



# Audit Report



OIG-17-053

## FINANCIAL MANAGEMENT

**Report on the Bureau of the Fiscal Service  
Federal Investments and Borrowings Branch's  
Description of its Investment/Redemption Services and  
the Suitability of the Design and Operating Effectiveness  
of its Controls for the Period August 1, 2016, to  
July 31, 2017**

September 18, 2017

Office of Inspector General  
Department of the Treasury

**This Page Intentionally Left Blank**



DEPARTMENT OF THE TREASURY  
WASHINGTON, D.C. 20220

OFFICE OF  
INSPECTOR GENERAL

September 18, 2017

**MEMORANDUM FOR SHERYL MORROW, COMMISSIONER  
BUREAU OF THE FISCAL SERVICE**

**FROM:** James Hodge /s/  
Director, Financial Audit

**SUBJECT:** Report on the Bureau of the Fiscal Service Federal Investments and Borrowings Branch's Description of its Investment/Redemption Services and the Suitability of the Design and Operating Effectiveness of its Controls for the Period August 1, 2016, to July 31, 2017

I am pleased to transmit the attached subject report. Under a contract monitored by our office, KPMG LLP (KPMG), an independent certified public accounting firm, examined the Bureau of the Fiscal Service (Fiscal Service) Federal Investments and Borrowings Branch's description of its general computer and investment/redemption processing controls; and the suitability of the design and operating effectiveness of these controls. This report includes management's description of Fiscal Service's system, management's written assertion, and KPMG's independent service auditor's report. The contract required that the examination be performed in accordance with generally accepted government auditing standards and the American Institute of Certified Public Accountants' Statement on Standards for Attestation Engagements Number 18, *Attestation Standards: Clarification and Recodification*.

In its examination, KPMG found in all material respects:

- the description fairly presents the general computer and investment/redemption processing controls that were designed and implemented throughout the period August 1, 2016, to July 31, 2017;
- the controls related to the control objectives stated in the description were suitably designed to provide reasonable assurance that the control objectives would be achieved if the controls operated effectively throughout the period August 1, 2016, to July 31, 2017, and sub-service organizations and Program Agencies applied the complementary controls assumed in the design of Fiscal Service's controls throughout the period August 1, 2016, to July 31, 2017; and

- the controls operated effectively to provide reasonable assurance that the control objectives stated in the description were achieved throughout the period August 1, 2016, to July 31, 2017, if complementary sub-service organization and Program Agency controls, assumed in the design of Fiscal Service's controls, operated effectively throughout the period August 1, 2016, to July 31, 2017.

In connection with the contract, we reviewed KPMG's report and related documentation and inquired of its representatives. Our review, as differentiated from an examination in accordance with generally accepted government auditing standards, was not intended to enable us to express, and we do not express, an opinion on Fiscal Service's description of controls, the suitability of the design of these controls and the operating effectiveness of controls tested. KPMG is responsible for the attached independent service auditor's report dated September 14, 2017, and the conclusions expressed therein. However, our review disclosed no instances where KPMG did not comply, in all material respects, with generally accepted government auditing standards.

Should you have any questions, please contact me at (202) 927-0009, or a member of your staff may contact Mark S. Levitt, Manager, Financial Audit, at (202) 927-5076.

Attachment

**Department of the Treasury  
Bureau of the Fiscal Service**

**Federal Investments and Borrowings Branch  
General Computer and  
Investment/Redemption Processing Controls**

**Report on Federal Investments and Borrowings Branch's Description of  
Its Investment/Redemption Services and the Suitability of the Design  
and Operating Effectiveness of Its Controls  
For the Period August 1, 2016 to July 31, 2017**

**DEPARTMENT OF THE TREASURY  
BUREAU OF THE FISCAL SERVICE  
FEDERAL INVESTMENTS AND BORROWINGS BRANCH**

**REPORT ON FEDERAL INVESTMENTS AND BORROWINGS BRANCH'S DESCRIPTION  
OF ITS INVESTMENT/REDEMPTION SERVICES AND THE SUITABILITY OF THE  
DESIGN AND OPERATING EFFECTIVENESS OF ITS CONTROLS**

**Table of Contents**

<u>Section</u>	<u>Description</u>	<u>Page</u>
<b>I.</b>	<b>Independent Service Auditor's Report Provided by KPMG LLP .....</b>	<b>1</b>
<b>II.</b>	<b>Management's Assertion .....</b>	<b>5</b>
<b>III.</b>	<b>Description of Controls Provided by the Bureau of the Fiscal Service .....</b>	<b>8</b>
	Overview of Operations .....	9
	Relevant Aspects of the Control Environment, Risk Assessment, and Monitoring.....	14
	Control Environment.....	14
	Risk Assessment.....	14
	Monitoring.....	14
	Information and Communication .....	16
	Information System .....	16
	Communication .....	16
	Control Objectives and Related Controls.....	17
	Complementary Program Agency Controls .....	18
	Sub-service Organizations .....	20
	Complementary Sub-service Organizations Controls.....	21
<b>IV.</b>	<b>Control Objectives, Related Controls, and Tests of Operating Effectiveness .....</b>	<b>22</b>
	General Computer Controls .....	25
	System Software Changes .....	25
	Vendor Software Changes.....	28
	Program Change Control.....	30
	Physical Access .....	32

Logical Access .....	35
Computer Operations .....	38
Network Performance Monitoring .....	39
Investment/Redemption Processing Controls .....	40
Item Processing Security .....	40
Item Capture.....	41
Confirmations.....	48
Program Balance Adjustment.....	49
Recordkeeping.....	51
Segregation of Duties .....	52
Interest Calculation and Payments .....	54
Statement Rendering .....	58
Monitoring Controls.....	60
Monitoring Sub-service Organizations .....	60
<b>V. Other Information Provided by the Bureau of the Fiscal Service .....</b>	<b>61</b>
Contingency Planning .....	62

**I. INDEPENDENT SERVICE AUDITOR'S REPORT  
PROVIDED BY KPMG LLP**





KPMG LLP  
1676 International Drive  
McLean, VA 22102

## Independent Service Auditor's Report

Inspector General, Department of the Treasury  
Commissioner, Bureau of the Fiscal Service  
Deputy Commissioner, Fiscal Accounting and Shared Services

### **Scope**

We have examined Bureau of the Fiscal Service's (Fiscal Service's) Federal Investments and Borrowings Branch's (FIBB) description of its general computer and investment/redemption processing controls used for processing Program Agencies' transactions throughout the period August 1, 2016 to July 31, 2017 (the "description") and the suitability of the design and operating effectiveness of the controls included in the description to achieve the related control objectives stated in the description, based on the criteria identified in "Fiscal Service's Assertion" (the "assertion"). The controls and control objectives included in the description are those that management of Fiscal Service believes are likely to be relevant to Program Agencies' internal control over financial reporting, and the description does not include those aspects of the investment/redemption processing system that are not likely to be relevant to Program Agencies' internal control over financial reporting.

The information included in Section V "Other Information Provided by the Bureau of the Fiscal Service" is presented by management of Fiscal Service to provide additional information and is not a part of Fiscal Service's description of its investment/redemption processing system made available to Program Agencies during the period August 1, 2016 to July 31, 2017. Information about Fiscal Service's contingency planning has not been subjected to the procedures applied in the examination of the description of the investment/redemption processing system and of the suitability of the design and operating effectiveness of controls to achieve the related control objectives stated in the description of the investment/redemption processing system and, accordingly, we express no opinion upon it.

Fiscal Service uses sub-service organizations identified in Section III to perform some of the services provided to Program Agencies that are likely to be relevant to those Program Agencies' internal control over financial reporting. The description includes only the control objectives and related controls of Fiscal Service and excludes the control objectives and related controls of the sub-service organizations. The description also indicates that certain control objectives specified by Fiscal Service can be achieved only if complementary sub-service organization controls assumed in the design of Fiscal Service's controls are suitably designed and operating effectively, along with the related controls at Fiscal Service. Our examination did not extend to controls of the sub-service organizations and we have not evaluated the suitability of the design or operating effectiveness of such complementary sub-service organization controls.

The description indicates that certain control objectives specified in the description can be achieved only if complementary Program Agency controls assumed in the design of Fiscal Service's controls are suitably designed and operating effectively, along with related controls at Fiscal Service. Our examination did not extend to such complementary Program Agency controls, and we have not evaluated the suitability of the design or operating effectiveness of such complementary Program Agencies controls.

### **Service organization's responsibilities**

In Section II, Fiscal Service has provided an assertion about the fairness of the presentation of the description and suitability of the design and operating effectiveness of the controls to achieve the related control objectives stated in the description. Fiscal Service is responsible for preparing the description and its assertion, including the completeness, accuracy, and method of presentation of the description and assertion, providing the services covered by the description, specifying the control objectives and stating them in the description,



identifying the risks that threaten the achievement of the control objectives, selecting the criteria stated in the assertion, and designing, implementing, and documenting controls that are suitably designed and operating effectively to achieve the related control objectives stated in the description.

***Service auditor’s responsibilities***

Our responsibility is to express an opinion on the fairness of the presentation of the description and on the suitability of the design and operating effectiveness of the controls to achieve the related control objectives stated in the description, based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants (AICPA) and applicable Government Auditing Standards issued by the Comptroller General of the United States. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether, in all material respects, based on the criteria in management’s assertion, the description is fairly presented and the controls were suitably designed and operating effectively to achieve the related control objectives stated in the description throughout the period August 1, 2016 to July 31, 2017. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

An examination of a description of a service organization’s investment/redemption processing system and the suitability of the design and operating effectiveness of controls involves:

- performing procedures to obtain evidence about the fairness of the presentation of the description and the suitability of the design and operating effectiveness of the controls to achieve the related control objectives stated in the description, based on the criteria in management’s assertion,
- assessing the risks that the description is not fairly presented and that the controls were not suitably designed or operating effectively to achieve the related control objectives stated in the description,
- testing the operating effectiveness of those controls that management considers necessary to provide reasonable assurance that the related control objectives stated in the description were achieved, and
- evaluating the overall presentation of the description, suitability of the control objectives stated in the description, and suitability of the criteria specified by the service organization in its assertion.

