, bond prices rose over the 2001-2004 time period. In periods of generally rising asset prices, it is disadvantageous to hold cash-equivalent investments, which tend to have lower yields in this environment.

During the approximately 1,400 days from January 1, 2001 through October 31, 2004, the FDIC maintained a cash balance in the short-term segment of the BIF portfolio of over \$1 billion for 73

¹ Positively Sloped Yield Curve: A situation in which long-term debt instruments have higher yields than short-term debt instruments. This is the usual condition, and happens because investors demand a higher return for taking on the additional risk of the longer-term investment.

percent of total days and over \$3 billion for 25 percent of total days. During the full-time period, the average daily return for the Bond segment was 2.6 times that of the short-term segment. The FDIC would have benefited by minimizing holdings in the short-term segment.

Bank Insurance Fund Average Daily Returns by Portfolio Segment						
Segment	Average Daily Return			Multiple of Short-Term		
Short-Term	0.0077%			1.0		
Bond	0.0201%			2.6		
TIPS	0.0341%			4.4		

Bank Insurance Fund Short Term Segment Cash Balance Analysis						
Total Investment Period Days	1,400					
Amount of Cash Held	\$500m	\$1.0b	\$2.0b	\$3.0b	\$4.0b	\$4.5b
Days Over Amount	1,242	1,019	630	354	154	68
% of Total Days	89%	73%	45%	25%	11%	5%

Hypothetical Investment Scenarios – Permitted Investments

The following table highlights the returns for a subset of simulation scenarios that conform to the FDIC’s existing investment restrictions compared with the actual returns of the BIF portfolio and the Merrill Lynch (ML) 1-10 Year Index (the benchmark used by DOF to assess relative performance). The “returns ranking” shows where each scenario, portfolio, or index ranks among the 54 scenarios that were simulated (49 simulations plus 4 indices and the actual BIF portfolio).

Scenario	Scenario Description	Returns Ranking	Aggregate Full Period Returns
A-3	10 yr Treasuries	8	28.25%
C-9	5, 10 yr Treasuries (50/50%)	15	27.05%
C-6	2, 10 yr Treasuries (50/50%)	33	25.97%
A-2	5 yr Treasuries	38	25.86%
C-2	2, 10 yr Treasuries (75/25%)	49	24.61%
BIF Actual	FDIC BIF Portfolio Actual	50	24.60%
ML 1-10 Yr	Benchmark: ML 1-10 Yr Index	52	23.36%
A-1	2 yr Treasuries	53	23.11%

In each of the above scenarios, holdings in overnight investments were maintained at levels no greater than \$50,000. This approach is consistent with portfolio construction strategies that

minimize holdings in cash equivalents and allocate all investments with higher expected current period returns. Given the evolution of Treasury yields during the Investment Period, the returns in most of the scenarios that conform to the FDIC's existing investment restrictions were enhanced by having smaller holdings in overnights than the actual holdings in the BIF.

However, it is important to note that if the DOF had invested cash inflows solely in 2-year or shorter-maturity Treasuries, returns for the BIF would have been lower than those actually generated. In general, the wide disparity in returns resulting from overnight investments versus those provided by other permitted investments illustrates that the DOF's investment decisions have a considerable effect on the FDIC's returns and dollar values of the BIF.

To present a more complete analysis of the returns on Permitted Investments shown above, we next expanded our scenario assumptions to incorporate the FDIC's target for operational liquidity during the Investment Period. Accordingly, we increased the minimum levels of overnight investments to \$150 million, which represents the target floor as prescribed by the Investment Advisory Group (as presented in the December 2004 Monthly Investment Status Report). For these additional scenarios, we used \$150 million as the minimum levels of overnight certificates for the entire investment period.

Scenario	Scenario Description	Returns Ranking	Aggregate Full Period Returns
A-3	10 yr Treasuries	9	28.11%
C-9	5, 10 yr Treasuries (50/50%)	17	26.92%
C-6	2, 10 yr Treasuries (50/50%)	37	25.86%
A-2	5 yr Treasuries	38	25.75%
BIF Actual	FDIC BIF Portfolio Actual	49	24.60%
C-2	2, 10 yr Treasuries (75/25%)	51	24.52%
ML 1-10 Yr	Benchmark: ML 1-10 Yr Index	52	23.36%
A-1	2 yr Treasuries	53	23.04%

As illustrated in the table above, increasing the FDIC's operational cash requirement to \$150 million from \$50,000 does not have a significant impact on the outcome of our simulation analysis. In general, the comparative returns available from other permitted investments would have provided the FDIC with an opportunity to generate higher returns.

Conclusion

Only an investor with perfect foresight can determine the "optimum" target for cash-equivalent holdings and the most advantageous times to increase or decrease cash-equivalent holdings. The DOF is further restricted by Department of the Treasury operating guidelines that prohibit the sale of securities prior to maturity in order to take advantage of a shift in the yield curve (i.e., restructuring trades). As a consequence, the DOF seems to have been cautious in making investments further out on the Treasury yield curve during a period in which macroeconomic forecasting was complicated by the terrorist attack of September 11, 2001 and related impacts on

GDP growth and the U.S. Federal budget deficit. Nonetheless, cash is a risky asset, especially in environments of strongly positively sloped yield curves and, in this case, resulted in reduced returns. Accordingly, any DOF investment decision to maintain holdings in overnight certificates beyond operational needs may warrant notice to, or approval by, the IAG.

Hypothetical Investment Scenarios – Restricted Investments

In any investment period, individual assets and asset classes will deliver different returns. After-the-fact analysis will determine the asset and asset class that delivered the best return. On a before-the-fact basis, however, most investors follow portfolio construction guidelines that both require some degree of diversification (e.g., maximum percentage of the portfolio that can be invested in a single instrument, issuer, industry, or asset class) and enforce prohibitions (e.g., against investing in certain product types, issuers, industries or asset classes).

The universe of permitted investments for the FDIC Funds is limited by the Department of the Treasury to securities in the GAS Program. Within this overarching restriction, the DOF's guidelines also provide general flexibility in holdings, other than the restriction against holding securities with a remaining maturity longer than 12 years. We believe that other aspects of the DOF's guidelines that limit concentrations by maturity/duration bucket² and also control potential investments in zero-coupon Treasuries are customary and prudent for a fixed income portfolio.

In many, but not all, market environments, diversification across assets and asset classes produces greater returns that are less volatile than less-diversified portfolios (such as the FDIC's portfolios). We conducted several scenarios to explore investment results from different portfolios of assets constructed according to simple, pre-determined rules. Within each scenario, no more than 25 percent of the investments included were allocated to non-permitted instruments. In addition to computing returns, we also computed the volatility of returns. As a result, we were able to compare returns not only in terms of absolute results, but also in terms of volatility by using a risk-adjusted return ratio. We call this ratio an "information ratio"; it is defined as the average of monthly returns divided by the standard deviation of the monthly returns.³

As a first step, during the Investment Period, we compared the performance of the BIF and the SAIF to the returns on several publicly available bond indices. The data in the following table reflects the actual returns for the indices and is not a simulation.

² Maturity/Duration Bucket: A time slice of the yield curve defined on an earlier page. For example, an analyst may choose to divide a 12-year yield curve into eight buckets. He defines the beginning date and end date of each bucket. Together, the eight buckets must match the entire yield curve. This division of the yield curve facilitates hedging decisions as well as estimates of the risk to the portfolio from potential changes in the shape of the yield curve.

³ "The Sharpe Ratio"; Sharpe, William F.; *The Journal of Portfolio Management*, Fall 1994.

Index Name	Index Type	CY 2001	CY 2002	CY 2003	YTD as of 10/31/04	Total Period Returns
Bank Insurance Fund (BIF) ⁴	FDIC	7.54%	9.20%	3.04%	2.97%	24.60%
Savings Association Insurance Fund (SAIF) ⁴	FDIC	7.48%	9.89%	3.01%	3.06%	25.40%
Lehman US Treasury Long Term Bond Index ³	Fixed Income Treasury Index	7.24%	11.50%	2.37%	NA ¹	NA ¹
Lipper General US Treasury ³		4.69%	12.47%	1.80%	NA ¹	NA ¹
Merrill 1-10 Year US Treasury Index ⁴		8.12%	9.05%	2.13%	2.44%	23.36%
Merrill High Yield Index ⁴	Fixed Income Corporate Index	4.50%	-1.90%	28.16%	8.09%	42.03%
Lipper Corporate Debt A-Rated Funds Index ³	Fixed Income Corporate Index	7.79%	8.56%	5.02%	NA ¹	NA ¹
Lehman Aggregate Index ⁴	Fixed Income Aggregate Index	8.44%	10.29%	4.17%	4.22%	29.83%
CSFB High Yield Index ³	Fixed Income High Yield Index	5.78%	3.11%	27.93%	13.32% ²	58.12%
S&P 500	US Equity Index	-11.89%	-22.10%	28.68%	3.06%	-8.97%

1. N/A – Not available.
2. 1 year return as of 9-30-04.
3. Data obtained from *Morningstar*.
4. Annual returns values computed from daily returns data.

On an absolute return basis, the highest returns in restricted investments were generated by fixed income indices that included securities with modest or significant credit risk and/or maturities beyond the FDIC's maximum of 12 years. However, further analysis of this data suggests that the volatility of returns of these indices was higher than that of either the actual BIF or the Merrill 1-10 Year Treasury Index. Generally, the increased volatility in these indices relative to the BIF or Merrill 1-10 Year Treasury Index results from securities with maturities greater than the FDIC's self-imposed 12-year limit and/or include securities not currently available to the FDIC (e.g., high yield bonds) that carry the additional credit risk associated with the financial condition of the issuers. In the next portion of our testing, we assessed the volatility of returns of each scenario and index by ranking returns in order of highest information ratio.

The following table presents the returns and information ratio for the subset of simulation scenarios that expand the range of available instruments by allowing investment in non-GAS Program securities. Also included are data for the actual BIF portfolio and three indices. The information ratio ranking shows where each scenario ranks among the 54 scenarios (see Appendix II for methodology, scenario descriptions, and scenario listings). It should be noted that, in each of these scenarios, holdings in overnight investments were maintained at levels no greater than \$50,000. This approach is consistent with portfolio construction strategies that minimize holdings in cash equivalents and allocate all investments with higher expected current period returns.