***Inherent limitations***

The description is prepared to meet the common needs of a broad range of Program Agencies and their auditors who audit and report on Program Agencies’ financial statements and may not, therefore, include every aspect of the investment/redemption processing system that each individual Program Agency may consider important in its own particular environment. Because of their nature, controls at a service organization may not prevent, or detect and correct, all misstatements in processing or reporting transactions. Also, the projection to the future of any evaluation of the fairness of the presentation of the description, or conclusions about the suitability of the design or operating effectiveness of the controls to achieve the related control objectives stated in the description is subject to the risk that controls at a service organization may become ineffective.

***Description of tests of controls***

The specific controls tested and the nature, timing, and results of those tests are listed in Section IV.

***Opinion***

In our opinion, in all material respects, based on the criteria described in Fiscal Service’s assertion:

- a. the description fairly presents the general computer and investment/redemption processing controls that was designed and implemented throughout the period August 1, 2016 to July 31, 2017;
- b. the controls related to the control objectives stated in the description were suitably designed to provide reasonable assurance that the control objectives would be achieved if the controls operated effectively throughout the period August 1, 2016 to July 31, 2017, and sub-service organizations and Program Agencies applied the complementary controls assumed in the design of Fiscal Service’s controls throughout the period August 1, 2016 to July 31, 2017; and



- c. the controls operated effectively to provide reasonable assurance that the control objectives stated in the description were achieved throughout the period August 1, 2016 to July 31, 2017 if complementary sub-service organization and Program Agency controls, assumed in the design of Fiscal Service's controls, operated effectively throughout the period August 1, 2016 to July 31, 2017.

***Restricted use***

This report, including the description of tests of controls and results thereof in Section VI, is intended solely for the information and use of management of Fiscal Service, Program Agencies of Fiscal Service's general computer and investment/redemption processing controls during some or all of the period August 1, 2016 to July 31, 2017, and their auditors who audit and report on such Program Agencies' financial statements or internal control over financial reporting and have a sufficient understanding to consider it, along with other information, including information about controls implemented by Program Agencies themselves, when assessing the risks of material misstatement of Program Agencies' financial statements. This report is not intended to be and should not be used by anyone other than these specified parties.

*KPMG LLP*

September 14, 2017  
McLean, Virginia

**II. MANAGEMENT'S ASSERTION**



DEPARTMENT OF THE TREASURY  
BUREAU OF THE FISCAL SERVICE  
WASHINGTON, DC 20227

September 14, 2017

KPMG LLP  
1676 International Drive  
McLean, Virginia 22012

Ladies and Gentlemen:

We have prepared the description of the Bureau of the Fiscal Service's (Fiscal Service's) Federal Investments and Borrowings Branch's (FIBB) description of its general computer and investment/redemption processing controls used for processing Program Agencies' transactions throughout the period August 1, 2016 to July 31, 2017 (the "description") for Program Agencies' during some or all of the period August 1, 2016 to July 31, 2017, and the Program Agencies' auditors, who audit and report on such Program Entities' financial statements or internal control over financial reporting, and have a sufficient understanding to consider it, along with other information, including information about controls implemented by sub-service organizations and the Program Agencies of the system themselves, when assessing the risks of material misstatement of the Program Agencies financial statements.

Fiscal Service uses sub-service organizations for some of its application processing. In section III, a list of sub-service organizations and the services provided to Fiscal Service are included. The description includes only the control objectives and related controls of Fiscal Service and excludes the control objectives and related controls of the sub-service organizations. The description also indicates that certain control objectives specified in the description can be achieved only if complementary sub-service organization controls assumed in the design of our controls are suitably designed and operating effectively along with the related controls at Fiscal Service. The description does not extend to controls of the sub-service organizations.

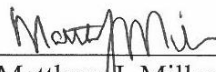
The description indicates that certain control objectives specified in the description can be achieved only if complementary Program Agency controls assumed in the design of Fiscal Service's controls are suitably designed and operating effectively, along with related controls at Fiscal Service. The description does not extend to controls of the Program Entities.

We confirm, to the best of our knowledge and belief, that:

- a) The description fairly presents the financial management services made available to Program Agencies' of the system during some or all of the period August 1, 2016 to July 31, 2017 for processing their transactions as it relates to controls that are likely to be relevant to Program Agencies' internal control over financial reporting. The criteria we used in making this assertion were that the description
  - i. presents how the system made available to Program Agencies' of the system was designed and implemented to process relevant Program Agencies' transactions, including, if applicable:
    - (1) the types of services provided, including, as appropriate, the classes of transactions processed;
    - (2) the procedures, within both automated and manual systems, by which those services are provided, including, as appropriate, procedures by which transactions are initiated,

- authorized, recorded, processed, corrected as necessary, and transferred to the reports and other information prepared for Program Agencies of the system;
- (3) the information used in the performance of the procedures, including, if applicable, related accounting records, whether electronic or manual, and supporting information involved in initiating, authorizing, recording, processing, and reporting transactions; this includes the correction of incorrect information and how information is transferred to the reports and other information prepared for Program Agencies;
  - (4) how the system captures and addresses significant events and conditions other than transactions;
  - (5) the process used to prepare reports and other information for Program Agencies;
  - (6) services performed by a sub-service organization, if any, including whether the carve-out method or the inclusive method has been used in relation to them;
  - (7) the specified control objectives and controls designed to achieve those objectives, including, as applicable, complementary Program Agency controls and complementary subservice organization controls assumed in the design of the service organization's controls; and
  - (8) other aspects of our control environment, risk assessment process, information and communications (including the related business processes), control activities and monitoring activities that are relevant to the services provided.
- ii. includes relevant details of changes to Fiscal Service's system during the period covered by the description.
  - iii. does not omit or distort information relevant to Fiscal Service's system, while acknowledging that the description is prepared to meet the common needs of a broad range of Program Entities of the system and their auditors, and may not, therefore, include every aspect of the financial management services that each individual Program Entity of the system and its auditor may consider important in its own particular environment.
- b) The controls related to the control objectives stated in the description were suitably designed and operating effectively throughout the period August 1, 2016 to July 31, 2017 to achieve those control objectives if sub-service organizations and Program Agencies applied the complementary controls assumed in the design of Fiscal Service's controls throughout the period August 1, 2016 to July 31, 2017. The criteria we used in making this assertion were that:
- i. the risks that threaten the achievement of the control objectives stated in the description have been identified by management of Fiscal Service;
  - ii. the controls identified in the description would, if operating effectively, provide reasonable assurance that those risks would not prevent the control objectives stated in the description from being achieved; and
  - iii. the controls were consistently applied as designed, including whether manual controls were applied by individuals who have the appropriate competence and authority.

Sincerely,

  
\_\_\_\_\_  
Matthew J. Miller  
Assistant Commissioner,  
Fiscal Accounting

**III. DESCRIPTION OF CONTROLS PROVIDED BY THE BUREAU OF  
THE FISCAL SERVICE**

## OVERVIEW OF OPERATIONS

The Federal Investments and Borrowings Branch (FIBB) is a component of the Bureau of the Fiscal Service (Fiscal Service). Fiscal Service was created on October 7, 2012 as a result of the consolidation of two Department of the Treasury (Treasury) bureaus, the Financial Management Service (FMS) and the Bureau of the Public Debt (BPD). Fiscal Service Delegation 10-5, Organizational Structure for the Bureau of the Fiscal Service and Delegations of Authority, dated August 27, 2014, and Fiscal Service Delegation 30-1, Organizational Structure for the Office of Fiscal Accounting Operations and Delegation of Authority, dated September 26, 2014, established the Office of Fiscal Accounting Operations' (FAO) responsibility to administer the federal investments program, which includes issuing, servicing, and redeeming Government Account Series (GAS) securities.

FAO has further assigned these responsibilities to the FIBB. FIBB is responsible for processing investment transactions for over 240 government investment accounts that are authorized by law to invest in GAS securities. The investment transactions processed by FIBB are based on the direction provided by the Federal agencies (Program Agencies) that have programmatic responsibility for the use of the fund balances. FIBB processes an average of approximately 1,500 transactions daily. FIBB also performs the following operational duties:

- Analyzes provisions and limitations of public laws relating to investments for each account.
- Establishes and controls the record keeping of Program Agencies' accounts by receiving and issuing investment documents such as the Request for Investment and Redemption of Securities, Warrants documenting the availability of certain taxes for investment or need for redemption, Investment Confirmations and Monthly Statement of Accounts.
- Provides daily and monthly reports to Program Agencies reflecting account activities and balances.

Investment and redemption transaction records are maintained in electronic form. Confirmations are available in FedInvest and Monthly Statement of Accounts are available in FedInvest and the Summary Level Statement of Accounts are also published on the TreasuryDirect website for retrieval and review by Program Agencies. FIBB maintains and operates the InvestOne accounting system to perform the operational duties stated above. The InvestOne accounting system is a transaction-based accounting system for recording and processing investment security transactions for each of the accounts and provides information to the Summary Debt Accounting System (SDAS), and the Central Accounting and Reporting System (CARS) (SDAS and CARS are not in scope for this report). The InvestOne accounting system computes daily, monthly, quarterly, semiannual, and annual interest income for each account for each security held. It also calculates amortization, investment discount and premium for investment and redemption transactions, Inflation Compensation Earned on the Treasury Inflation Protected Securities (TIPS), and maintains summary account balances for each account as well as balances by type of security. Program Agencies use FedInvest, a web-based extension of InvestOne, to enter investment and redemption requests, view transaction information, and obtain confirmations and reports. Internal Fund managers use FedInvest and two additional extensions, Customer Role Management (CRM) and Rate Price Administration (RPA), to process transactions, manage users and accounts, and manage the application of pricing, rates, and pending transactions.



FIBB processes investment transactions based on requests from Program Agencies regarding security type, maturity, and amount. Program Agencies submit the investment/redemption requests via the Internet using FedInvest. If Program Agencies are unable to access FedInvest to submit requests they can submit the investment/redemption requests via email to FIBB for manual entry. The investment and redemption request processing for Program Agencies is summarized as follows.