Scenario	Scenario Description	Info Ratio Ranking	Info Ratio ¹	Full Period Returns
B-1	SSA Par Value Specials	1	0.658	25.92%
D-4	5 yr, ML High Yield Index	2	0.563	28.57%
E-13	5 yr, ML High Yield Index -1%	3	0.560	28.39%
BIF Actual	FDIC BIF Portfolio Actual ²	4	0.558	24.60%
E-14	5 yr, ML High Yield Index -2%	5	0.557	28.20%
D-7A	5 yr, S&P 500 Index	6	0.556	26.20%
E-25A	5 yr, S&P 500 Index -1%	7	0.553	26.04%
E-26A	5 yr, S&P 500 Index -2%	8	0.550	25.88%
E-15	5 yr, ML High Yield Index -5%	10	0.546	27.65%
E-27A	5 yr, S&P 500 Index -5%	11	0.540	25.39%
E-16	5 yr, ML High Yield Index -10%	12	0.522	26.72%
E-28A	5 yr, S&P 500 Index -10%	13	0.518	24.59%
D-2	5 yr, ML Corp Bond Index	15	0.483	26.45%
D-3	5 yr, Lehman Aggregate Index	16	0.482	26.25%
E-5	5 yr, ML Corp Bond Index -1%	17	0.480	26.29%
E-9	5 yr, Lehman Aggregate Index -1%	18	0.479	26.08%
D-5	5 yr, Lehman TIPS Index	19	0.479	27.39%
E-6	5 yr, ML Corp Bond Index -2%	20	0.478	26.13%
E-10	5 yr, Lehman Aggregate Index -2%	21	0.477	25.92%
E-17	5 yr, Lehman TIPS Index -1%	22	0.476	27.22%
C-1	2, 30 yr Treasuries (75/25%)	23	0.474	25.20%
Leh Agg	Lehman Aggregate Corp. Index ³	25	0.474	29.83%
E-18	5 yr, Lehman TIPS Index -2%	26	0.473	27.04%
D-1	5 yr, Agency MBS	27	0.472	26.23%
E-1	5 yr, Agency MBS -1%	28	0.470	26.07%
E-7	5 yr, ML Corp Bond Index -5%	29	0.469	25.63%
E-11	5 yr, Lehman Aggregate Index -5%	30	0.468	25.44%
E-2	5 yr, Agency MBS -2%	31	0.467	25.91%
E-19	5 yr, Lehman TIPS Index -5%	32	0.464	26.52%
E-3	5 yr, Agency MBS -5%	34	0.459	25.43%
ML1-10 Yr	Benchmark: ML 1-10 Yr Index ³	35	0.452	23.36%
E-8	5 yr, ML Corp Bond Index -10%	36	0.451	24.81%
E-12	5 yr, Lehman Agg. Index -10%	37	0.450	24.63%
D-6	5 yr, STRIPS Index	38	0.449	27.00%
E-21	5 yr, STRIPS Index -1%	39	0.447	26.83%
E-20	5 yr, Lehman TIPS Index -10%	40	0.446	25.66%
E-22	5 yr, STRIPS Index -2%	41	0.445	26.66%
E-4	5 yr, Agency MBS -10%	42	0.442	24.62%
C-3	5, 30 yr Treasuries (75/25%)	43	0.437	26.91%
E-23	5 yr, STRIPS Index -5%	45	0.436	26.16%
E-24	5 yr, STRIPS Index -10%	46	0.420	25.31%
C-5	2, 30 yr Treasuries (50/50%)	47	0.419	27.08%
C-7	5, 30 yr Treasuries (50/50%)	49	0.404	27.97%
C-4	10, 30 yr Treasuries (75/25%)	50	0.390	28.72%
C-8	10, 30 yr Treasuries (50/50%)	51	0.377	29.19%
A-4	30 yr Treasuries	52	0.351	30.14%
ML Hi Yld	ML High Yield Index ³	53	0.291	42.03%
S&P 500	S&P 500 Index ³	54	(0.048)	-14.40%

Notes:

1. The information ratio is a risk-adjusted measure of returns and is equal to the average monthly return divided by the standard deviation of monthly returns.
2. Performance data obtained from the FDIC via PORTIA reports.
3. These data are the returns solely of this index over the Investment Period. The December 31, 2000 holdings in the BIF are not included.

Among the simulated scenarios with the lowest volatility of returns are those that combine 5-year Treasury notes with the Merrill Lynch High Yield Corporate Bond Index or the S&P 500 Index. During this time period, these two indices were not highly correlated with Treasury securities. The combination of non-correlated securities reduces the volatility of returns for the resulting (diversified) portfolio. Along with the decrease in volatility, the High Yield index provided an increase in total period returns of 2.7 percent compared to the scenario containing only 5-year Treasury notes. The S&P 500 Index did not provide a similar increase in returns due to the poor performance of equities over the Investment Period. We note, however, that the S&P 500 rallied impressively during the remainder of 2004, after the conclusion of the Investment Period. Also, in many simulations, the terminal value of non-Treasury investments was reduced by 1, 2, 5, or 10 percent on the last trading day of the Investment Period to approximate the loss that the FDIC would realize if it were forced to liquidate assets unexpectedly.

As expected, the Par Value Specials offered by the U.S. Treasury to certain government agencies (e.g., Social Security Administration) delivered the best risk-adjusted performance over the Investment Period. Although not currently available to the FDIC, Par Value Specials represent an additional investment option to the GAS Program that the FDIC may want to consider. The actual performance of the BIF ranks fourth in our analysis of risk-adjusted returns and, therefore, suggests the DOF performed well relative to other investment alternatives. However, the BIF's strong performance is largely attributed to the short average maturity/duration of its portfolio that stems from (a) significant holdings of cash-equivalent assets and (b) its self-imposed maturity limit of 12 years. Both of these factors contributed to limit volatility of the portfolio but also limited the resulting returns in a period of generally declining interest rates. If the FDIC expressed a willingness to consider some incremental level of risk/volatility, the returns available to the BIF may have been greater during the Investment Period. As noted above, for example, had the FDIC invested according to the simulation that combines 5-year Treasury notes with the Merrill Lynch High Yield Corporate Bond Index (Scenario D-4), the return over the Investment Period would have increased by 397 basis points.

Conclusion

The DOF's current investment guidelines (i.e., GAS Program) maintain virtually perfect transactional liquidity and minimize any impact of market signaling from DOF's investment activities. Investments in instruments outside the GAS Program would not enjoy perfect transactional liquidity and would increase the chances of market signaling⁴ that could adversely impact both normal-market investment results as well as the final investment results in any contingency that required rapid liquidation of all investments. However, in some market environments, it is possible that the DOF could generate higher returns for the Funds under less restrictive investment guidelines. At a minimum, given the high risk-adjusted return available from Par Value Specials, the DOF should consider engaging the U.S. Treasury in a discussion to gain access to these investments.

⁴ Market Signaling: To convey information to the market through a firm's or entity's actions.

Maturity Limits

The FDIC's decisions about the maturity limit on its investments are complicated by multiple factors, including the difficulty of forecasting bank failures, a need to manage fund volatility and the objective of improving investment returns. The FDIC's Corporate Investment Policy (a) precludes the purchase of any GAS securities with a maturity in excess of 12 years and (b) requires that no more than 50 percent of the portfolio shall contain securities with maturity dates beyond 6 years. According to the Division of Finance *Corporate Liquidity Guidelines*, "The target balances of the AFS security holdings ... should be sufficient to cover unanticipated cash outflows which cannot be funded through the current overnight investment balances or through the receipt of coupon interest payments and investment security maturities as they occur during the current period."

Investments in securities with maturities greater than the self-imposed 12-year limit may jeopardize the FDIC's goal of controlling fund balance volatility. However, as our quantitative analysis of alternative investment strategies confirmed, in a period of declining interest rates, the best returns generally come from the longest duration instruments. Conversely, in a period of rising interest rates, the longest duration instruments would not maximize returns.

Conclusion

A critical question for the FDIC to consider, given the perfect transactional liquidity the FDIC currently maintains by investing in the GAS Program, is to what extent is the FDIC willing to assume some additional levels of risk/volatility for the potential benefit of increasing returns. We agree with the FDIC that it is prudent to maintain a laddered portfolio.⁵ Therefore, in markets characterized by a strongly positively sloped yield curve, the FDIC should continually analyze the returns foregone by investing in cash-equivalent instruments and place a specific limit on cash-equivalent holdings.

Benchmarking Survey

In planning the benchmarking exercise, it is important to note that the investment management function within the FDIC has few, if any, true peers among government agencies or commercial organizations due to its unique liability structure. The FDIC continuously monitors insured institutions at risk of failure and makes assessments of the potential immediate cash requirements that may arise should certain institutions fail. Nonetheless, the FDIC's liability structure (i.e., the timing and amounts of future cash outflows) beyond the immediate short term becomes increasingly unpredictable due to the uncertainty associated with potential failures. As a result, the investment decisions and subsequent performance of the FDIC's funds are not necessarily

⁵ Laddered Portfolio: An investment portfolio constructed to have comparable cash flows in each maturity "bucket" in order to minimize the risk of a change in the shape of the yield curve.

comparable to those of other government and/or commercial organizations with conventional liability structures.

Even though the investment environment at other organizations does not replicate the situations faced by the FDIC, the investment management practices at these organizations provide a basis on which to compare and contrast the FDIC's investment policies and practices. We reviewed the operations and performance of the investment management functions of 20 government and commercial organizations. While the responses from the survey participants are not sufficiently robust to draw any firm conclusions with respect to the FDIC's investment management practices, the data offer some interesting insights.

- The value of the FDIC's portfolio is significantly greater than that of nearly all other respondents.
- Over 70 percent of the 11 government agencies polled share the FDIC's objective to "generate returns and provide contingent liquidity."
- The FDIC is limited to purchasing securities in the GAS Program whereas several other government agencies have the ability to purchase securities outside of the GAS Program.
- Unlike their government counterparts, asset managers at commercial organizations are more likely to engage in restructuring trades.
- Similar to the FDIC, 70 percent of all respondents manage their asset portfolios relying on an internal investment management team rather than employ external advisors.
- Of the organizations that manage their investment portfolios internally, over 73 percent of these entities, including the FDIC, employ from 1 to 3 full-time positions.

A summary of the results from the benchmarking survey is presented in Appendix III.

Conclusion

The responses provided by the survey respondents are not sufficiently robust from which to draw any statistically significant conclusions with respect to the relative performance of the FDIC's investment portfolio vis-à-vis the investment performance of the survey respondents over the Investment Period.

Recommendation 1

The FDIC's opportunities to maximize its investment returns consist of broad courses of action, some of which are fully consistent with existing policies and regulations, while others would require approval by the FDIC Board or statutory changes.

As a result of the aforementioned scenario analyses and other stated considerations that impact portfolio performance, we recommend, given its oversight responsibilities, the CFO's office

initiate an internal review of the investment management policies and procedures to give further consideration to the courses of action necessary to address the recommendations set forth below. The results of such review should be presented to the IAG and shared with the FDIC's Board of Directors.

Overall, PwC agrees with the investment staff's reliance on an analytical framework that gives equal prominence to magnitude of returns, volatility of returns, and assumptions of transactional liquidity. We also note their concern to avoid market signaling in the conduct of portfolio transactions. The FDIC must conduct its investment operations with the perpetual risk that it will be called upon to liquidate its entire portfolio on an immediate basis. The management of this risk does not afford the FDIC a clear-cut opportunity to avail itself of alternative investment strategies that might likely yield higher returns with volatility comparable to its current volatility of returns. Equally important, since it is not possible to quantify the risk to the FDIC or the larger financial system of a troubled liquidation of the FDIC's investments, it is not possible to estimate the final monetary benefits that might accrue to the FDIC from adopting a different investment strategy.

Specifically, the CFO's internal review should consider the following:

- With respect to short-term investments, the DOF and IAG should consider establishing a limit on the amount of cash-equivalents (i.e., holdings in overnights in the short-term segment) permissible in both the BIF and SAIF as a percentage of beginning-of-period market value based on operating requirements and considering the liquidity of the portfolio. Holdings in excess of this limit should require the advance approval of the IAG.
- Given the growth in assets in the Funds in recent years and the potential impact of portfolio diversification on improving returns, the DOF and the IAG should consider formulating a proposal to permit adoption of investment guidelines that would allow investments in currently restricted instruments. For example, the FDIC should consider discussions with the Department of the Treasury to gain access to the Par Value Special securities. These securities would provide the FDIC with another investment option that is consistent with the FDIC's overall investment objectives and would maintain transactional liquidity and limit market signaling, two factors of significance given the FDIC's operational mission.
- With respect to maturity limits, we agree with the FDIC that it is prudent to maintain a laddered portfolio. In market environments of a strongly positively sloped yield curve, the FDIC should continue its recently-initiated practice of analyzing the returns foregone by investing in cash-equivalent instruments and place a specific limit on cash-equivalent holdings. The critical question for the FDIC to consider is, given the perfect transactional liquidity the FDIC currently maintains by investing in the GAS Program, to what extent is the FDIC willing to assume some additional levels of risk for the potential benefit of maximizing returns.

FINDING B: PORTFOLIO VALUATION AND RESERVE RATIO CALCULATION

The current method used to report the Reserve Ratio lacks complete financial transparency and does not accurately communicate the FDIC's true economic and financial condition as it relates to the potential need for assessments. The fund balance used in the Reserve Ratio calculation does not reflect the fair market value of the securities designated as held-to-maturity securities in the FDIC portfolio.