### **Establishing FedInvest Access**

To establish access to FedInvest, the applicant representing the Program Agency must complete the Bureau of the Fiscal Service FedInvest Logon ID Request. Once completed, the form is reviewed and signed by the applicant's supervisor and submitted to FIBB for processing. Upon receipt, FIBB verifies that the information is complete and then initiates a request that the user be added to Contact Management by submitting a Contact Creation Request in the Hewlett-Packard (HP) Service Request Catalog. Once the IT Service Desk notifies FIBB that the user has been added to Contact Management, FIBB provides a copy of the FedInvest Logon ID Request to the FAO Information System Security Representatives (ISSRs) for user set-up in FedInvest. After this is completed, Information and Security Services (ISS) provides the new user with their user ID and temporary password. The user is then instructed to login to FedInvest with the temporary password, answer security questions, and change their temporary password. When access to FedInvest is no longer required by the user, the applicable Program Agency will email FIBB at FedInvestor@fiscal.treasury.gov and request that the user's access be revoked. FIBB will then forward the request to the FAO ISSRs, who will process the revocation.

### **Investment Request Processing**

Program Agency users access FedInvest using their user ID and password. The Program Agency user selects the Account Fund Symbol (AFS), date, security type, and investment amount in FedInvest.

**Before Prices Loaded** – The FedInvest user may enter investment requests before prices are loaded in the system for up to 10 business days in the future except for Zero-Coupon Bonds and Special Issue Certificates of Indebtedness. Upon submission of the request, the user receives a confirmation number which is proof to the Program Agency that their request was accepted. When prices are loaded by the FIBB accountant into the InvestOne accounting system, the FIBB accountant uses the FedInvest RPA module to load the prices into FedInvest, publish them on the website, and apply the prices to the pending investment transactions. Once the price has been applied to the transaction, it is automatically posted to the InvestOne accounting system evidenced by the replacement of the confirmation number with a memo number on the confirmation available to the user in FedInvest.

**After Prices Loaded** – The FedInvest user may enter investment requests after prices are loaded except for Zero-Coupon Bonds. Since FedInvest interfaces with the InvestOne accounting system, the InvestOne accounting system automatically assigns a memo number and applies the price/rate. A confirmation of results is available in FedInvest.

**Zero-Coupon Bond securities** – The FedInvest user must enter investment requests by 11:00 am ET. FedInvest sends the request by email to the FIBB accountants who forward the request to the Treasury's, Office of Debt Management (ODM) for pricing. ODM prices the purchase of the Zero-Coupon Bond at approximately 12:00 pm ET and forwards the results to FIBB by email. The FIBB accountant enters the pricing results into the InvestOne accounting system, posts the transaction,

and forwards the memo number to the FedInvest user. A confirmation of results is available in FedInvest.

Program Agencies submit the investment/redemption requests via the Internet using FedInvest. If Program Agencies are unable to access FedInvest to submit requests they can submit the investment/redemption requests via email to FIBB for manual entry. FIBB also processes investment transactions for certain Program Agencies when documentation provided by Fiscal Service Governmentwide Accounting (GWA) indicates that there are additional amounts available for investment. A FIBB accountant enters the request into FedInvest or the InvestOne accounting system on behalf of the Program Agency. Then two FIBB accountants compare the transaction confirmation to the investment request to ensure the investment request is recorded accurately and posted to the correct day, and then digitally stamp the investment request to document their review. A confirmation of results is available in FedInvest the same day. On the following business day, a FIBB accountant compares the InvestOne report (Prior Day Review) to the investment requests submitted by the Program Agency to ensure transactions were properly entered into the InvestOne accounting system and places the 4<sup>th</sup> stamp on the investment request.

### **Redemption Request Processing**

Program Agency users access FedInvest using their user ID and password. The Program Agency user selects the AFS, date, inventory method (First-In First-Out (FIFO) or Specific ID), security type, and redemption amount in FedInvest.

Before Prices Loaded – The FedInvest user may enter Market-based bill, note (fixed and floating rate), bond, and TIPS redemption requests using the FIFO inventory method before prices are loaded in the system for up to 10 business days in the future. Upon submission of the request, the user receives a confirmation number which is proof to the Program Agency that their request was accepted. When prices are loaded by the FIBB accountant into the InvestOne accounting system, the FIBB accountant uses the FedInvest RPA module to load the prices into FedInvest, publish them on the website, and apply the prices to the pending redemption transactions. Once the price has been applied to the transaction, it is automatically posted to the InvestOne accounting system evidenced by the replacement of the confirmation number with a memo number that is also on the confirmation available to the user in FedInvest.

After Prices Loaded – The FedInvest user may enter Market-based bill, note (fixed and floating rate), bond and TIPS redemption requests using the FIFO or Specific ID inventory methods after prices are loaded in the InvestOne accounting system and FedInvest. If Program Agencies have tax lots (a group of the same securities purchased on different dates) and decide to apply the specific identification method rather than the FIFO method to redeem from specific tax lots, Program Agencies need to select “Specific ID” inventory method to override the InvestOne accounting system default setting of the FIFO method, and enter the principal amount to redeem for each tax lot. Since FedInvest interfaces with the InvestOne accounting system, the InvestOne accounting system automatically assigns a memo number and applies the price/rate. A confirmation of results is available on FedInvest.

Special Issue par-value securities - Special par-value securities have unique redemption rules that require the InvestOne accounting system to redeem them based on the order of earliest maturity date, lowest prevailing interest rate, and FIFO. The FedInvest user receives a confirmation with a confirmation number and a message that the redemption rules will be applied in accordance with Treasury Fiscal Policy. The transaction will be pending until after the close of business on the

effective date. At close of business (after 3:00 pm ET) on the effective date of the redemption, the FIBB accountant uses the FedInvest RPA module to run the Post Par Value Sell Transactions that will process, post, and assign memo numbers to the pending redemption requests in the InvestOne accounting system using the unique redemption rules. A confirmation of results is available in FedInvest.

Zero-Coupon Bond securities – The FedInvest user must enter redemption requests into FedInvest (by 11:00 am ET) and FedInvest sends an email to the FIBB accountants who forward the request to ODM for pricing. ODM prices the redemption of the Zero-Coupon Bond at approximately 12:00 pm ET and forwards the results to FIBB via email. The FIBB accountant enters the pricing results into the InvestOne accounting system, posts the transaction, and forwards the memo number to the FedInvest user. A confirmation of results is available in FedInvest.

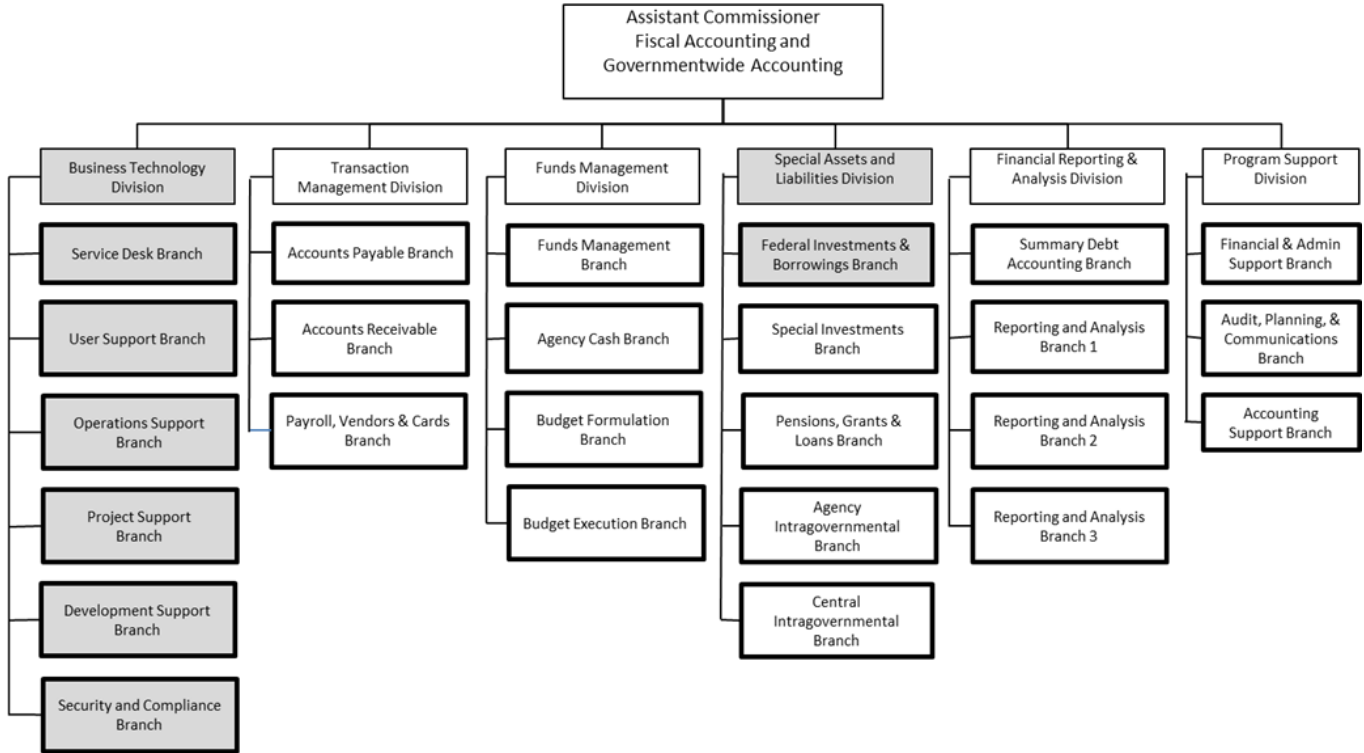
Program Agencies submit the investment/redemption requests via the Internet using FedInvest. If Program Agencies are unable to access FedInvest to submit requests they can submit the investment/redemption requests via email to the Federal Investments and Borrowings Branch for manual entry. FIBB also processes redemption transactions for certain Program Agencies when documentation provided by GWA reflects that there is a need to redeem previously invested funds. A FIBB accountant enters the request into FedInvest or InvestOne accounting system on behalf of the Program Agency. Then two FIBB accountants review and digitally stamp the redemption request. A confirmation of results is available in FedInvest the same day. On the following business day, a FIBB accountant compares the InvestOne report (Prior Day Review) to the redemption requests submitted by the Program Agency to ensure the transactions were properly entered into the InvestOne accounting system and places a 4<sup>th</sup> stamp on the redemption request.

FIBB obtains and applies open market prices for securities negotiated by brokers and dealers of government securities from the Department of the Treasury's ODM and the Federal Reserve Bank (FRB) of New York.

FIBB functions do not encompass monitoring or determining rates, types, and maturities of government marketable securities. ISS provides application security (including passwords), processing, and report programming support to FIBB including regular maintenance programming and user-requested program enhancements.

The in-scope Fiscal Service functions are shaded in the following organizational chart.

### ORGANIZATIONAL CHART



## **RELEVANT ASPECTS OF THE CONTROL ENVIRONMENT, RISK ASSESSMENT, AND MONITORING**

### **Control Environment**

Operations are primarily under the direction of the Office of the Director of SALD and the Director of the Business Technology Division (BTD), which represent the functional areas listed below:

- *Administrative development:* Coordinates various aspects of FIBB operations. Identifies areas requiring internal controls and implements those controls. Performs systems planning, development, and implementation. Reviews network operations and telecommunications and performs disaster-recovery planning and database administration.
- *Fund support:* Supports end users (Program Agencies) in all aspects of their use of the application system including research and resolution of identified problems.
- *Operations:* Manages daily computer operations, production processing, report production and distribution, and system utilization and capacity.

SALD and BTD hold bi-weekly management meetings to discuss special processing requests, operational performance, and the development and maintenance of projects in process. Written position descriptions for employees are maintained. The descriptions are inspected annually and revised as necessary.

References are sought and background, credit, and security checks are conducted for all Fiscal Service personnel when they are hired. Additional background, credit, and security checks are performed every three to five years. The confidentiality of Program Agency information is stressed during the new employee orientation program and is emphasized in the personnel manual issued to each employee. Fiscal Service provides a mandatory orientation program to all full time employees and encourages employees to attend other formal outside training.

All Fiscal Service employees receive an annual written performance evaluation and salary review. These reviews are based on goals and objectives that are established and reviewed during meetings between the employee and the employee's supervisor. Completed appraisals are reviewed by senior management and become a permanent part of the employee's personnel file.

### **Risk Assessment**

Fiscal Service has placed into operation a risk assessment process to identify and manage risks that could affect FIBB's ability to provide reliable transaction processing for users. This process requires management to identify significant risks in their areas of responsibility and to implement appropriate measures to manage these risks.

Additionally, all mission-critical systems and general support systems are subject to an internal risk-based review every year. This review identifies assets and possible threats to these assets, provides a measure of vulnerability of the system to these threats, and confirms control or protective measures are in place.

### **Monitoring**

Fiscal Service management and supervisory personnel monitor the quality of internal control performance as a normal part of their activities. To assist them in this monitoring, Fiscal Service has implemented a series of "key indicator" management reports that measure the results of various processes involved in providing transaction-processing services to Program Agencies. Key indicator reporting consists of SDAS posting summary reports to validate accuracy. All exceptions

to normal or scheduled processing through hardware and software, or procedural problems are also logged, reported and resolved daily. These reports are inspected daily and weekly by appropriate levels of management, and action is taken as necessary.

Fiscal Service also uses the results of the annual Report on Controls at a Service Organization Relevant to User Entities' Internal Control over Financial Reporting (SOC 1) as a tool for identifying opportunities to strengthen controls.

For Fiscal Service systems that do not receive a SOC 1 report, system verification letters are prepared to document the information security controls that are implemented. The system verification letters are also obtained and reviewed by management. For sub-service organizations that do not receive a SOC 1 report alternative procedures are performed.

## **INFORMATION AND COMMUNICATION**

### **Information Systems**

#### **InvestOne Accounting System Description**

The InvestOne accounting system is a vendor supplied subsystem of the Debt Information Management System (DIMS). The InvestOne accounting system is used to record and report investment fund activity processed by FIBB. The InvestOne accounting system is licensed by Fidelity National Information Services (FIS). The InvestOne accounting system resides on Fiscal Service's Fiscal IT mainframe (FIT-MF). ISS provides the primary support for maintaining the InvestOne accounting system. This includes FIT-MF operations (batch processing and reporting), custom report writing, application change management, data management, tape backup and recovery, user access security, remote access, and continuity management. The InvestOne accounting system is accessed through the network using a terminal emulator that enables communication with ISS FIT-MF applications. The InvestOne accounting system also provides a report writer package called Spectra that provides users with the ability to create their own reports. FIBB uses Spectra to create reports, which provide functionality not included in the standard InvestOne reports.

FIBB also receives supporting documentation/reports on a daily basis from internally-developed programs created by programmers. These programs read the data from the InvestOne accounting system and create various reports to assist in FIBB's daily processing. Specifically, data is downloaded from the InvestOne accounting system to a data file located on the servers where the programs execute. Data is not sent from these programs to the InvestOne accounting system.

#### **FedInvest Description**

FedInvest, also a subsystem of DIMS, is a vendor-developed, web-based extension to the InvestOne accounting system that provides access to the federal investments information through the Internet. FedInvest allows federal investment fund managers to assume direct responsibility for managing their respective accounts. Using FedInvest, federal agencies are able to input transactions into the InvestOne accounting system, as well as view account statements and transaction information over the Internet. Additionally, FedInvest provides an interface to the InvestOne accounting system for internal fund managers in Fiscal Service's Funds Management Division (FMD). FedInvest includes edits that serve to enforce federal investment program policies resulting in improved data quality in the InvestOne accounting system.

FedInvest also includes two extensions that are available only to Fiscal Service internal users. The Customer Role Management (CRM) module is used by the ISSRs to manage FedInvest users and their access to associated investment account information. CRM is used by FIBB accountants to manage security type and account information. CRM is also used to create and post broadcast messages (announcements) that are seen by users signed onto the system, and establish email communication to all system users and their agency Chief Financial Officers. The Rate Price Administration (RPA) module is used by FIBB accountants to load rates/prices, publish rates/prices on the TreasuryDirect website, apply prices to pending market-based transactions, post pending special issue par-value redemption transactions, and update FedInvest with the Consumer Price Index (CPI) for processing TIPS transactions.

### **Communication**

Fiscal Service has implemented various methods of communication to ensure that all employees understand their individual roles and responsibilities over transaction processing and controls. These methods include orientation and training programs for newly hired employees, and use of

electronic mail messages to communicate time sensitive messages and information. Managers also hold periodic staff meetings as appropriate. Every employee has a written position description that includes the responsibility to communicate significant issues and exceptions to an appropriate higher level within the organization in a timely manner.

### **Control Objectives and Related Controls**

Fiscal Service control objectives and related controls are included in Section IV of this report, “Control Objectives, Related Controls, and Tests of Operating Effectiveness.” Although the control objectives and related controls are included in Section IV, they are, nevertheless, an integral part of the Fiscal Service’s description of controls.



## COMPLEMENTARY PROGRAM AGENCY CONTROLS

FIBB's controls related to its system supporting the delivery of investment/redemption processing services cover only a portion of overall internal control for each Program Agency of FIBB. It is not feasible for the control objectives related to FIBB's services to be achieved solely by FIBB. Therefore, each Program Agencies' internal control over financial reporting should be evaluated in conjunction with FIBB's controls, related tests, and results described in Section IV of this report, taking into account the related complementary Program Agency controls as described below, where applicable. In order for Program Agencies to rely on the controls reported on herein, each Program Agency must evaluate its own internal control to determine whether the identified complementary Program Agency controls have been implemented and are operating effectively.

Program Agency auditors should determine whether Program Agencies have established controls to provide reasonable assurance to:

- Ensure that access to FedInvest is restricted to properly authorized individuals.
- Provide applicable legislation to FIBB, and any subsequent legislation revisions, that authorizes the Program Agency to invest.
- Verify the authority to invest prior to submitting investment account set-up and investment/redemption requests.
- Ensure that only authorized personnel sign requests or submit transactions in FedInvest.
- Ensure that investment/redemption transactions processed by FIBB on behalf of the Program Agency agree with applicable Warrants processed by Fiscal Service Government-Wide Accounting (GWA).
- Ensure that the submission of investment/redemption requests in FedInvest is accurate and completed prior to 3:00 pm ET (11:00 am ET for Zero-Coupon Bonds).
- Notify FIBB if the investment/redemption requests have been processed incorrectly so that correcting transactions may be processed before 3:00 pm ET.
- Review investment/redemption/maturity/interest confirmations and Monthly Statement of Accounts to ensure that each request was processed accurately, timely, and in accordance with Program Agency instructions.
- Review detailed case management transactions and case information to ensure that each request was processed accurately, timely, and in accordance with Program Agency instructions.
- Track investment/redemption confirmations to ensure that the Program Agency FedInvest user correctly processes all requests.
- Review and reconcile all transaction confirmations to determine that they are accurate and complete, and report discrepancies to FIBB so that correcting transactions may be processed before 3:00 pm ET.
- Review adjustments and make prompt and appropriate journal entries to the accounting records, to adjust the investment account balances and related interest.
- Review Monthly Statement of Accounts to verify that adjustments were processed completely and accurately.
- Agency investments should be geared toward assuring maturities match needs since the rate of return cannot be changed. It can be recalculated and verified.
- Reconcile interest payments and allocations received as presented in the confirmations and Monthly Statement of Accounts and recalculate interest for accuracy.
- Approve reinvestments of interest after review for accuracy, completeness, and compliance with instructions.

- Recalculate interest accrual and amortization of premium and/or discount and compare the results to the Fiscal Service provided monthly Accrual Confirmation and Accrual Activity Reports.
- Report any interest accrual discrepancies noted on the monthly Accrual Confirmation and Accrual Activity Reports to Fiscal Service for resolution.
- Report any premium and/or discount amortization discrepancy noted on the monthly Accrual Confirmation and Accrual Activity Reports to Fiscal Service for resolution.
- Verify the accuracy of Program Agency requested fee amounts entered by both FIBB and Program Agency accountants.
- Review FIBB provided Monthly Statement of Accounts to ensure that transactions are recorded accurately and timely, and report discrepancies to FIBB so correction processes may occur.
- Reconcile investment activity from GWA application CARS Account Statements to the FIBB provided Monthly Statement of Accounts to verify that investment activity is being properly reported by FIBB on the Program Agencies' behalf.