Investment Valuation

Pursuant to Financial Accounting Standards Board (*SFAS*) No. 115, *Accounting for Certain Investments in Debt and Equity Securities* and as outlined in the Division of Finance, Statement of Policy 18.1, at acquisition, the FDIC classifies its investments in one of two categories: held-to-maturity (HTM) or available-for-sale (AFS). HTM securities are reported at amortized cost or adjusted book value.⁶ AFS securities are reported at fair value,⁷ with unrealized holding gains and losses reported in comprehensive income as a separate component of the Fund Balance (BIF and SAIF) and Resolution Equity (FRF) on the Statement of Financial Position.⁸

Reserve Ratio Calculation

Current law requires the FDIC to maintain the deposit insurance fund balances (net worth) at a Designated Reserve Ratio of at least 1.25 percent of estimated insured deposits. If the Reserve Ratio falls below 1.25 percent of estimated insured deposits, the FDIC's Board of Directors is required to initiate steps to set semiannual assessment rates that are sufficient to increase the Reserve Ratio to the Designated Reserve Ratio. On a quarterly basis, the FDIC calculates the Reserve Ratio to determine if the Designated Reserve Ratio has been maintained.

The Reserve Ratio is calculated as follows:

[Fund Balance (Total Assets – Total Liabilities)]

divided by

[Estimated Insured Deposits]

Based on the current Generally Accepted Accounting Principles (GAAP) basis of accounting for investments in certain debt and equity securities discussed above, HTM securities are reported at

⁶ Adjusted Book Value: The book value on an entity's balance sheet after assets and liabilities are adjusted to market value.

⁷ Fair Value: The price that an interested but not desperate buyer would be willing to pay and an interested but not desperate seller would be willing to accept on the open market assuming a reasonable period of time for an agreement to arise.

⁸ The reporting associated with assets classified as AFS or HTM is reviewed as part of the FDIC's annual financial statement audits performed by the Government Accountability Office.

amortized cost or adjusted book value and AFS securities are reported at fair value. Therefore, HTM securities included in total assets are included at adjusted book value instead of market value.

Since the adjusted book value of HTM is less volatile than the market value of HTM, the Reserve Ratio is less volatile than it would be if all holdings were included at their market value. The current approach also has the potential to impact the collection of assessments:

- If there are significant unrealized gains in HTM, the accounting for HTM understates the current value of the FDIC's total investments. The potential does exist that if estimated deposits were to increase significantly and cause the Reserve Ratio to fall below the 1.25 percent Designated Reserve Ratio, the collection of assessments could be triggered. However, in such an instance, the current Reserve Ratio calculation would have only considered the adjusted book value of the HTM portfolio. If the HTM portfolio were valued at market value, the unrealized gains could significantly increase the Fund Balance and cause the Reserve Ratio to remain above the 1.25 percent threshold. This would eliminate the need for collecting assessments.

Recommendation 2

We recommend that the FDIC's CFO consider including in financial reports a Reserve Ratio calculation to reflect a market-value approach for valuing the HTM portion of the investment portfolio of the BIF and SAIF Funds. Such an approach, presented together with the current Reserve Ratio calculation methodology, promotes complete financial transparency in the Reserve Ratio calculation and more accurately communicates the FDIC's true economic and financial condition as it relates to assessments.

PwC is cognizant of the potential for increased volatility in the Fund balance amount used in the Reserve Ratio calculation under the market-value approach. The resulting impact could generate frequent swings in the actual Reserve Ratio calculation that could impact assessment decisions. While the purpose of the approach is to promote transparency, it is also clear that the resulting volatility could be a disruptive factor in FDIC's operations. PwC believes that this approach is best suited for a situation where the Reserve Ratio is determined based on a range that provides more flexibility in the decisions related to assessments. It is PwC's understanding that pending legislation related to FDIC Deposit Insurance Reform considers such a range. Therefore, our recommendation should be given further consideration in connection with passage of that legislation.

FINDING C: PERFORMANCE GUIDELINES

Certain of the annual performance guidelines for DOF’s Treasury Management Branch are not well matched with the performance goals, and; therefore, the measurement of performance relative to a given guideline does not clearly reinforce behavior toward the respective goal.

Performance Goals and Guidelines

DOF’s Treasury Management Branch is subject to a series of performance goals and guidelines established annually by DOF’s Director and are published on the FDIC’s Intranet. Although the performance goals and guidelines cover a broad set of responsibilities, our analysis was limited to those goals and guidelines distinctly related to investment strategy and performance.

	GOAL	GUIDELINE
#1	Adequate corporate liquidity is maintained.	No HTM securities are sold to meet obligations of the BIF or SAIF.

Conclusion

As a participant in the GAS Program, the FDIC’s investments enjoy virtually perfect transactional liquidity through the Department of the Treasury. As a consequence, any and all investments made by DOF’s Treasury Management Branch automatically achieve the goal of corporate liquidity. Furthermore, the associated guideline, which strongly discourages the sale of any HTM securities because they would trigger a requirement to convert all HTM holdings to AFS, addresses the volatility of the fund balance but not its liquidity.

Recommendation 3

We recommend that the CFO replace the current goal regarding liquidity with a goal to manage the reported volatility of the value of the BIF and SAIF.

	GOAL	GUIDELINE
#4	BIF and SAIF cash is invested to maximize investment revenue.	Total returns for the BIF and SAIF should exceed the Merrill Lynch 1-10 Year U.S. Treasury Index.

Conclusion

The Merrill Lynch 1-10 Year Index is not an exact match for the FDIC investment portfolio for the following reasons:

- A goal to exceed the returns of the Merrill Lynch Index is based on active trading of investments, including the ability to enter into restructuring trades. However, the FDIC is not at liberty to sell investments for the purpose of restructuring a portfolio.
- The FDIC invests in Treasury Inflation Protected Securities (TIPS) and 1-day certificates, but the Merrill Lynch Index does not include them.
- The FDIC can invest in securities with maturities of up to 12 years, which is 2 years beyond the maturity limit of the Merrill Lynch Index.

Recommendation 4

As guidelines for measuring investment returns, we recommend that the CFO consider the following two performance measures:

- Compare the FDIC's short-term market forecast at the moment of purchases to subsequent movements in yields. When cash inflows occur, the FDIC selects investments according to its short-term (next few months) forecast for changes in Treasury yields and the shape of the yield curve. A regular comparison of the FDIC's forecasts and investment selection to subsequent changes in yields and the shape of the yield curve would provide objective information regarding the FDIC's skill in active decision making.
- Compare the FDIC's returns with those of hypothetical portfolios based on rigid investment rules that pre-determine the Treasury investments, amounts, and timing of purchases. In addition to tracking returns on the Merrill 1-10 Treasury Index, the FDIC would benefit by tracking returns on simulated investment selection procedures in which there is no discretion in the timing or purchases or the selection of investments. These simulations would constitute a clear alternative to the FDIC's discretionary investment practices.

FINDING D: INDEPENDENT INVESTMENT EXPERTISE

The FDIC's investment Funds are not subject to the oversight of independent expert parties.

Governance

Governance requires a clear delegation of authority as well as continuous monitoring and oversight of key business processes by individuals independent of operations management. The delegation of authority and monitoring must be performed by individuals with substantial expertise in all the factors affecting the success of the enterprise.

Ultimate oversight and responsibility for directing the FDIC investment policies and procedures resides with the FDIC Board of Directors. The IAG provides additional oversight for the DOF. However, the current members of the IAG consist solely of "insiders." All are current employees of the FDIC who hold positions in senior management and, in some cases, have been appointed by the Chairman of the FDIC. The DOF pursues an active investment management strategy, exercising considerable discretion in the selection and timing of security purchases. While communication of investment results and portfolio strategy from the DOF to the IAG and the Board is adequate, their reviews lack evidence of an independent perspective grounded in strong knowledge of the financial markets and investment techniques.

The passage of the Sarbanes-Oxley Act ("the Act") reinforced the importance of having independent financial expertise at the Board level within a corporation's governance structure. Retaining the services of knowledgeable financial experts who are positioned to protect the assets of organizations and ensure proper financial reporting is quickly becoming less of a best practice and more of an expectation, especially in the specialized and complex area of investment management. Although the Act does not apply directly to government entities, it has increased the pressure on large organizations to systematically monitor performance and reporting and enlist the views of an independent expert in doing so.

Recommendation 5

We recommend that the CFO retain an independent investment management firm to provide periodic (at least semi-annual) assessments of the DOF's investment strategies and performance that are provided to the FDIC's Board of Directors.



APPENDIX I: OBJECTIVE, SCOPE, AND METHODOLOGY

Objective

The audit objective was to determine if the FDIC's investment strategy and portfolio management procedures provide the highest possible investment returns for the FDIC, taking into consideration the applicable legal and regulatory framework established for investments by the various Funds.

Audit Timing

We conducted our audit procedures during the period from November 2004 to February 2005. Our consideration of compliance with applicable laws and regulations and our review of the design of the FDIC's internal control relevant to the FDIC's investment strategy and portfolio management policies and procedures to obtain an understanding of the design of significant internal controls was limited to documentation reviewed, interviews conducted, and evaluation performed during this 4-month period.

Scope

The scope of the audit included an independent assessment of the FDIC's investment strategy, portfolio management procedures, and performance during the period from January 1, 2001 to October 31, 2004. Of the FDIC's investment portfolios, our assessment considered the BIF and the SAIF, but not the FRF due to the FDIC's current agreement with the Department of the Treasury that FRF monies will be invested only in overnight securities. The audit services provided by PwC were performed in accordance with the Performance Audit Standards under Generally Accepted Government Auditing Standards.

In the course of performing our procedures (which were performed during the period from November 2004 to February 2005), with respect to internal control relevant to FDIC's investment strategy and portfolio management policies and procedures, we obtained an understanding of the design of significant internal controls. Our procedures were not designed to provide assurance on internal control over the FDIC's investment strategy and portfolio management policies and procedures. Further, our procedures were performed subsequent to the period, January 1, 2001 to October 31, 2004, that was subjected to the performance audit described above. Accordingly, we do not express an opinion on such controls. We identified no instances of non-compliance with FDIC's investment strategy and portfolio management policies and procedures.



Methodology

To accomplish our objectives, we interviewed DOF staff in Washington, D.C., and reviewed investment policies and procedures and other investment-related documentation. We also performed the following procedures:

- Identified the FDIC's portfolio investment makeup and evaluated if the mix of allowable investments was a reasonable investment approach to maximize the FDIC's return with adequate consideration given to liquidity needs.
- Evaluated the FDIC's investment policy and ensured that the FDIC fully availed itself of the most favorable investment instruments that complied with applicable legal and regulatory investment restrictions.
- Identified other federal agencies or other entities with similar investment goals and restrictions as the FDIC to determine if other investment strategies have proved to be more favorable than the FDIC's investment approach.
- Reviewed the FDIC's investment portfolio mix of short-term and long-term instruments and the interest rates currently being earned.
- Developed quantifiable results showing how alternative investment strategies would have provided higher-than-historical yields in prior years and how recommended investment strategy changes will give the FDIC the greatest probability of higher investment returns in the future.
- Reviewed the statutory restrictions on allowable FDIC investment activities and determined if those restrictions have any significant impact on the portfolio's earnings potential.
- Reviewed investment policies and procedures to determine whether the execution of those policies and procedures complied with applicable laws and regulations.
- Reviewed the FDIC's internal control relevant to the FDIC's investment strategy and portfolio management policies and procedures to obtain an understanding of the design of significant internal controls.



APPENDIX II: SIMULATION METHODOLOGY AND DESCRIPTION

By means of a proprietary simulation model, PwC has simulated the theoretical results of the FDIC's BIF portfolio for the period January 1, 2001 through October 31, 2004, using a variety of mechanical investment strategies. All three PORTIA segments (Bond, short-term, and TIPS) of the BIF portfolio are included in the results of the simulations. Although our analysis was limited to the BIF portfolio, the conclusions are applicable to the SAIF since the investment guidelines and restrictions for the SAIF are identical to those of the BIF.

The following applies to portfolio simulations A through E.

Starting Point

The starting point of the simulations was FDIC's BIF portfolio as it existed on December 31, 2000. The list of holdings for this portfolio was obtained from the FDIC via a PORTIA report. The exact securities and the positions in these securities were replicated in the simulator. Beginning January 1, 2001, any new purchases were made according to the strategy of the particular scenario being simulated (see below). As existing positions in Treasury securities matured, they were replaced with purchases according to the scenario strategy.

TIPS Segment

The TIPS segment of the portfolio was not modified from the PORTIA data provided by the FDIC. The market values and accrued interest values were unchanged from PORTIA. Similarly, timing and amounts of cash flows resulting from purchases/sales and interest received was unchanged.