Specific complementary Program Agency control considerations are provided for Control Objectives 5, 8, 9, 10, 11, 13, 14, and 15 in the Control Objectives, Related Controls, and Tests of Operating Effectiveness section of this report.

## **SUB-SERVICE ORGANIZATIONS**

In order to provide investment/redemption processing services, FIBB relies on systems and services provided by other organizations external to FIBB (sub-service organizations). The following table describes the types of the sub-service organizations used by FIBB. These sub-service organizations were not subject to examination by KPMG LLP.

### **Federal Reserve Bank (FRB) of New York**

On a daily basis, FIBB obtains Treasury Price Quote files via digital certificate from a secure FRB website. FIBB uses these price quote files to calculate the market-based security prices that can be loaded into the InvestOne accounting system and compared to the price files provided by ODM

### **Department of the Treasury – Office of Debt Management (ODM)**

On a daily basis, the ODM provides FIBB the daily security price files for market-based transactions. Additionally, as needed, ODM provides FIBB with the Zero-Coupon Bond pricing. ODM provides FIBB the Daily Market Quotations on Most Recently Auctioned Treasury Bills used for the rate for the one-day certificates.

### **Bureau of the Fiscal Service**

GWA provides daily and monthly reports to FIBB, including IPAC reports, and Central Accounting and Reporting System (CARS) account statements. FIBB uses these reports to verify the accurate posting of transactions and data. GWA also sends FIBB daily tax deposit estimates that are applicable to certain funds. FIBB allocates the estimated deposits to the appropriate trust funds based on monthly OTA estimates and provides the investment amounts to GWA. GWA confirms the amounts, notifies FIBB that they agree with the amounts, and prepares the warrant. FIBB then invests the amounts in the appropriate accounts. GWA also provides the actual tax deposit figures each month when available and FIBB invests / redeems based on the actual tax information provided by GWA

## COMPLEMENTARY SUB-SERVICE ORGANIZATION CONTROLS

FIBB controls related to its system supporting its delivery of investment/redemption processing services cover only a portion of overall internal control for each Program Agency of FIBB. It is not feasible for the control objectives related to services provided by FIBB to be achieved solely by FIBB. Therefore, each Program Agencies' internal control over financial reporting must be evaluated in conjunction with FIBB's controls and the related tests and results described in section IV of this report, taking into account the related complementary sub-service organization controls expected to be implemented at sub-service organizations. Complementary sub-service organization controls and FIBB's control objectives that depend upon them are described for each of FIBB's sub-service organizations below.

### ***Federal Reserve Bank of New York***

#### Control Objective 5 – Logical Access

- Responsible for maintaining privileged user access and logical security over the servers, hardware devices, and related to the systems used.
- Responsible for granting, reviewing, and removing user access to the systems used.

#### Control Objective 1 – System Software Changes and Control Objective 3 – Program Change Control

- Responsible for performing patching and application changes to the systems used.

#### Control Objective 9 – Item Capture; Control Objective 12 – Recordkeeping; & Control Objective 14 – Interest Calculation and Payments

- Responsible for performing data back-ups for to the systems used.

### ***Department of the Treasury – Office of Debt Management***

#### Control Objective 5 – Logical Access

- Responsible for maintaining privileged user access and logical security over the servers, hardware devices, and related to the systems used.
- Responsible for granting, reviewing, and removing user access to the systems used.

#### Control Objective 1 – System Software Changes & Control Objective 3 – Program Change Control

- Responsible for performing patching and application changes to the systems used.

#### Control Objective 9 – Item Capture; Control Objective 12 – Recordkeeping; & Control Objective 14 – Interest Calculation and Payments

- Responsible for performing data back-ups for to the systems used.

### ***Fiscal Service***

#### Control Objective 5 – Logical Access

- Responsible for maintaining privileged user access and logical security over the servers, hardware devices, and related to the systems used.
- Responsible for granting, reviewing, and removing user access to the systems used.

#### Control Objective 1 – System Software Changes & Control Objective 3 – Program Change Control

- Responsible for performing patching and application changes to the systems used.

Control Objective 9 – Item Capture; Control Objective 12 – Recordkeeping; & Control Objective 14 – Interest Calculation and Payments

- Responsible for performing data back-ups for to the systems used.

**IV. CONTROL OBJECTIVES, RELATED CONTROLS, AND TESTS  
OF OPERATING EFFECTIVENESS**

### **Information Provided by KPMG LLP**

This report, when combined with an understanding of the controls at Program Agencies, is intended to assist auditors in planning the audit of user entities' financial statements or user entities' internal control over financial reporting and in assessing control risk for assertions in user entities' financial statements that may be affected by controls at FIBB.

Our examination was limited to the control objectives and related controls specified by FIBB in Section III and IV of the report, and did not extend to controls in effect at user entities. It is the responsibility of each user entity and its independent auditor to evaluate this information in conjunction with the evaluation of internal control over financial reporting at the user entity in order to assess total internal control. If internal control is not effective at user entities, FIBB's controls may not compensate for such weaknesses.

FIBB's internal control represents the collective effect of various factors on establishing or enhancing the effectiveness of the controls specified by FIBB. In planning the nature, timing, and extent of our testing of the controls to achieve the control objectives specified by FIBB, we considered aspects of FIBB's control environment, risk assessment process, monitoring activities, and information and communications.

The following clarifies certain terms used in this section to describe the nature of the tests performed:

- Inquiry – Inquiring of management and others within the service organization who, in the service auditor's judgment, may have relevant information.
- Observation – Observing operations and inspecting documents, reports, and printed and electronic records of transaction processing.
- Inspection – Involves examining records or documents, whether in paper form or electronic form.
- Reperformance – Involves the independent execution of procedures or controls that were originally performed as part of the entity's internal control.

In addition, as required by paragraph .35 of Attestation Standards - Clarification and Recodification (AT-C) section 205, *Examination Engagements* (American Institute of Certified Public Accountants (AICPA), Professional Standards), and paragraph .30 of AT-C section 320, when using information produced (or provided) by the service organization, we evaluated whether the information was sufficiently reliable for our purposes by obtaining evidence about the accuracy and completeness of such information and evaluating whether the information was sufficiently precise and detailed for our purposes. Procedures used included:

- Inspect the source of the information;
- Inspect the query, script, parameters used to generate the information;
- Observe the generation of information; and
- Inspect management's reconciliation of reports.

## GENERAL COMPUTER CONTROLS

### Control Objective 1 – System Software Changes

Controls provide reasonable assurance that changes to system software are authorized, tested, properly implemented, and documented.

#### Description of Controls

The Bureau of the Fiscal Service has documented procedures for the authorization, testing, implementation, and documentation of system software changes.

The InvestOne accounting system operates within a FIT-MF environment<sup>1</sup>. The FedInvest system is operated within a client-server environment<sup>2,3</sup>. FIT-MF and client-server system software products are under vendor control for maintenance and support. Upgrades to these products are obtained from the vendors and installed by the Information and Security Services (ISS) specialists.

For system software changes, Fiscal Service uses the HP Service Manager (HPSM) product for change management. All system software changes (i.e., new product installations, maintenance upgrades, etc.) require a change record to be opened in HPSM. A change record can be opened by any specialist in ISS for effecting such changes or the change control coordinator. The HPSM change record includes a description of the change, implementation date of the change, a justification, and a back-up/back-out plan.

Changes are initially discussed at the weekly change control meetings. Attendees include ISS representatives impacted by the proposed change. Notification is sent to the assistant commissioner, division directors, branch managers and/or staff personnel. Following the meeting, the change control coordinator prepares and distributes the Weekly Change Control Memorandum with information on changes for the upcoming week. This memorandum describes the system changes, effective dates, reasons for changes or problems the changes will resolve. There is also a reference to the HPSM change control number.

---

<sup>1</sup> Which consists of the following system software products:

- z/OS Operating System
- Customer Information Control System (CICS)
- ACF2 Security
- Tape Management System (TMS)
- Control D (Print scheduling)
- CA Workload (Production scheduling)
- ETF/A (Emergency Change Control)
- MQSeries
- DB2

<sup>2</sup> The FedInvest system is composed of the following system software components:

- Spring
- Hibernate
- Java Server Faces
- JAVA
- Windows Server 2008
- DB2
- WebSphere Application Server

<sup>3</sup> Reliant Services:

- LDAP access to Enterprise Directory Services
- SMTP access to Domino messaging service



Before system software changes can be moved to Production, they are tested in accordance with the Fiscal Service's system software change control procedures. These procedures document the authorization, testing, implementation, and documentation requirements for system software changes. Changes progress through various environments, which differ according to the type of system infrastructure. For the FIT-MF, there are three separate environments: Test, Acceptance, and Production. Each environment is a logical environment with its own datasets and libraries. FIT-MF changes are first tested by a programmer in the Test environment. Next, the changes are moved to Acceptance, tested, and then moved to the Production environment following approval. For changes to distributed software, changes are promoted up through integration, Acceptance, and Production regions within similar controls described above.

All changes are reviewed and coordinated at the weekly change control meeting, and authorized by the change control coordinator prior to being moved into the Production environment.

All emergency changes follow the same process as indicated above, with the exception that changes move through the environments at an accelerated rate. Testing and authorization of these changes are documented in HPSM.

Fiscal Service has established a process that allows system programmers and database administrators to have temporary access to the Production FIT-MF environment through the use of a "fire-call" ID product that allows them elevated privileges for system software and application changes. The operating system is configured to monitor and log such activity for review and approval by management; management reviews these logs within a reasonable timeframe after the use of the "fire-call" ID.

ISS reviews the use of sensitive system utilities included in the protected programs group on a weekly basis and limits access to these programs based on job responsibility.