Cash Balances and Timing of Purchases

All cash inflows and outflows moved through the short-term segment of the portfolio. Cash inflows from maturities and interest payments in the Bond segment were added to the cash balance in the short-term segment. Cash flows from the TIPS segment were also added to/subtracted from the cash balance in the short-term segment. The user designated target, maximum, and minimum balances for cash. When the cash balance exceeded the maximum, securities were purchased automatically to bring the cash balance back to the target value. When the cash balance dropped below the minimum value, securities were automatically sold to bring the cash balance above the minimum. Cash was not allowed to build up beyond the maximum value set by the user.

In the Audit phase simulations, the target cash balance had been set at \$10,000. The maximum cash balance was \$50,000 and the minimum cash balance was \$0. In subsequent simulations that incorporated the FDIC's recent target floor for operational cash, the maximum cash balance was \$155 million, and the minimum cash balance was \$150 million. While in the short-term segment, funds were invested overnight and received the London Interbank Offered Rate (LIBOR). The LIBOR rate is a benchmark rate that is used for financial instruments traded on



the global financial markets. The LIBOR rate was used as a proxy for the rate received on overnight investments by the FDIC.

Sales

On a few occasions in the PwC simulations, securities in the Bond segment needed to be sold to fund purchases in the TIPS segment. This was necessary because the FDIC's actual TIPS purchases had been preserved and, with the low-target cash balance in the simulations, there were not adequate funds in the short-term segment to fund the TIPS purchases. When a sale was necessary, the securities being sold were the same ones that were being purchased in the Bond segment in the given scenario. For example, if the scenario called for the purchase of 2-year and 10-year Treasuries, then 2-year and 10-year Treasuries that had been purchased since January 1, 2001, were sold to raise the cash needed.

Input Data

Daily pricing data for the Treasury securities and various indices was obtained from Bloomberg. The Treasury securities purchased in the various scenarios were selected from all the Treasury securities outstanding during the time period covered by the simulations, January 1, 2001 to October 31, 2004.

Scenario Summary

In all scenarios, the specific Treasury securities purchased were updated quarterly to ensure the most recently issued security was being purchased. This ensured that a 5-year Treasury security purchased in June of 2002 actually had approximately a 5-year term remaining, instead of purchasing a 5-year security that had been issued 2 years previously and only had a 3-year term remaining. See the Scenarios Index for a detailed listing of the components of each scenario.

Scenario A

In the "A" scenarios, all new purchases were of a single type of Treasury security, e.g., the 2-year Treasury note.

Scenario B

In the "B" scenario, all new purchases were of Par Value Special securities. Purchases throughout the year were of the current month Certificate of Indebtedness (CI). On June 30 of each year, all outstanding CIs matured. At this time, all available funds from maturities and interest receipts were invested in the newly issued Special Investment (SI). SIs carried the same coupon rate as the CI for the month of June in the year of issue and had a term beyond the time frame of the simulation (i.e., a maturity date beyond October 31, 2004). CIs and SIs were both purchased at par and both paid interest semi-annually on December 31 and June 30.

Scenario C



In the “C” scenarios, new purchases were spread among two types of Treasury securities (e.g., 2-year and 10-year Treasury notes) in set proportions. The first set of simulations distributed 75 percent of the available funds to the shorter-term security and 25 percent to the longer-term security for a variety of security pairings. The second set of simulations used the same pairings of securities, with 50 percent of the available funds distributed to each.

Scenario D

In the “D” scenarios, a variety of indices were used to introduce non-Treasury securities, such as mortgage-backed securities and corporate bonds. In all “D” scenario simulations, available funds for purchases were distributed as follows: 75 percent to the 5-year Treasury note and 25 percent to a single non-Treasury index. For all indices except the S&P 500, it has been assumed that accrued interest was incorporated into the daily index price and that interest payments were re-invested immediately in the index. For the S&P 500 Index, the total returns series, including dividend re-investment, was used.

Scenario E

The “E” scenarios replicated the conditions of the “D” scenarios with the addition of a terminal effect. In order to simulate the effect of a rapid liquidation of non-GAS securities on the open market, the market value of the index was reduced by a certain percentage on the final trading day of the period. Market values were reduced by 1, 2, 5, or 10 percent and resulted in a lower total portfolio return for 2004 and, hence, for the entire period.

Scenario Index

The following securities were purchased in the simulations when cash was available for investment (e.g., from maturities and interest receipts). The starting point for simulations was the FDIC's BIF holdings as of December 31, 2000, with actual purchases being replaced by the securities listed below.

Name	First Security	% First Security	Second Security	% Second Security	Non-GAS Security Terminal Value Reduction
A-1	2 year Treasury Note	100%	N/A	N/A	N/A
A-2	5 year Treasury Note	100%	N/A	N/A	N/A
A-3	10 year Treasury Note	100%	N/A	N/A	N/A
A-4	30 year Treasury Note	100%	N/A	N/A	N/A
B-1	SSA Par Value Specials	100%	N/A	N/A	N/A
C-1	2 year Treasury Note	75%	30 year Treasury Bond	25%	N/A
C-2	2 year Treasury Note	75%	10 year Treasury Note	25%	N/A
C-3	5 year Treasury Note	75%	30 year Treasury Bond	25%	N/A
C-4	10 year Treasury Note	75%	30 year Treasury Bond	25%	N/A

Name	First Security	% First Security	Second Security	% Second Security	Non-GAS Security Terminal Value Reduction
C-5	2 year Treasury Note	50%	30 year Treasury Bond	50%	N/A
C-6	2 year Treasury Note	50%	10 year Treasury Note	50%	N/A
C-7	5 year Treasury Note	50%	30 year Treasury Bond	50%	N/A
C-8	10 year Treasury Note	50%	30 year Treasury Bond	50%	N/A
C-9	5 year Treasury Note	50%	10 year Treasury Note	50%	N/A
D-1	5 year Treasury Note	75%	Agency MBS Index	25%	N/A
D-2	5 year Treasury Note	75%	Investment Grade Corp Bond Index	25%	N/A
D-3	5 year Treasury Note	75%	Lehman Aggregate Index	25%	N/A
D-4	5 year Treasury Note	75%	Merrill Lynch High Yield Index	25%	N/A
D-5	5 year Treasury Note	75%	Lehman TIPS Index	25%	N/A
D-6	5 year Treasury Note	75%	7 and 10 yr Treasury Zero Index	25%	N/A
D-7A	5 year Treasury Note	75%	S&P 500 Index	25%	N/A
E-1	5 year Treasury Note	75%	Agency MBS Index	25%	1%
E-2	5 year Treasury Note	75%	Agency MBS Index	25%	2%
E-3	5 year Treasury Note	75%	Agency MBS Index	25%	5%
E-4	5 year Treasury Note	75%	Agency MBS Index	25%	10%
E-5	5 year Treasury Note	75%	Investment Grade Corp Bond Index	25%	1%
E-6	5 year Treasury Note	75%	Investment Grade Corp Bond Index	25%	2%
E-7	5 year Treasury Note	75%	Investment Grade Corp Bond Index	25%	5%
E-8	5 year Treasury Note	75%	Investment Grade Corp Bond Index	25%	10%
E-9	5 year Treasury Note	75%	Lehman Aggregate Index	25%	1%
E-10	5 year Treasury Note	75%	Lehman Aggregate Index	25%	2%
E-11	5 year Treasury Note	75%	Lehman Aggregate Index	25%	5%
E-12	5 year Treasury Note	75%	Lehman Aggregate Index	25%	10%
E-13	5 year Treasury Note	75%	Merrill Lynch High Yield Index	25%	1%
E-14	5 year Treasury Note	75%	Merrill Lynch High Yield Index	25%	2%
E-15	5 year Treasury Note	75%	Merrill Lynch High Yield Index	25%	5%
E-16	5 year Treasury Note	75%	Merrill Lynch High Yield Index	25%	10%
E-17	5 year Treasury Note	75%	Lehman TIPS Index	25%	1%
E-18	5 year Treasury Note	75%	Lehman TIPS Index	25%	2%
E-19	5 year Treasury Note	75%	Lehman TIPS Index	25%	5%
E-20	5 year Treasury Note	75%	Lehman TIPS Index	25%	10%
E-21	5 year Treasury Note	75%	7 and 10 yr Treasury Zero Index	25%	1%
E-22	5 year Treasury Note	75%	7 and 10 yr Treasury Zero Index	25%	2%
E-23	5 year Treasury Note	75%	7 and 10 yr Treasury Zero Index	25%	5%
E-24	5 year Treasury Note	75%	7 and 10 yr Treasury Zero Index	25%	10%
E-25A	5 year Treasury Note	75%	S&P 500 Index	25%	1%
E-26A	5 year Treasury Note	75%	S&P 500 Index	25%	2%
E-27A	5 year Treasury Note	75%	S&P 500 Index	25%	5%
E-28A	5 year Treasury Note	75%	S&P 500 Index	25%	10%



APPENDIX III: BENCHMARKING RESULTS

BACKGROUND

In planning the benchmarking exercise, it is important to note that the investment management function within the FDIC has few, if any, true peers among government agencies or commercial organizations due to the FDIC's unique liability structure. The FDIC continuously monitors insured institutions at risk of failure and makes assessments of the potential immediate cash requirements that may arise should certain institutions fail. Nonetheless, the FDIC's liability structure (i.e., the timing and amounts of future cash outflows) beyond the immediate short-term becomes increasingly unpredictable due to the uncertainty associated with potential failures. As a result, the investment decisions and subsequent performance of the FDIC's funds are not necessarily comparable to those of other government and/or commercial organizations with conventional liability structures.

Even though the investment environment at other organizations does not replicate the situations faced by the FDIC, the investment management practices at these organizations provide a basis on which to compare and contrast the FDIC's investment policies and practices. Therefore, PwC reviewed the operations and performance of the investment management functions of 20 government and commercial organizations. While the responses from the survey participants are not sufficiently robust to draw any firm conclusions with respect to the FDIC's investment management practices, the data offer some interesting insights.

- The value of the FDIC's portfolio is significantly greater than that of nearly all other respondents.
- Over 70 percent of the 11 government agencies polled share the FDIC's objective to "generate returns and provide contingent liquidity."
- The FDIC is limited to purchasing securities in the GAS Program whereas several other government agencies have the ability to purchase securities outside of the GAS Program.
- Unlike their government counterparts, asset managers at commercial organizations are more likely to engage in restructuring trades.
- Similar to the FDIC, 70 percent of all respondents manage their asset portfolios relying on an internal investment management team rather than employ external advisors.
- Of the organizations that manage their investment portfolios internally, over 73 percent of these entities, including the FDIC, employ between 1 and 3 FTEs.

It is important to note that the results of the benchmarking study were not derived using statistical sampling techniques, and the results should not be viewed as statistically significant given the limited number of organizations surveyed. For certain questions, the responses reflect the best estimate from the respondents for a specified period and do not correspond to the Investment Period over which our simulation analyses were performed and, furthermore, may not necessarily reflect information available from public sources. The survey results reflect the opinions of the respondents and should be used for informational purposes only.



Finally, it should be noted that these organizations participated in the benchmarking exercise on the express basis that any information collected during the survey effort would be maintained in confidence and any public reporting of the benchmarking results would not disclose their identities.

Methodology

A telephone survey was conducted by PwC with each of the participants to collect information related to their investment management practices and portfolios. The interviews were generally conducted with a Treasurer or Cash Management Officer, but in certain cases, we spoke directly with the Chief or Deputy Financial Officer. Since the sample size is relatively small, the results focus on broad investment practices rather than providing in-depth comparisons at the operational level.

In order to make a fair comparison of responses, participants were limited to a choice of responses from the questionnaire only. In some cases, participants elected not to respond or were unable to respond to particular questions. In these circumstances, we noted their non-response in the results of the study.

Respondent Demographics

PwC invited the participation of several government agencies, cooperatives, and commercial corporations based on information received from the following sources: the FDIC's DOF, the Bureau of Public Debt, and PwC's prior experience in working with Investment Managers in various commercial corporations.

Names of commercial corporations or government organizations participating in the study will not be disclosed to the FDIC or OIG and will remain confidential. We have, however, provided a general profile of the characteristics of the commercial, government, and government-related entities that participated in the study below:

- A total of 20 organizations were included in this survey
- 55 percent – 11 were government or government-related organizations¹
- 45 percent – 9 were commercial organizations

The government and government-related organizations participating in the study consisted of organizations that were government insurance programs, government-sponsored entities, or government agencies. Most of these agencies do not receive their funding from appropriations but rather through user fees and assessments or operating income.

Commercial organizations participating in the study were either private or public companies and represented a diverse base of industries, including manufacturing, transportation, insurance,

¹ Any reference to government organizations refers to government agencies or federally sponsored agencies.



retail, technology, and professional services. A number of commercial corporations declined, for reasons of privacy, to respond to our questionnaire. When corporations elected to participate, we asked them to confine their comments to the investment of their corporate cash. The investment of pension funds, which is the largest investment activity of most non-financial corporations, was purposely excluded from the survey due to the different nature of their liabilities.



RESULTS

The data presented in the following tables summarizes the responses provided by the survey respondents. For presentation purposes, the tables generally illustrate the data as a percentage of: (a) government organizations, (b) commercial organizations, and (c) all survey respondents. An additional reference indicates the FDIC's practices relative to the survey participants.

For example, in Question 1, 60 percent of all organizations polled indicated that the general purpose of their investment portfolio was to generate returns and provide contingent liquidity, but 72.7 percent of government organizations answered in the same manner. As noted by the checkmark, this approach is generally consistent with the FDIC's practices.

Investment Profile, Strategies, and Policy Restrictions

1. What is the general purpose of your investment portfolio(s)?

Please select all that apply:

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>	<i>FDIC</i>
Generate returns	18.2%	11.1%	15.0%	
Provide contingent liquidity	9.1%	22.2%	15.0%	
Generate returns and provide contingent liquidity	72.7%	44.4%	60.0%	√
Other	0%	22.2%	10.0%	
Total Responses:	100% (11)	100% (9)	100% (20)	

2. What is the current size of the portfolio(s) measured in dollars?

Please select one of the following:

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>	<i>FDIC</i>
Less than or equal to \$1 Bil.	30.0%	50.0%	38.9%	
\$1.1 Billion - \$1.5 Billion	20.0%	25.0%	22.2%	
\$1.6 Billion - \$2 Billion	10.0%	12.5%	5.6%	
\$2.1 Billion - \$5 Billion	10.0%	0%	11.1%	
\$5.1 Billion - \$10 Billion	0%	0%	0%	
\$10.1 Billion - \$20 Billion	20.0%	0%	11.1%	
\$20.1 Billion - \$30 Billion	0%	0%	0%	
\$30.1 Billion +	10.0%	12.5%	11.1%	√
<i>Average Portfolio Size</i>	\$7.4 b	\$4.8 b	\$6.3 b	
Total Responses:	100% (10)	100% (8)	100% (18)	
Not Measured or Reported:	1	1	2	

3. How predictable are the liabilities (cash disbursements) that your portfolio is expected to fund?

Please select one of the following:

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>	<i>FDIC</i>
Highly Predictable	45.5%	55.6%	50.0%	
Difficult to Predict	54.5%	33.3%	45.0%	√
Unpredictable	0%	11.1%	5.0%	
Total Responses:	100% (11)	100% (9)	100% (20)	

4. What is the source of funds for the portfolio? (Note: Each participant could provide more than one answer.)

Please select all that apply:

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>	<i>FDIC</i>
Government appropriations	3	0	3	
User fees	8	0	8	√
Other	4	9	13	

5. Which of the following securities are you permitted, by law or regulation, to purchase? (Note: Each participant could provide more than one answer.)

Please select all that apply:

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>	<i>FDIC</i>
Non-marketable Treasuries	8	0	8	√
Treasuries (open market)	3	6	9	
Agency Mortgage-Backed Securities	3	6	9	
Collateralized Mortgage Obligations (CMOs)	2	6	8	
Corporate Notes and Bonds	2	6	8	
Other (e.g., equities)	4	7	11	

Portfolio Composition and Performance

6. What is the current average maturity of the portfolio?

Please select one of the following:

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>	<i>FDIC</i>
One Day	9.1%	0%	6.3%	
Less Than 30 Days	0%	80.0%	25.0%	
31 Days – 1 Year	0%	20.0%	6.3%	
Greater than 1 – 5 Yrs	36.4%	0%	25.0%	√
Greater than 5 – 10 Yrs	18.2%	0%	12.5%	
Greater than 10 – 15 Yrs	9.1%	0%	6.3%	
Greater than 15 – 20 Yrs	27.3%	0%	18.7%	
Greater than 20 Yrs and Up	0%	0%	0%	
Total Responses:	100% (11)	100% (5)	100% (16)	
Not Measured or Reported:	0	4	4	

7. What is the current average duration of the portfolio?

Please select one of the following:

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>	<i>FDIC</i>
One Day	28.6%	0%	16.7%	
Less Than 30 Days	0%	40.0%	16.7%	
31 Days – 1 Year	0%	40.0%	16.7%	
Greater than 1 – 5 Yrs	28.6%	0%	16.7%	√
Greater than 5 – 10 Yrs	28.6%	20.0%	25.0%	
Greater than 10 – 15 Yrs	0%	0%	0%	
Greater than 15 – 20 Yrs	14.3%	0%	8.3%	
Greater than 20 Yrs and Up	0%	0%	0%	
Total Responses:	100% (7)	100% (5)	100% (12)	
Not Measured or Reported:	4	4	8	

8. How are returns measured?

Please select one of the following:

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>	<i>FDIC</i>
Yield	60.0%	33.3%	47.4%	
Total Return	40.0%	66.7%	52.6%	√
Other	0%	0%	0%	
Total Responses:	10	9	19	

<i>Not Measured or Reported:</i>	1	0	1	
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9. What index or measures do you use to benchmark portfolio performance?

Please select all that apply: (Note: Each participant might elect more than one answer.)

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>	<i>FDIC</i>
Customized goals specific to the organization	4	7	11	
Government bond index	3	1	4	√
Broad bond index	1	0	1	
Other	2	2	4	
None	3	0	3	
Total Responses:	13	10	23	

10. Do you ever sell a security prior to its maturity strictly for the sake of improving the return on the portfolio?

Please select one of the following:

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>	<i>FDIC</i>
Yes	10.0%	44.4%	26.3%	
No	60.0%	55.6%	57.9%	√
Not Permitted	30.0%	0%	15.8%	
Total Responses:	100% (11)	100% (9)	100% (20)	

11. What is the composition of the portfolio(s)?

Please select all that apply:

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>	<i>FDIC</i>
Non-marketable Treasuries	8	0	8	√
Treasuries (open market)	3	5	8	
Agency Mortgage-Backed Securities	2	4	6	
CMOs	1	2	3	
Corporate Notes and Bonds	1	5	6	
Other (e.g., equities)	2	4	6	

Investment Management

12. Who manages the portfolio?

Please select one of the following:

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>	<i>FDIC</i>
Internal Staff	72.7%	66.7%	70.0%	√
External Advisor	18.2%	22.2%	20.0%	
Both Internal & External Advisors	0%	11.1%	5.0%	
Other	9.1%	0%	5.0%	
Total Responses:	100% (11)	100% (9)	100% (20)	

13. If external managers are used, how is compensation computed?

Please select one of the following:

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>
Fixed fee per year	100.0%	0	25.0%
Percentage of assets managed	0%	100.0%	75.0%
Other	0	0	0
Total Responses:	100% (1)	100% (3)	100% (5)

14. If internally managed, how many FTE's (i.e., Full Time Equivalents) are involved?

Please select one of the following:

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>	<i>FDIC</i>
3-3.99 FTEs	11.1%	0	6.7%	
2-2.99 FTEs	11.1%	16.7%	13.3%	
1-1.99 FTEs	66.7%	50.0%	60.0%	√
0-.99 FTEs	11.1%	33.3%	20.0%	
Average FTEs	1.33	.89	1.16	
Total Responses:	100% (9)	100% (6)	100% (15)	

Oversight and Compliance

15. What boards or committees provide oversight to the investment portfolio(s)?

Please select all that apply: (Note: Participants could select more than one answer.)

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>	<i>FDIC</i>
Board of the organization	3	4	7	√
An advisory committee (investments only)	3	2	5	√
An advisory committee (broad, not limited to investments)	1	1	2	
Other	7	2	9	

16. In your organization's financial statements how do you value your investment portfolios?

Please select one of the following:

<i>Survey Response</i>	<i>Government</i>	<i>Commercial</i>	<i>Total</i>	<i>FDIC</i>
Book value	27.3%	12.5%	21.1%	
Market value	45.5%	62.5%	52.6%	
Book value for "hold to maturity" securities and market value for "available for sale" securities	27.3%	25.0%	26.3%	√
Don't know	0%	0%	0%	
Total Responses:	100% (11)	100% (8)	100% (19)	
Non-Responses or not reported	0	1	1	

Part II

Corporation Comments and OIG Evaluation

CORPORATION COMMENTS AND OIG EVALUATION

The CFO and the Director, DOF, provided a written response on June 9, 2005, which is presented in its entirety, beginning on page II-9, and is summarized below, along with our overall evaluation of the response.

Overall Corporation Comments: The CFO and DOF expressed concerns regarding the scope and objectives of the underlying audit and that there appeared to be a misunderstanding of the circumstances in which the FDIC must operate and the principles of investment management. The CFO and DOF responded that the report findings and recommendations do not take into account the requirements to “maintain liquidity and control deposit insurance fund volatility.” Further, the CFO and DOF characterize the FDIC’s investment policies and its implementation of those policies as being consistent with the profile of a “prudent investor” managing a program with “limited inherent risk.”

Early in the response, the CFO and DOF indicated that, “we are gratified that PwC was able to replicate and match the portfolio total return figures generated by PORTIA, the FDIC’s portfolio information management system of record, thus verifying such calculations are being performed and reported appropriately.”

Overall OIG Evaluation of Response: We consider the CFO’s and DOF’s concerns to be unwarranted. The audit scope and objectives were set by the FDIC OIG. In accomplishing the audit, PwC took into consideration the goals and constraints under which the Funds operate, including those related to maintaining liquidity and controlling deposit insurance fund balance volatility. Additionally, PwC gained an understanding of other unique circumstances that impact the development of the FDIC’s investment strategies. Beyond this understanding, the PwC team collectively possessed sound professional knowledge of fixed income investment management as required by applicable auditing standards. In fact, the FDIC OIG selected PwC to perform this audit based on its demonstrated ability in the audited area.

The overall message of the PwC report is that certain investment practice alternatives might prove beneficial to the FDIC if implemented. We disagree that the findings and recommendations of the report do not take into account the requirements to “maintain liquidity and control deposit insurance fund volatility.” Recommendation 3 directly addresses the confusion caused by the FDIC’s use of the term “liquidity” and recommends changing DOF’s performance goal from “managing liquidity” to managing the reported volatility of the BIF and SAIF.

Regarding the CFO’s and DOF’s response that the FDIC’s investment policies and its implementation of those policies are consistent with the profile of a “prudent investor” managing a program with “limited inherent risk,” PwC was not asked to opine on the level of inherent risk in the FDIC’s portfolios as part of this audit. PwC also did not opine on a particular investment nor on the preferences of a “prudent investor.” The alternatives presented through the PwC analyses provided an array of investment options

for FDIC management to consider in managing the FDIC's portfolio. Also, as indicated earlier, PwC focused its work on the FDIC's investment policies and practices to manage its portfolios and considered improvement necessary as indicated by the recommendations in this report.

The Corporation's comment that PwC's analyses verified PORTIA calculations is inconsistent with the audit process and audit results. Verifying the FDIC's portfolio return figures generated by PORTIA was not part of the PwC replication of PORTIA results. Additionally, the CFO and DOF view the PwC report as opining on the appropriate reporting of the FDIC's investment data. PwC was not engaged to opine on investment reporting, and no such opinion is in the audit report. Thus, the statement in the Corporation's response misstates PwC's audit results and conclusions.

The CFO and DOF concurred with one recommendation, concurred with another recommendation but only on a limited basis, and nonconcurred with the remaining three recommendations. The Corporation's comments on each of the five recommendations along with our evaluations of their comments follow.