### **Tests of Operating Effectiveness and Results of Testing**

1. Inspected written procedures for system software change management and determined that procedures were documented, including procedures to document, test, and authorize system software changes, and properly implement changes into production.
2. Inspected the emergency system software change procedures and determined that procedures for implementing emergency system software changes were documented, including authorization by management.
3. Inspected vendor maintenance support contracts for system software and determined that the contracts existed and were current.
4. For a selection of system software change records, inspected HPSM tickets and determined that HPSM was used throughout the examination period to log, track, and monitor system software changes.
5. For a selection of dates, inspected Weekly Change Control Memorandums and determined that weekly change control meetings were held to discuss planned changes with the potential to impact the InvestOne accounting system or FedInvest application system software.
6. For a selection of system software changes and emergency software changes, inspected supporting documentation and determined the changes were tested and authorized prior to implementation.
7. For a selection of system software changes and emergency system software changes, inspected supporting documentation and determined the changes were reviewed and coordinated with the

weekly change control meeting, as well as authorized by the change control coordinator prior to being moved into production.

8. Inspected a list of users with access to use "fire-call" and determined the listing commensurate with job responsibilities.
9. For a selection of days, inspected fire-call logs and evidence of review, and determined that fire-call logs were reviewed by ISS management.
10. For a selection of weeks, inspected evidence of ISS's review of reports for sensitive system utilities in the protected programs group and determined that the reports were reviewed.

No exceptions noted.

## **Control Objective 2 – Vendor Software Changes**

Controls provide reasonable assurance that implemented new releases of vendor-supplied applications are tested, authorized, properly implemented, and documented.

### **Description of Controls**

Fiscal Service has documented procedures for the testing and authorization of new releases of vendor supplied applications. The change control process is under the control and direction of BTD (part of FAO). Fiscal Service uses the HPSM product for documenting vendor-supplied releases.

The InvestOne accounting system is licensed by FIS. Fiscal Service has a maintenance and support contract for the InvestOne accounting system with FIS. ISS is responsible for all maintenance and support of the FedInvest system.

FIS periodically provides new releases of the InvestOne accounting system, including documentation. Each new release requires comprehensive testing. BTD tests the new InvestOne accounting system releases developed by FIS consistent with change control procedures for FAO systems. New InvestOne accounting system releases are installed in the Test environment where they are initially tested. After successful completion of testing, ISS migrates the InvestOne accounting system new release to the Acceptance environment, where it is subjected to acceptance testing by users. ISS only installs an InvestOne accounting system new release in the Production environment after all testing has been successfully completed and management has approved the InvestOne accounting system new release for implementation in the Production environment. Fiscal Service loaded InvestOne version 14.5 on May 23, 2016.

In addition to new releases, FIS will periodically provide fix tapes for the InvestOne accounting system. Fix tapes, which address certain InvestOne accounting system issues, are narrower in scope than new releases. Based on what changes a particular fix tape includes, Fiscal Service management will decide whether or not to implement the fix tape. If management decides to implement the fix tape, the fix tape is migrated through the Test and Acceptance environments. Fix tapes are installed in the Production environment only after successful completion of testing in the Test and Acceptance environments and management approval for migration into the Production environment.

BTD also tests changes to the InvestOne accounting system application reports, developed by FIS using the same change control procedures described above.

In addition, Fiscal Service uses the version control software to manage the upgrades and enhancements. Changes are only migrated into the Production environment once all responsible parties approve the change in the version control software. Access to migrate changes via the version control software is limited based on job responsibility.

### **Tests of Operating Effectiveness and Results of Testing**

1. Inspected procedures for the implementation of new releases of vendor supplied applications, and determined that they were documented and included requirements for testing, documentation, and authorization.
2. Inspected vendor maintenance support contracts for the InvestOne accounting system software and determined that the contracts existed and were current.

3. For a selection of new InvestOne releases, inspected supporting documentation and determined the changes were tested, authorized, documented, and properly implemented.
4. Inspected the listing of vendor software changes and enhancements and determined that there were no fix tapes installed into the production environment during the examination period.
5. Inspected version control software access permissions and determined that access permissions to migrate changes to the production environment were restricted commensurate with job responsibilities.

No exceptions noted.

### **Control Objective 3 – Program Change Control**

Controls provide reasonable assurance that development of new applications and changes to existing applications are tested, authorized, properly implemented, and documented.

#### **Description of Controls**

Fiscal Service has documented procedures for the testing, authorizing, implementation, and documentation of application software changes. The application change control process is under the control and direction of BTD.

FIS has custom built additional application components for data entry and reporting. Included is the FedInvest application, which functions as a web-based user interface that Program Agencies can use for entering transactions into the InvestOne accounting system. For reporting, Fiscal Service has built internally-developed programs utilizing RM (desktop) COBOL and mainframe COBOL that generate customized reports to provide information unavailable in the standard InvestOne accounting system reporting package.

For RM COBOL, ISS uses version control software<sup>4</sup> to control access to source code for these internally-developed programs and to facilitate version control by requiring developers to check source code in and out using version control software. These programs read the data from the InvestOne accounting system and create reports. Specifically, data is downloaded from InvestOne accounting system, using standard processes, to a data file on the FIT-MF. File Transfer Protocol (FTP) is then used to move the files to the server, where the programs will execute. Data is not sent from these programs to the InvestOne accounting system. The reports are used internally by FMB and disseminated to multiple stakeholders, who include: Program Agencies, ODM, Treasury's Office of Fiscal Projections (OFP), the Congressional Budget Office (CBO), and various offices within Fiscal Service.

For FIT-MF COBOL, ISS uses version control software<sup>5</sup> to control access to source code for these internally-developed programs and to facilitate version control. These programs were developed by ISS and reside on the mainframe, where these programs execute.

For FedInvest and customized reports, ISS uses version control software<sup>4</sup> to control access to source code for the vendor supplied and Fiscal Service managed programs to facilitate version control. Changes to FedInvest are developed by ISS.

BTB provides support for the design and testing of the above changes. BTB creates the requirements documentation, which is then provided to ISS (or FIS) for development. BTB manages the request, documentation, testing, and authorization process using a Change Control Checklist and HPSM.

Changes using version control software progress through three separate environments: Test/Integration, Acceptance, and Production. A change is first tested by the programmer in the Test/Integration environment. It is then migrated to the Acceptance environment where a user tests the change using example transactions and Acceptance environment files and libraries.

---

<sup>4</sup> Subversion

<sup>5</sup> Endeavor

Once the Acceptance testing has been successfully completed, the applicable Manager within BTM authorizes the change and sends a request to ISS to move the change into the Production environment. Upon notification of an accepted change, ISS creates an update package in version control software. Only approved changes are installed in the Production environment.

Each change is reviewed by the user groups that are affected by the change, and each group provides user concurrence that they accept the change. Following user concurrence, a senior staff member reviews the testing materials and completes the Change Control Checklist indicating that testing has been completed. The package is provided to applicable Manager within BTM for final review and approval.

For FIT-MF COBOL, the version control software is an application through which users approve changes. This version control software is also used to move changed program files into the Production environment. This version control software will not allow changes to be migrated from the Acceptance environment into Production until the changes have been approved. Access to migrate changes to Production via the version control software change control software is limited based on job responsibility.

### **Tests of Operating Effectiveness and Results of Testing**

1. Inspected application software change procedures and determined that they were documented and included requirements for testing, documentation, and authorization.
2. Inspected access groups and inquired of ISS management and determined that access to source code for internally-developed programs was commensurate with job responsibilities.
3. Inspected the access control lists for FedInvest and customized reports version control software and determined that access to the source code for FedInvest commensurate with job responsibilities.

**Exception Noted:** There were two (2) separated employee user accounts that remained active after their separation date and two (2) employees that transferred positions that retained access inappropriately and none of the accounts were accessed after the separation or transfer dates.

**Management Response:** Management removed the user accounts and perform recertification of users on an annual basis.

4. Inspected all change records in HPSM and determined that HPSM was used throughout the examination period to log, track, document, and monitor application software changes.
5. For a selection of application software changes, inspected supporting documentation and determined the changes were tested and authorized.
6. Inspected version control software access permissions and determined that access permissions to migrate changes to the production environment were restricted and commensurate with job responsibilities.

No exceptions noted, except as described above.

## **Control Objective 4 – Physical Access**

Controls provide reasonable assurance that physical access to computer equipment and storage media is restricted to authorized individuals.

### **Description of Controls**

Fiscal Service has documented policies and procedures for controlling physical access to buildings and to the data center. These include:

- Identification of sensitive/critical areas to which access needs to be restricted.
- Physical access controls designed to detect unauthorized access.
- Procedures for log reviews and investigation of violations.

The InvestOne accounting system FIT-MT and FedInvest servers reside in ISS's data center. Various physical access controls protect the facilities. Armed security guards staff and monitor Fiscal Service facilities 24 hours a day, 7 days a week. A digital video camera system monitors all entrances, the building perimeter, and certain interior areas, including the data center, and records activity 24 hours a day. All people entering each building are required to place any materials, packages, bundles, etc. onto an x-ray machine. Entrants are also required to pass through a walkthrough metal detector. An activation of the walkthrough metal detector results in further screening by the security guard, utilizing a handheld metal detector to identify the source of activation. In addition, entrants must swipe their badges into an access control system that grants access to authorized personnel.

The Security Branch issues employee badges, after performing security background checks and fingerprinting.

Employees are required to have badges available at all times upon request. Terminated employees are required to surrender identification badges and are removed from the database security system immediately.

Physical access to the ISS Data Center is restricted to authorized users only. An employee needing access to the data center must have his/her Branch Manager request access for a one-day badge, which will give the employee access to the data center. The requests are made through Hewlett Packard Service Manager (HPSM), a workflow system that is used to approve data center access. After the Branch Manager completes and submits the HPSM request form for the appropriate ISS resource area access level, requests are forwarded to ISS's data center managers for approval in the HPSM. If ISS approves the request and the appropriate training is completed by the employee, the Fiscal Service Division of Security and Emergency Programs (DSEP) Security Branch grants access. Access to all sensitive areas requires use of a badge. The use of a badge provides an audit trail that is reviewed by ISS management monthly for potential access violations. Any unauthorized access attempts are followed-up on by contacting the individual's supervisor. Individuals without badge access to the data center must be escorted to the command center and are required to sign in/out of a Visitor log to be issued a data center visitor badge. Visitor badges do not have access to the data center, but rather designate the individual as a visitor. A visitor log is maintained at the main entrance to the data center. Only designated DSEP specialists have access to the Physical Access Control System (PACS). Vendors that are authorized to have a badge are issued a one-day badge and must leave their access badge onsite following completion of work in the data center. A log of one-day badges is maintained and reviewed weekly.