Recommendation 1

Recommendation: PwC recommended that, given its oversight responsibilities, the CFO's office initiate an internal review of the investment management policies and procedures to give further consideration to the following recommended courses of action. The results of such a review should be presented to the IAG and shared with the FDIC's Board of Directors:

- With respect to short-term investments, DOF and the IAG should consider establishing a limit on the amount of cash-equivalents (i.e., holdings in overnights in the short-term segment) permissible in both the BIF and SAIF as a percentage of the beginning-of-period market value based on operating requirements and considering the liquidity of the portfolio. Holdings in excess of this limit should require the advance approval of the IAG.
- Given the growth in assets in the Funds in recent years, and the potential impact of portfolio diversification on improving returns, DOF and the IAG should consider formulating a proposal to permit adoption of investment guidelines that would allow investments in currently restricted instruments, including Par Value Specials.
- With respect to maturity limits, PwC agrees with the FDIC that it is prudent to maintain a laddered portfolio. In market environments of a strongly positively-sloped yield curve, the FDIC should continue its practice of analyzing the returns foregone by investing in cash-equivalent instruments and place a specific limit on cash-equivalent holdings. The critical question for the FDIC to consider is, given the perfect transactional liquidity the FDIC currently maintains by investing in the

GAS Program, to what extent is the FDIC willing to assume some additional levels of risk for the potential benefit of maximizing returns?

The CFO and DOF Response: The FDIC has carefully considered the multi-part recommendation and has decided against initiating an internal review of the investment management policies and procedures. Pertinent objections to each element of the recommendation follow:

- Placing rigid limits on cash-equivalents would force DOF's investment staff to make security purchases only on those days when the insurance funds receive cash. Such an "autopilot" approach would preclude "market timing" purchases (for example, buying Treasury securities when their prices dip) that the FDIC has used successfully in the past to enhance the long-term investment earnings of the insurance funds.
- With respect to expanding the FDIC's investment authority, on at least three separate occasions in the recent past, FDIC staff and management have carefully considered and consistently rejected the idea of seeking permission to expand the FDIC's current investment authority.
- With respect to seeking authority to invest in Par Value Specials, these securities are not available to revolving funds such as the BIF or the SAIF. For various reasons, FDIC staff believes that to ask the Treasury and the Congress to, in effect, subsidize the BIF and the SAIF by allowing the Funds to earn long-term U.S. Treasury security market yields without incurring the attendant price risk by allowing the FDIC to invest in Par Value Special securities is inconsistent with the principles of sound public policy.

OIG Evaluation of Response: The CFO and DOF response is partially responsive to the recommendation. The response documents that further consideration was given to each of the specific elements under the overall recommendation. However, the element concerning the establishment of a limit on cash equivalents appears to need some clarification. The CFO and DOF refer to placing "rigid limits" on cash equivalents to be detrimental to optimal decisionmaking because, under those conditions, "FDIC investment staff would be forced to invest at inopportune times." This interpretation of the PwC recommendation differs from the intended course of action. The recommendation emphasizes that the critical consideration is, "to what extent is the FDIC willing to assume some additional levels of risk for the potential benefit of maximizing returns." Accordingly, the message is not that "rigid limits" (a term that does not appear in the report) be established but that pre-determined levels of available overnight deposits should trigger discussion and that CFO and IAG authorization be sought to maintain cash equivalents above established limits. With this clarification, the audit recommendation should serve to enhance the management of the investment process rather than be seen as hindering the FDIC's investment staff from making the best investment decisions because of arbitrary rigid limits that force untimely investment decisions.

We reaffirm our position on the recommendation. The recommendation is unresolved and will be presented to the designated audit follow-up official for a final management decision.

Recommendation 2

Recommendation: PwC recommended that the CFO consider including in financial reports a Reserve Ratio calculation to reflect a market-value approach for valuing the HTM portion of the investment portfolio of the BIF and SAIF Funds.

CFO and DOF Response: At this time, the Corporation is not going to include in the FDIC financial reports a Reserve Ratio calculation to reflect a market-value approach for valuing the held-to-maturity portion of the investment portfolio. Extensive footnote disclosures with respect to investments explicitly detail the book and market value of all categories of securities held in the BIF's and SAIF's investment portfolios. However, the CFO and DOF also stated that possible changes from the pending enactment of deposit insurance reform would render this recommendation worthy of further consideration.

OIG Evaluation of Response: We consider the comments responsive, and no further action is necessary. The recommendation is resolved, dispositioned, and closed.

Recommendation 3

Recommendation: PwC recommended that the CFO replace the current goal regarding liquidity with a goal to manage the reported volatility of the value of the BIF and the SAIF.

CFO and DOF Response: The CFO and DOF concurred that the subject goal should be revised, and DOF staff will make such a revision.

OIG Evaluation of Response: Management's actions are responsive to the recommendation. The recommendation is resolved but will remain undispositioned and open until we have determined that the agreed-to corrective action has been completed and is effective.

Recommendation 4

Recommendation: As guidelines for measuring investment returns, PwC recommended that the CFO consider the following two performance measures:

- Compare the FDIC's short-term market forecast at the moment of purchases to subsequent movements in yields.
- Compare the FDIC's returns with those of hypothetical portfolios based on rigid investment rules that pre-determine the Treasury investments, amounts and timing of purchases.

CFO and DOF Response: The CFO and DOF did not concur that the FDIC should compare the FDIC’s short-term market forecast at the moment of purchases to subsequent movements or that the FDIC compare its returns with those of hypothetical portfolios based on rigid investment rules that pre-determine the Treasury’s investments, amounts, and timing of purchases. Specifically, the CFO and DOF object for the following reasons:

- The numerous internal FDIC-staff analyses are viewed as adequate comparisons to market forecasts.
- Prior FDIC internal studies resulted in the selection of the Merrill Lynch 1-10 Year Treasury Index, and FDIC staff still considers this the appropriate measurement index.
- The Merrill Lynch 1-10 Year Treasury Index helps the FDIC staff determine whether making particular maturity and duration decisions adds value in both the short-term and longer-term bases.
- Comparing the BIF and SAIF investment performance to other indexes is not warranted, especially on a cost/benefit perspective.
- Potential problems exist in selecting “appropriate” hypothetical portfolios to compare the BIF and SAIF investment activities, such as determining beginning/ending periods.

OIG Evaluation of Response: This recommendation is unresolved for the following reasons:

- Based on PwC’s experience in the investment management industry, it is common practice to maintain a record of the portfolio manager’s short- and medium-term forecasts of changes in market benchmarks and compare those forecasts to the actual evolution of the benchmarks. In the fixed income asset class, these benchmarks typically consist of key rates in the Treasury curve (e.g., yields for the 2-year, 5-year, 10-year, and 20-year), spreads between these key rates (i.e., changes in the shape of the Treasury yield curve) and changes in credit spreads (not relevant to the FDIC’s investment program). This practice is especially relevant when the managers have the flexibility to either invest in accordance with the perceived market consensus or with a strategy different from the perceived market consensus. DOF has this flexibility; therefore, the comparison of DOF’s forecasts to the actual evolution of Treasury yields would be a valuable performance yardstick.
- Benchmark selection and performance measurement as opposed to the chosen benchmark is important for passive investment strategies. DOF employs an active investment strategy and manages a portfolio that, during the investment period in PwC’s study, had substantial holdings in cash equivalents and TIPS, neither of

which is a constituent of the Merrill 1-10 Year Treasury Index. A comparison of the Funds' returns to hypothetical, mechanical investment strategies would be an informative complement to the current performance attribution analysis (relative to the Merrill index). These comparisons would enable the IAG to compare the returns on the DOF's active strategies vs. a set of hypothetical passive strategies.

Accordingly, we reaffirm our recommendation, which will be presented to the designated audit follow-up official for a final management decision.

Recommendation 5

Recommendation: PwC recommended that the CFO retain an independent investment management firm to provide periodic (at least semi-annual) assessments of DOF's investment strategies and performance that are provided to the FDIC's Board of Directors.

CFO and DOF Response: The CFO and DOF did not concur that the CFO should retain an independent investment management firm for the following reasons:

- External oversight would be very expensive given the skill requisites the firms would need to examine complex portfolios.
- The FDIC has a wealth of internal investment expertise, and an active FDIC management oversight program for investments in place.
- FDIC management's response indicated, however, that a limited, periodic review every four or five years makes good sense.

OIG Evaluation of Response: This recommendation is unresolved for the following reasons:

- The PwC study did not involve an assessment of the level of risk in the FDIC's investment program or PwC's opinion on those risks. Therefore, the assessment from an independent oversight group is lacking in spite of the FDIC's internal management oversight activities.
- PwC recommends that the CFO solicit some indicative quotes on fees that qualified investment consulting firms would charge for a semi-annual assessment of the investment performance of the Funds before concluding that the value of an independent review would not be justified due to its cost.
- In its response, FDIC management acknowledges that, "a limited, periodic review of the Corporate investment program every four to five years makes good sense." This position recognizes the value of some degree of independent oversight. We do not agree, however, with FDIC management's chosen timeframe of every 4 to 5 years. Reviewing the investment activities at such large time intervals will not

provide the FDIC meaningful insight into potential strategy adjustments that may be most responsive to economic changes that generally occur on more frequent bases.

The PwC recommendation involves a broader goal of periodic monitoring to achieve the most desirable investment results. Annual, or more frequent, reviews of FDIC's investment strategies and performance would serve to give the FDIC ongoing advice for formulating future investment decisions. Further, ongoing reviews by independent investment firms would provide current independent oversight on investment decisions, and fresh awareness of available opportunities to maximize the FDIC's portfolio returns while continuing to satisfy the objectives of minimizing fund volatility and maintaining adequate liquidity.

Accordingly, we reaffirm our recommendation, which will be presented to the designated audit follow-up official for a final management decision.

MANAGEMENT RESPONSES TO THE RECOMMENDATIONS

The information in this table is based on management’s written response to our report. The table also presents the status of the recommendations as of the date of report issuance.

Rec. Number	Corrective Action: Taken or Planned/Status	Expected Completion Date	Monetary Benefits	Resolved: ^a Yes or No	Dispositioned: ^b Yes or No	Open or Closed ^c
1	The FDIC has decided against initiating an internal review of the investment management policies and procedures. No planned corrective action.	None	None	No	No	Open
2	The Corporation is not going to include in the FDIC financial reports a Reserve Ratio calculation. However, possible changes from the pending enactment of deposit insurance reform would render this recommendation worthy of further consideration.	None	None	Yes	Yes	Closed
3	The CFO and DOF concurred that the subject goal should be revised, and DOF staff will make such a revision.	December 2005	None	Yes	No	Open
4	The CFO and DOF did not concur that the FDIC should compare the FDIC’s short-term market forecast at the moment of purchases to subsequent movements or that the FDIC compare its returns with those of hypothetical portfolios based on rigid investment rules that pre-determine the Treasury’s investments, amounts, and timing of purchases. No planned corrective actions.	None	None	No	No	Open
5	The CFO and DOF did not concur that the CFO should retain an independent investment management firm. No planned corrective actions.	None	None	No	No	Open

- ^a Resolved – (1) Management concurs with the recommendation, and the planned corrective action is consistent with the recommendation.
(2) Management does not concur with the recommendation, but planned alternative action is acceptable to the OIG.
(3) Management agrees to the OIG monetary benefits or a different amount, or no (\$0) amount. Monetary benefits are considered resolved as long as management provides an amount.
- ^b Dispositioned – The agreed-to corrective action must be implemented, determined to be effective, and the actual amounts of monetary benefits achieved through implementation identified. The OIG is responsible for determining whether the documentation provided by management is adequate to disposition the recommendation.
- ^c Once the OIG disposes the recommendation, it can then be closed.

CORPORATION COMMENTS



Federal Deposit Insurance Corporation
550 17th Street NW, Washington, D.C. 20429-9990

Deputy to the Chairman and CFO

June 9, 2005

MEMORANDUM TO: Stephen M. Beard
Deputy Assistant Inspector General for Audits

FROM: Steven O. App [Electronically produced version;
Deputy to the Chairman and original signed by Steven O. App]
Chief Financial Officer

Frederick S. Selby [Electronically produced version;
Director, Division of Finance original signed by Fred S. Selby]

SUBJECT: Revised Draft Report entitled *Audit of FDIC's Investment Policies*

The Division of Finance has reviewed your revised draft audit report entitled *Audit of FDIC's Investment Policies* (Assignment No. 2004-069) that was performed by PricewaterhouseCoopers LLP (PwC) under a contract with the Office of the Inspector General (OIG).

We were pleased that the draft report concluded that "the investment staff of the Division of Finance generally performed well in managing the FDIC's investment portfolio in the context of the stated investment strategy, interest rate environment, and assessment of certain insured institutions undergoing financial stress." We were also pleased to see that in the course of its review, PwC identified no instances of non-compliance with applicable laws and regulations relating to the Federal Deposit Insurance Act, the U.S. Treasury's Operating Circular that governs the Government Account Series (GAS) Investment Program, and the FDIC's Board-approved Corporate Investment Policy. Finally, we are gratified that PwC was able to replicate and match the portfolio total return figures generated by PORTIA, the FDIC's portfolio information management system of record, thus verifying such calculations are being performed and reported on appropriately.

Unfortunately, there are aspects of this draft audit report we find troubling (even after the extensive revisions it has already undergone) and we continue to believe it is fundamentally flawed for two reasons. First, as we have previously indicated, the charge to PwC was overly narrow in that it overemphasized measuring how well the FDIC is achieving the "highest possible return" on the Bank Insurance Fund (BIF) and Savings Association Insurance Fund (SAIF) investment portfolios, given the numerous constraints within which these portfolios must be managed. The Corporate Investment Policy, which was carefully crafted and reviewed at the highest levels of the Corporation, explicitly and deliberately places the achievement of

investment returns as a tertiary goal (maintaining liquidity¹ and controlling deposit insurance fund balance volatility both take precedence). While PwC acknowledged there are other considerations besides achieving the highest possible return that the FDIC must take into account as it develops and implements its investment strategy, it does not appear this fact was given due consideration in formulating the findings and recommendations in the draft audit report.

Second, and more importantly, there seems to be a fundamental misunderstanding of how the unique circumstances in which the FDIC must operate color the development of our investment strategies given basic principles of sound fixed income investment management. The 46-month period that the audit covered was generally characterized by historically low U.S. Treasury market yields—indeed, in some instances during the period, the yields hit 40-year lows. Additionally, throughout much of the period, the market consensus was that such yields were “artificially” low—in part reflecting the Federal Reserve’s very accommodative monetary policy—and that yields were expected to rise rather substantially in the not-too-distant future. All else being equal, given such market expectations, prudent fixed income investment management would dictate shortening the duration of the portfolio in anticipation of investing in longer-term securities once the expected rise in yields has occurred (or at least partially occurred). Combine this basic principle with the fact that the FDIC faces a unique constraint that most other fixed income investors do not—it *generally cannot trade out of a longer-term investment once it is made absent a compelling liquidity need*—and one can readily understand why FDIC maintained a bias towards shorter-term investments throughout the period studied. For FDIC to have made substantial investments at the longer end of the yield curve, it would have had to believe that the then current (and historically low) U.S. Treasury yields were going to stay at that level for the entire six- to twelve-year holding period of the securities purchased. Such a belief would have been in direct contradiction with the market’s consensus forecasts throughout that period and we believe that few, if any, prudent investors would be willing to make such a wager.

We have carefully considered each of the draft report’s five recommendations. As noted below, we concur with one recommendation, and will give further consideration to a second recommendation as conditions merit. We do not concur with three recommendations as delineated, although we appreciate the spirit of the corporate governance recommendation. Before discussing each of the audit’s five recommendations and our reasons for concurrence, partial concurrence, or non-concurrence, we will first discuss in more detail our specific concerns with the audit’s investment performance finding.

The basic methodology employed during the course of the audit to assess the FDIC’s relative investment performance was to compare different hypothetical investment scenarios against the BIF portfolio’s actual total returns over the period from January 1, 2001, to October 31, 2004. The findings from the BIF portfolio analysis were assumed to apply equally well to the SAIF portfolio, which was not studied in this audit engagement.

¹ In this context of the Corporate Investment Policy, liquidity is defined as investments that can be sold without triggering the requirement under SFAS No. 115 that all securities be subsequently marked-to-market. Such investments include cash equivalents (overnight investments), available-for-sale securities, and held-to-maturity securities maturing within three months.

In the 10-year Treasuries scenario (Scenario A-3), PwC concludes that the 46-month total return would have been 28.25% (3.65 percentage points higher than the BIF portfolio's actual total return of 24.60%). Other reported hypothetical scenarios showed similar "superior" returns achieved over the BIF portfolio, albeit to a lesser degree. While we do not dispute the mathematical accuracy of the results of PwC's modeling exercise, we take great exception to the implication in the report that FDIC's management of the BIF investment portfolio (and by extension, the SAIF investment portfolio) significantly lagged those of other investment strategies that could have *realistically* been employed by the FDIC in managing these funds. Specific issues we have with the analysis include the following:

- Many of the PwC constructed investment scenarios *represented unrealistic investment strategies that FDIC could not have pursued*. For instance, many of the scenarios presented in the draft report ignored the FDIC's long-run strategic objective (contained within our Corporate Investment Policy) of maintaining a laddered maturity structure.² For example, we estimate that PwC's Scenario A-3 resulted in a portfolio structure with approximately 65% to 75% of the portfolio being concentrated in securities maturing within seven to ten years as of October 31, 2004. For a number of reasons, maintaining such a maturity structure for a deposit insurance fund would not be prudent and more importantly, *would be a clear violation of the maturity limits contained in the FDIC's Board-approved investment policy*. In short, the implication in the report that the FDIC could have earned an additional 365 basis points for the BIF portfolio during the period under study is misleading and inaccurate because it implies pursuit of a strategy we could not and would not pursue.
- The period under study did not represent a full interest rate cycle and therefore, a prudent investment professional can not reasonably assess the merits of a particular investment strategy over this short period. The 46-month period ending October 31, 2004, which was characterized by generally falling interest rates, biases the results of the PwC analysis in favor of pursuing the heavy long-end maturity sector bets like those being placed in Scenario A-3. A longer period of study that included a period of rising interest rates as well would clearly make for a much fairer comparison of the relative merits (and likely relative performance) of the BIF portfolio versus the hypothetical investment scenarios employed by PwC.
- The "passive" portfolios constructed by PwC in conducting its analysis were not truly passive. PwC retained the very successfully performing BIF Treasury Inflation-Protected Securities (TIPS) purchases in each of its passive investment scenarios and thus unfairly inflated the performance results of many of these reported scenarios. If the hypothetical portfolios created were designed to be passive, we believe they should have been completely passive and not included these TIPS purchases.
- Lastly, the draft audit report does not recognize that during 2002 and 2003, the FDIC was faced with two possibilities that when viewed together would have made investing

² Interestingly, PwC states in its report that "with respect to maturity limits, we agree with the FDIC that it is prudent to maintain a laddered portfolio".

significant sums in 10-year Treasury securities imprudent at best.³ First, the BIF was faced with the real risk of failures of BIF-insured financial institutions. Second, and as elaborated upon earlier, the consensus interest rate forecasts throughout this two-year period were projecting yields on U.S. Treasury securities to rise. Both of these facts are clearly demonstrated in the data presented in Appendices 1 and 2.

Appendix 1 is a table reflecting the FDIC's estimate of BIF's loss exposure that was reported in the footnotes to the BIF's audited financial statements for the years 2000 through 2004. While the footnotes disclose FDIC's best estimates of the potential losses that could be experienced in these troubled institutions, the amount of cash required for working capital purposes at the time of resolution would very likely be far greater. To raise funds for working capital purposes, the funds must sell all its investments before borrowing. Hence, all securities, *including perhaps longer-term securities purchased when yields were lower*, would have to be liquidated to generate cash in volumes sufficient to meet the working capital needs for these resolutions.

Appendix 2 contains a table reflecting certain average overnight investment rates, 10-year Treasury security yields, and the spread between these two investment alternatives. This appendix also includes the Blue Chip Forecast yields for 10-year U.S. Treasury securities 3 to 6 months forward and 9 to 12 months forward from each calendar quarter end during the period covered by the audit.

Given the forecasted increases in yields throughout the period and the very real possibility that the FDIC might have to redeem its longer-term securities to fund bank failures, *a prudent investor would not have invested in 10-year U.S. Treasury securities that might have to be sold at losses (perhaps at substantial losses given the volatility in the Treasury markets) in as little as a few months after purchase.* This is especially true if the losses would be significantly greater than the increase in yields offered by 10-year Treasury securities compared to overnight investments during their holding period.⁴

Discussion of the Audit's Five Recommendations

Having addressed our concerns about the draft audit report's investment performance finding, we will next address each of the draft report's five recommendations.

³ In fact, it would have been a violation of the Department of Treasury's rules for the GAS program. The Department of the Treasury Operating Circular states in Section 4060(f) that "A program agency for a government investment account shall, to the best of its ability, develop its investment strategy so to select investments having maturities suitable to the cash disbursement needs of the program being financed through the account. The principal amounts and maturities of investments should be selected to coincide approximately with the program agency's disbursement estimates, so that the investments may be bought and held to their maturities."

⁴ The calculus that the FDIC is constantly required to make is whether the extra spread earned during the holding period will exceed the potential capital loss incurred upon sale of the longer-term security purchased. In the steep yield curve environment that existed in 2002 and 2003, the spread was significant. However, the consensus for significant higher yields again was also quite pronounced, which implies the potential capital losses incurred upon a forced sale could have been significantly greater than the potential additional yield earned.

Recommendation #1

That the CFO's office should initiate an internal review to consider:

- establishing a limit on the amount of cash-equivalents;
- formulating a proposal to permit adoption of investment guidelines that would allow investments in currently restricted instruments, especially including Social Security par value specials; and
- determining to what extent the FDIC is willing to assume some additional levels of risk for the potential benefit of maximizing returns given what PwC characterized as "perfect transactional liquidity."

Management's Response to Recommendation #1:

The FDIC has carefully considered each facet of this multi-part recommendation and has decided against initiating any additional internal reviews to address the above three items. The Investment Advisory Group (IAG) considered and rejected the idea of establishing a specific upper bound on the amount of cash-equivalents that either BIF or SAIF may hold at its most recent meeting on April 21, 2005. Placing such rigid limits on cash-equivalents would force DOF's investment staff to make security purchases only on those days when the insurance funds receive cash. Such an "autopilot" approach would preclude "market timing" purchases (for example, buying Treasury securities when their prices dip) that we have used successfully in the past to enhance the long-term investment earnings of the insurance funds. Indeed, the IAG recently reviewed DOF staff's market timing performance for all of 2004 and the first quarter of 2005 and the relevant attribution analysis showed staff added value through its judicious use of market-timed purchases.

With respect to the second part of this three part recommendation—expanding the FDIC's investment authority—on at least three separate occasions in the recent past, FDIC staff and management have carefully considered and consistently rejected the idea of seeking permission to expand the FDIC's current investment authority. (An expansion of FDIC's existing investment authority beyond the GAS program would require legislative action.)

The issue was studied in late 2000 under then FDIC Chairman Donna Tanoue; staff and the IAG's recommendation at that time was to not pursue such authority. Subsequently, the FDIC commissioned an independent report, dated March 21, 2001, titled *Reform of Deposit Insurance*, which considered the issue of the FDIC's pursuing a more flexible investment strategy. The report's authors, Alan S. Blinder (former Vice Chairman of the Federal Reserve System's Board of Governors) and Robert Westcott, while acknowledging that a more diversified portfolio might indeed deliver both lower risk and a higher return, nonetheless conclude that "[o]ur instincts are that the FDIC is such an important symbol of consumer protection that it should continue to invest in the safest, most liquid assets available—that is, U.S. Treasuries through the Bureau of Public Debt." The results of both Blinder and Westcott's and staff's studies were shared with congressional staff members.