ISS performs a monthly review of individuals' access patterns of the data center for the previous month. ISS performs a semiannual reconciliation of individuals authorized data center access to individuals granted data center access by DSEP. Additionally, ISS performs an annual review and recertification of individuals with access to the data center. If an individual is found to have unauthorized data center access, ISS will, based on the individual's need for access, make a decision whether to request that DSEP remove their data center access or whether to provide authorization for their access.

### **Tests of Operating Effectiveness and Results of Testing**

1. Inspected physical access policies and procedures for the data center and determined that they were documented and included the identification of sensitive/critical areas to which access needs to be restricted, physical access controls designed to detect unauthorized access, and procedures for log reviews and investigation of violations.
2. Observed physical access controls of Fiscal Service buildings and the ISS data center and noted that security guards, video cameras, badge readers, and locked doors were in place and in operation to restrict access.
3. Observed persons entering Fiscal Service buildings and noted that persons were required to place any materials, packages, bundles, etc. onto an x-ray machine, and additionally were required to pass through a walkthrough metal detector.
4. Observed persons entering Fiscal Service buildings and noted that an activation of the walkthrough metal detector resulted in further screening by the security guard, utilizing a handheld metal detector to identify the source of activation.
5. Observed entrants swipe their badges into the access control system and noted that the controls system granted access to authorized personnel.
6. For a selection of employees who were granted access to the ISS data center, but were not on the authorized access list, inspected evidence of the individual's Branch Manager access request for the employee to be issued a one day badge and determined the request was: Tracked in HPSM; Approved by ISS; and, Access was granted by a designated Fiscal Service DSEP specialist via PACS.
7. Observed employees within the Fiscal Service buildings and noted that badges were displayed.
8. Inspected the data center access list and compared to a list of separated employees and determined that separated employees were removed from the badge reader system.
9. For a selection of employees who were granted access to the ISS data center and are not on the authorized access listing, inspected evidence of the individual's Branch Manager requesting access for the employee to be issued a one day badge and determined the request was:
  - a) Tracked in HPSM;
  - b) Approved by ISS; and if approved,
  - c) Access was granted by a designated Fiscal Service Division of Security and Emergency Programs (DSEP) specialist via PACS.
10. Inspected permissions to access the PACS badge system of Fiscal Service security management, and determined that access permissions to the physical access systems are commensurate with job responsibilities.
11. For a selection of months, inspected evidence of the monthly review of violation logs and determined that a review to identify unauthorized access attempts was performed.
12. For a selection of dates, inspected visitor logs and determined that visitor logs were reviewed.
13. For a selection of days, inspected shift logs and determined that an inventory of vendor badges was performed.
14. Inspected documentation of the monthly review of physical access privileges to the data center and determined that access privileges were reviewed.



15. Inspected documentation of the annual recertification of physical access privileges to the data center and determined that access privileges were recertified.

No exceptions noted.

## **Control Objective 5 – Logical Access**

Controls provide reasonable assurance that logical access to system and application software is restricted to authorized individuals.

### **Description of Controls**

Fiscal Service has guidelines for the preparation of security plans for applications and systems that process Sensitive but Unclassified information. All mission-critical systems and general support systems are subject to an internal risk-based review annually. This review identifies assets and possible threats to these assets, provides a measure of vulnerability of the system to these threats, and confirms control or protective measures are in place.

The InvestOne accounting system is classified as a mission-critical system. InvestOne accounting system security along with the host FIT-MF's security package controls access to the InvestOne accounting system. InvestOne accounting system security restricts access to accounts within the system based on user banks and user identification (UID). InvestOne accounting system access is restricted to authorized personnel. The security settings are also used to restrict ISS personnel's access to system software, data files, and program libraries.

FedInvest is a web-based user interface through which users have access to enter transactions into and view InvestOne accounting system data. External users are limited to accessing InvestOne accounting system data through FedInvest. External users that invest in Government Account Series (GAS) are able to connect to FedInvest over the Internet to input transactions into the InvestOne accounting system as well as to view account statements and transaction information. Administrator access permissions are allocated in the FedInvest and the InvestOne accounting system users commensurate with their job responsibilities.

FAO follows Fiscal Service system administration security password guidelines/procedures to establish and maintain passwords.<sup>6</sup> Passwords are not displayed when entered. The reserved word feature is enabled to prevent the use of commonly used words in passwords.

ISSRs manage access to the InvestOne accounting system. To establish access to FedInvest, the applicant representing the Program Agency must complete the Bureau of the Fiscal Service FedInvest Logon ID Request. Once completed, the form is reviewed and signed by the applicant's supervisor and submitted to FIBB for processing. Upon receipt, FIBB verifies that the information is complete and then initiates a request that the user be added to Contact Management by submitting a Contact Creation Request in the Hewlett-Packard (HP) Service Request Catalog. Once the IT Service Desk notifies FIBB that the user has been added to Contact Management, FIBB provides a copy of the FedInvest Logon ID Request to the Fiscal Accounting Operations (FAO) Information System Security Representatives (ISSRs) for user set-up in FedInvest. After this is completed, Information and Security Services (ISS) provides the new user with their user ID and temporary password. The user is then instructed to login to FedInvest with the temporary password, answer security questions, and change their temporary password. When access to FedInvest is no longer required by the user, the applicable Program Agency will email FIBB at FedInvestor@fiscal.treasury.gov and request that the user's access be revoked. FIBB will then forward the request to the FAO ISSRs, who will process the revocation.

---

<sup>6</sup> These guidelines require passwords to be at least 8 characters in length, changed every 30 days for ACF2 and every 90 days for LDAP, and unique for each individual.

The ISSRs have documented procedures for granting access. Modifications to user accounts require use of the same Access Request/Revoke Form.

External users must have their supervisor's approval along with FIBB approval documented on an Access Request/Revoke form before access is granted to FedInvest. When an external user accesses InvestOne accounting system data, they enter a user ID and password into FedInvest. User IDs are authenticated by a security utility and Single Sign-On/ITIM<sup>6</sup>. If the required authentications failed, the user would be prevented from accessing InvestOne accounting system data through FedInvest.

ISSRs remove FedInvest and InvestOne accounting system access from users at the request of their managers/supervisors or FIBB personnel. Each access removal request is documented via an email.

On a weekly basis, ISSR reviews Internal Violations Reports for any inappropriate activity; follow-up is notated on the report.

Additionally, on a periodic basis an ISSR reviews a report of all InvestOne accounting system user IDs that have not been used to access InvestOne accounting system within a predetermined number of days<sup>7</sup>. The ISSR follows up with any affected users by email or by phone.

Additionally, the ISSRs recertify access annually to mission critical systems by verifying access privileges for all InvestOne accounting system and FedInvest users.

ISSRs remove or modify any user IDs or access privileges identified for deletion or changes by the user's manager/supervisor or FIBB personnel when accompanied by an email.

### **Complementary Program Agency Controls**

Program Agencies should establish controls to:

- Ensure that access to FedInvest is restricted to properly authorized individuals.

### **Tests of Operating Effectiveness and Results of Testing**

1. Inspected evidence of the InvestOne and FedInvest risk-based review and determined that the risk-based review was performed and was approved on September 28, 2016.
2. Inspected the InvestOne accounting system and FedInvest security plan and determined that the plan was documented.
3. Observed a user log into the InvestOne accounting system and noted that their access was restricted in accordance with the system configuration.
4. For each InvestOne accounting system user, compared access granted to an FAO Organization Chart and determined that access privileges commensurate with job responsibilities.
5. Observed a user log into the FedInvest system and noted that their access was restricted in accordance with the system configuration.
6. Inspected security guidelines and procedures for administrator privileges for the InvestOne accounting system and FedInvest and determined that security guidelines and procedures were documented for administrator privileges.

---

<sup>6</sup> A security utility and Single Sign-On/ITIM, is used to authenticate users. User credentials are stored in the enterprise directory.

<sup>7</sup> A list of InvestOne users that have not logged into InvestOne for 45 days or more is reviewed monthly.

7. Inspected a list of users with administrator access privileges to InvestOne accounting system and FedInvest and determined that access was limited and commensurate with job responsibilities.
8. Inspected security guidelines and procedures for InvestOne and FedInvest and determined that logical access controls procedures were documented.
9. Inspected password settings for InvestOne accounting system and FedInvest and determined that password length, complexity, and expiration settings were configured in accordance with Fiscal Service requirements.
10. Observed a user log into InvestOne accounting system and FedInvest and noted that their password was masked as they entered it.
11. For a selection of new InvestOne users, inspected documented user access request forms and determined that access was authorized.
12. For a selection of new FedInvest users, inspected documented user access request forms and determined that access was authorized.
13. Inspected a list of all separated and transferred Fiscal Service employees with InvestOne or FedInvest access and lists of InvestOne accounting system and FedInvest user IDs and determined that access to InvestOne accounting system and FedInvest had been revoked for terminated and transferred Fiscal Service employees with InvestOne or FedInvest access.
14. For a selection of weeks, inspected ACF2 InvestOne audit log reports and evidence of review and determined that the reports are reviewed.
15. For a selection of months, inspected evidence of review and removal of inactive accounts and determined that inactive user accounts were reviewed on a monthly basis.
16. Inspected documentation of the review and recertification of internal InvestOne and FedInvest user access and determined that internal InvestOne and FedInvest user access had been reviewed and recertified.
17. For a selection of external FedInvest users, inspected documentation of the review and recertification of external FedInvest user access and determined that external FedInvest user access had been reviewed and recertified.
18. Inspected a selection of annual user access recertification for external FedInvest users and determined that all user access modifications were made as requested.

No exceptions noted.

## **Control Objective 6 – Computer Operations**

Controls provide reasonable assurance that computer processes are scheduled appropriately and deviations are identified and resolved.