Finally, in January 2003, CFO Steven App reviewed this matter with the FDIC's Advisory Committee on Banking Policy, and collectively they came to the same conclusion as previous

efforts that considered expanding the FDIC's investment authority—the current authority is sufficient. Again, although staff and management recognized that expanding the FDIC's investment authority could enhance portfolio returns, the potential for such returns would be accompanied by, among other things, higher portfolio market value volatility, increased transactions costs, additional liquidity concerns, and would introduce the potential for unintended market signaling. Accordingly, as the FDIC has reviewed this matter rather extensively over the recent past, each time concluding not to seek legislative changes to expand the FDIC's investment authority, initiating an additional internal review is not warranted at this time.

With respect to the third part of the recommendation, we do not concur with the recommendation to seek authority to invest in par value specials. (These securities are currently only available to federal government trust funds and are not available to revolving funds, such as the BIF or the SAIF.) The U.S. Department of Treasury describes par value specials as follows:

“Par value specials are non-marketable securities that bear interest rates established according to statutory formulas, generally based on the average market yield on outstanding Treasury securities with specified maturities. They are purchased and redeemed at par or face value, so there are no premiums or discounts when purchased, and there are no gains or losses when sold. Thus, there is significantly less market risk involved as a result of interest rate shifts with investing in par value specials. Par value specials are only available to Investment Funds when the statute governing a particular fund specifically authorizes them to be issued to the fund and provides the interest rate formula for them.

The Social Security Trust Funds, Medicare Trust Funds, and a limited number of other Investment Funds are authorized by statute to hold par value specials. As of July 31, 2000, 21 of the 214 Investment Funds are invested in par value specials. This represents \$1.843 trillion of the \$2.214 trillion invested on behalf of the Investment Funds. Par value specials eliminate capital losses when securities are redeemed after interest rates have risen, and also eliminate capital gains when securities are redeemed after interest rates have fallen. The legislative authority for an Investment Fund to use par value specials represents a policy decision that the Investment Fund should be protected from capital risk while still receiving a long-term interest rate that generally exceeds the short-term interest rate (because the yield curve is usually upward-sloping).”⁵

Staff believes that to ask the U.S. Treasury and Congress to in effect subsidize the BIF and the SAIF by allowing the insurance funds to earn long-term U.S. Treasury security market yields without incurring the attendant price risk by allowing it to invest in par value special securities is inconsistent with principles of sound public policy.

Finally, FDIC will continue to evaluate risks and returns of alternative classes and maturities of available U.S. Treasury security investments. FDIC will also continue to invest in longer-term

⁵ *Treasury Responsibilities in Investment Fund Administration, Report for the Secretary of Treasury*, U.S. Department of the Treasury, November 2000.

U.S. Treasury securities as market conditions and cash flow projections warrant. The FDIC will not automatically invest in longer-term U.S. Treasury securities when in its collective judgment the risk/reward tradeoff does not justify such investments.

Recommendation #2

To promote complete financial transparency in the reserve ratio and to more accurately communicate the FDIC's true economic and financial condition as it relates to assessments, that the CFO consider including in financial reports a reserve ratio calculation to reflect a market-value approach for valuing the held-to-maturity portion of the investment portfolio. PwC notes that while the purpose would be to promote transparency, the resulting volatility could be a disruptive factor in FDIC's operations and this would be better suited for a situation where the reserve ratio is determined based on a range which provides more flexibility in the decisions related to assessments. Given that current pending legislation considers such a range, PwC suggests its recommendation should be given further consideration in connection with passage of that legislation.

Management's Response to Recommendation #2:

At this time, we are not going to include in our financial reports a reserve ratio calculation to reflect a market-value approach for valuing the held-to-maturity portion of the investment portfolio. We believe the financial reports that senior management currently delivers to the FDIC Board of Directors and the general public accurately and fully communicate the FDIC's financial condition as it relates to insurance funds investments, assessments, and reserve ratios. The fund balances and related reserve ratios are determined and reported in accordance with generally accepted accounting principles (GAAP) and the FDIC has received clean audit reports from the Government Accountability Office (GAO) for the past 13 years on the financial statements of both the BIF and the SAIF. Our extensive footnote disclosures with respect to investments explicitly detail the book and market value of all categories of securities held in the BIF's and SAIF's investment portfolios.

However, if deposit insurance reform legislation is enacted that replaces the Designated Reserve Ratio with an acceptable range in which the reserve ratio could float, we concur that this recommendation would merit further consideration. FDIC staff and the IAG have already discussed this issue and have concluded that this matter would merit further review under such circumstances.

Recommendation #3

That the CFO replace the current goal regarding liquidity with a goal to manage the reported volatility of the value of the BIF and SAIF.

Management's Response to Recommendation #3:

We concur with this recommendation with the understanding it is principally the Director, DOF, and not the CFO, who determines DOF's annual performance goals. As currently written, the DOF Annual Performance Goal could be misleading, depending on how one interprets the term "liquidity." A broad interpretation of the term liquidity is consistent with the draft report's statement that "[a]s a participant in the GAS program, the FDIC's investments enjoy perfect 'transactional liquidity' through the U.S. Department of Treasury." However, as mentioned earlier, FDIC investment staff have historically used the term "liquidity," in the context of the Corporate investment portfolios, to mean those securities that may be readily saleable without triggering potentially adverse accounting consequences. Accordingly, to better align the goal with the accompanying measurement guideline, we agree that the subject goal should be revised, to address minimizing or controlling portfolio price *volatility*, and Division of Finance staff will make such a revision.

Recommendation #4:

As a guideline for measuring investment returns, that the CFO consider comparing the FDIC's short-term market forecast at the moment of purchases to subsequent movements in yields; and that the FDIC compares its returns with those of hypothetical portfolios based on rigid investment rules that pre-determine the Treasury's investments, amounts, and timing of purchases.

Management's Response to Recommendation #4:

We have carefully considered this recommendation, but do not concur with its recommended actions. For the past few years, extensive analyses have been performed annually as part of a formal, detailed investment performance attribution analysis. Moreover, as part of the quarterly investment review prepared for the IAG, staff discusses its investment security purchases in the context of current and anticipated Treasury market conditions. Finally, more ad-hoc comparisons are performed on a regular basis during each calendar quarter as staff prepares for and executes the actual investment security purchases (analyzing forward curves, tracking consensus Treasury yield forecasts as reported monthly by Bloomberg, etc.).

With respect to the recommendation that the FDIC compare its results with that of a hypothetical investment portfolio, we have considered and do not concur with that recommendation. Several years ago, staff conducted a study of how best to efficiently measure its relative investment performance. This culminated in the selection of the Merrill Lynch 1 – 10 Year Treasury Index (Index) as an investment performance benchmark. We discussed the choice of this benchmark with the PwC audit team extensively, and we continue to be comfortable that this is the best alternative for assessing our relative performance going forward.

We recognize that the Index is not an ideal yardstick for measuring the investment performance of the BIF and SAIF investment portfolios; however, we nonetheless believe that comparing portfolios' investment returns to the Index provides useful information regarding the FDIC's

investment strategies and tactics, on both short-term (one-year) and longer-term horizons. It is true that the Index does not include TIPS, overnight investments, and 10- to 12-year Treasury security investments that the FDIC can make. However, to the extent that the FDIC strategically invests in such securities, a comparison to the Index will help determine whether such investments add value—either on a short-term or long term basis, as gleaned through the investment performance attribution analysis mentioned above. Being able to strategically invest in these securities (that are not part of a “plain vanilla” intermediate Treasury note and bond index) is important, especially in light of some of the more unique constraints placed on the FDIC, including: 1) the need to maintain, under certain economic or banking industry situations, a large dollar value of securities that can be sold without triggering a requirement to mark-to-market all securities; and 2) the restrictions in the GAS program against actively trading securities. In addition, comparing the performance of the BIF and SAIF’s conventional Treasury holdings to the index helps staff determine whether making particular maturity and duration decisions also add value, especially over the longer run.

Accordingly, we believe that also comparing the BIF and SAIF’s investment performance to hypothetical portfolios on an ongoing basis is not warranted, especially from a cost/benefit perspective. Moreover, implementing such a program is subject to potential problems and criticisms, such as selecting the “appropriate” hypothetical portfolio(s) to be used, determining the beginning and end periods employed for the horizon period, etc. As discussed extensively above, the results of comparison when utilizing such portfolios can be extremely sensitive to those variables.

Recommendation #5:

That the CFO retain an independent investment management firm to provide periodic (at least semi-annually) assessments of the DOF’s investment strategies and performance that are provided to the FDIC’s Board of Directors.

Management’s Response to Recommendation #5:

We fully support the concept of independent review and, as an organization, are always striving to achieve the highest standards of good corporate governance. However, engaging private investment management and consulting firms to semi-annually conduct these types of analyses would be a very expensive endeavor because these firms generally possess the skills requisite to examine complex portfolios that have trading positions with significant value at risk. Given the unique and limited parameters under which the FDIC manages its investment portfolios coupled with its wealth of internal investment expertise, its solid internal controls, and the strength of its management oversight program, FDIC management is confident it is meeting the highest standards of good corporate governance and so does not concur that the added considerable expense of semi-annual independent reviews will be beneficial to the Corporation or its stakeholders. However, given the materiality of the investment portfolios to the funds, we do believe that a limited, periodic review of the Corporate investment program every four to five years makes good sense, although the costs of such reviews should be closely managed given the limited risk inherent in this program.

We appreciate the opportunity to respond to your draft audit report. Please call Louis E. Wright at 202-416-6979 should you have any questions.

cc: Mr. Murton
Ms. Patelunas
Mr. Browne
Mr. Angel
Mr. Black

Bank Insurance Fund
Audited Financial Statement Disclosure of Potential Bank Failure Costs
(\$ in millions)

Year-End	Financial Statement Contingent Liabilities for Anticipated Failures of Insured Institutions*	Financial Statement Footnote Disclosure of Additional Estimated Losses**
2000	\$141.4	\$639.0
2001	\$1,911.0	\$5,100.0
2002	\$1,008.1	\$6,000.0
2003	\$178.3	\$2,200.0
2004	\$8.3	\$300.0

* Contingent liability for banks that are likely to fail within one year of the reporting date, absent some favorable event such as obtaining additional capital or merging, when the liability becomes probable and reasonably estimable.

** In addition to recorded contingent liabilities, the FDIC identifies additional risk in the financial services industry that could result in a material loss to the BIF should potentially vulnerable financial institutions ultimately fail. This risk is evidenced by the level of problem bank assets and the presence of various high-risk business models that are particularly vulnerable to adverse economic and market conditions. Due to the uncertainty surrounding future economic and market conditions, there are other banks for which the risk of failure is less certain, but still considered reasonably possible.

Spread and Blue Chip Forecast Analysis
10-Year Treasury Yields and Overnight Investments
12/31/2000 - 12/31/2004

Date	Average Overnight Rate 1 Month +/-	Average 10-Year Treasury Yield 1 Month +/-	Average Spread 10-Year Treasury Yield - Overnight Rate	Blue Chip Forecast 10-Year Treasury Yield 3-6 Months Forward	Blue Chip Forecast 10-Year Treasury Yield 9-12 Months Forward
12/31/2000	6.17%	5.18%	-0.99%	5.3%	5.5%
3/31/2001	4.99	5.01	0.02	5.0	5.1
6/30/2001	3.82	5.24	1.42	5.2	5.4
9/30/2001	2.78	4.63	1.85	5.2	5.4
12/31/2001	1.78	5.02	3.24	5.0	5.3
3/31/2002	1.75	5.24	3.49	5.4	5.7
6/30/2002	1.74	4.74	3.00	5.3	5.6
9/30/2002	1.74	3.89	2.15	4.4	4.9
12/31/2002	1.25	4.02	2.77	4.3	4.8
3/31/2003	1.23	3.87	2.64	4.2	4.7
6/30/2003	1.08	3.65	2.57	3.6	4.1
9/30/2003	0.98	4.27	3.29	4.5	4.8
12/31/2003	0.99	4.19	3.20	4.6	5.1
3/31/2004	1.00	4.06	3.06	4.2	4.7
6/30/2004	1.14	4.60	3.46	5.1	5.5
9/30/2004	1.67	4.10	2.43	4.7	5.1
Average 12/31/2000 through 9/30/2004	2.13%	4.48%	2.35%	4.75%	5.11%