### **Description of Controls**

The InvestOne accounting system is an interactive FIT-MF system with master data files that are updated when entries are posted. End-of-day processes perform maintenance to the data files and data backups. ISS support personnel complete the Production Control Daily Checklist to verify the successful completion of end-of-day processes. Data entry error checking and input screen designs help ensure that the data entered by the users is accurate and complete. The error checks include verification of entered data based on predetermined values and ranges. Errors detected by the system are rejected immediately and must be corrected before the transaction is permitted to update the master data tables.

Daily user operations procedures are posted for the InvestOne accounting system to provide operators with the information necessary to sequentially complete daily processing. Additionally, a monthly calendar is posted that highlights the daily requirements. The InvestOne accounting system configuration requires that daily reporting be performed in sequence before transaction processing can begin.

The mainframe job scheduler software controls the scheduling of batch jobs for the InvestOne accounting system. The job scheduler allows all programs for batch processing, printing and data backup to be scheduled and performed automatically. Access to the job schedules is limited to ISS support personnel and privileges are commensurate with job responsibilities. The job scheduler sends messages confirming successful completion of each day's scheduled jobs to ISS and BTM. Any abends are also communicated to the appropriate ISS and BTM personnel as they happen through automated messages. Abends are resolved and jobs are restarted as necessary through the job scheduler.

### **Tests of Operating Effectiveness and Results of Testing**

1. For a selection of dates, inspected Production Control Daily Checklists and determined that the checklists were used during processing.
2. Observed transactions entered into the InvestOne accounting system and noted that error checking edits prevented users from entering values of the wrong data type or values not on lookup lists.
3. Inspected posted daily user operations for InvestOne accounting system and FedInvest, the Daily Procedures, and the monthly requirements calendar and determined that these schedules and procedures were available.
4. For a selection of months, inspected the monthly requirements calendars and determined that these schedules were available.
5. Inspected the InvestOne accounting system job schedule and determined that a job production schedule for the InvestOne accounting system was documented.
6. Inspected the list of ACF2 user IDs with access to make modifications to schedules, compared the list to an ISS staff detail listing and determined that access privileges to make modifications to CA Workload Object commensurate with job responsibilities.

No exceptions noted.

## **Control Objective 7 – Network Performance Monitoring**

Controls provide reasonable assurance that network performance monitoring techniques are implemented appropriately.

### **Description of Controls**

Users must be connected to the Fiscal Service network to access the InvestOne accounting system. Additionally they must run terminal emulation software to connect to the FIT-MF environments. Network performance and availability is monitored by ISS 24 hours a day.

Fiscal Service uses a combination of monitoring tools (ManageEngine OPManger and HP SiteScope) are used to monitor networking equipment such as switches and firewalls. These tools automatically report any network equipment or application outages to the Network Operations Center (NetOps).

### **Tests of Operating Effectiveness and Results of Testing**

1. Observed FAO staff and noted that terminal emulation software was used to connect to the FIT-MF.
2. Observed ISS Command Center staff and noted that monitoring tools were used to monitor the performance and availability of Fiscal Service networking equipment, such as switches and firewalls.
3. Observed ISS Command Center staff and noted that tools were used to monitor the performance and availability of the FedInvest website.
4. Inquired of management and were informed that the ISS Command Center was staffed 24 hours a day.

No exceptions noted.

## **INVESTMENT/REDEMPTION PROCESSING CONTROLS**

### **Control Objective 8 – Item Processing Security**

Controls provide reasonable assurance that an authorized investment authority is established prior to processing investment requests.

#### **Description of Controls**

The Office of the Fiscal Assistant Secretary (OFAS) issues guidance through the Department of the Treasury Operating Circular “Responsibilities Relating to Government Investment Accounts and Investment in Government Account Series (GAS) Securities” (Operating Circular). The Operating Circular communicates policies and procedures regarding the government accounts on the books of Treasury that the Secretary of the Treasury has been authorized or directed by law to invest. The Operating Circular describes the government investment account responsibilities that Treasury has, and the fiscal responsibility the Program Agencies have for the use of the invested funds.

The Operating Circular also describes the process for how Treasury issues approval of the Fund's investment authority. FIBB creates new investment accounts in the InvestOne accounting system that will be available in FedInvest after FIBB receives confirmation that Fiscal Service's Office of the Chief Counsel and Treasury's Assistant General Counsel for Banking and Finance have completed the legal review of the Fund's investment authority or receives a completed Memorandum of Understanding (MOU) between Treasury's OFAS and the Program Agency.

Office of the Chief Counsel maintains records concerning all legal matters with regards to new and existing investment funds.

#### **Complementary Program Agency Controls**

Program Agencies should establish controls to:

- Provide applicable legislation to FIBB, and any subsequent legislation revisions, that authorizes the Program Agency to invest.
- Verify the authority to invest prior to submitting investment account set-up and investment/redemption requests.
- Ensure that investment/redemption transactions processed by FIBB on behalf of the Program Agency agree with applicable Warrants processed by Fiscal Service Government-Wide Accounting (GWA).
- Ensure that only authorized personnel sign requests or submit transactions in FedInvest.

#### **Tests of Operating Effectiveness and Results of Testing**

1. For a selection of new investment accounts, inspected evidence confirming that the Fiscal Service's Office of the Chief Counsel and Treasury's Assistant General Counsel for Banking and Finance have completed the legal review of the Fund's investment authority or a completed MOU between Treasury's OFAS and the Program Agency was received prior to the investment account being made available in the FedInvest system.

No exceptions noted.

## **Control Objective 9 – Item Capture**

Controls provide reasonable assurance that investment and redemption requests are processed and recorded accurately and prepared in a timely manner.

### **Description of Controls**

Program Agencies log on to FedInvest to enter their investment and redemption requests prior to the 3:00 pm ET deadline (11:00 am EST for Zero-Coupon Bonds). Investment options include: (1) Market-based bills, notes (fixed and floating rate), bonds, Treasury Inflation Protected Securities (TIPS); (2) one-day certificates; (3) special issue par-value securities for agencies with proper legislative authority; and (4) Zero-Coupon Bonds. Procedures for processing investment and redemption requests by FIBB accountants on behalf of the Program Agency are documented for each type of transaction. For new market-based securities auctioned by Treasury, FIBB accountants manually set up the new securities with a Committee on Uniform Securities Identification Procedures (CUSIP) number assigned by the Treasury into the InvestOne accounting system. Zero-Coupon Bond securities are manually set up by FIBB accountants with a CUSIP number assigned by the Treasury into the InvestOne accounting system only when an investment request is received by the agency. One-day and special issue par-value securities are also set-up by a FIBB accountant; however, the FIBB accountant assigns a security number based on the security name and date of issue instead of a CUSIP number. Another (the supervisor and a reviewing FIBB accountant) reviews the set-up of a new security to ensure that they are accurately recorded.

A Program Agency can send investment/redemption requests by email to FIBB for processing on their behalf. FIBB also processes investment transactions for certain Program Agencies when documentation provided by Fiscal Service Government-Wide Accounting (GWA) indicates that there are additional amounts available for investment. To ensure that the Program Agency's investment/redemption requests are suitable and have been entered correctly into the system, two FIBB accountants review and digitally stamp each request, in addition to the accountant who entered the transaction into the FedInvest or InvestOne accounting system. The FIBB accountants inspect the requests to ensure that they include: name of fund, account symbol, date of request, amount, type of security to invest/redeem, and authorized signature of the Program Agency manager or authorized agent. If the requests do not contain the required information, the FIBB accountants contact the Program Agency to obtain the required information. Investment/redemption requests are processed as of the date on the requests.

Market-based securities – Office of Debt Management (ODM) provides FIBB daily security price files for the market-based securities. These price files are calculated by ODM using Federal Reserve Bank (FRB) of New York Treasury Price Quote files. FIBB accountants perform daily procedures to ensure the accuracy of the prices and for contingency planning in the event that ODM price files are unavailable to FIBB. FIBB accountants obtain the FRB of New York Treasury Price Quote files from a secure website using a digital certificate. The FIBB accountant runs a desktop COBOL program that uses the FRB of New York prices to calculate and prepare market-based price files that can be loaded into the InvestOne accounting system. The desktop COBOL program also compares the calculated prices to the prices contained in the ODM files producing an exception report of any differences. In addition, a FIBB accountant performs a yield curve comparison to check for significant variances from the composite Bloomberg generic pricing source obtained from the Bloomberg terminal. The FIBB accountant notifies ODM of any price differences on the exception report and unusual variances identified from the yield curve comparison, if any, and ODM provides FIBB with certification of any necessary price corrections via email. The FIBB



accountant loads the market-based prices into the InvestOne accounting system and FedInvest by approximately 1:00 pm ET.

Overnight Rates (one-day securities) – ODM provides FIBB the daily rate for the one-day certificates in an email of daily market bid quotations on most recently auctioned Treasury bills. The one-day rate is the prior day's coupon equivalent of the shortest regularly issued Treasury security, currently the 4 week bill. Each morning, a FIBB accountant enters the overnight interest rate for the one-day security into the InvestOne accounting system and FedInvest and two FIBB accountants compare the InvestOne accounting system security definition screens and the FedInvest screen to the ODM email received to ensure the rate was recorded accurately.

Special issue par-value securities – On the first business day of each month, a FIBB accountant creates the special issue par-value securities in the InvestOne accounting system and FedInvest using the rates provided by the Division of Accounting Operations (DAO) Securities Accounting Team (SAT). SAT prepares the rates for submission to FIBB using rates provided by ODM and the average auction results of Treasury securities as specified in the pertinent legislation. Once the special issue par-value security rates are compiled, they are submitted to the SAT supervisor for review. The supervisor reviews the rates prior to submission to FIBB by comparing the rates on the form for submission to the rates obtained from ODM and the security auction results tables. Once the securities have been created in the InvestOne accounting system using the rates obtained from SAT, the FIBB accountant runs an InvestOne OLE report for special issues and another InvestOne OLE report for one day securities to pull the rates into InvestOne. Another accountant and the supervisor reviews the rates in InvestOne and compares them to the rates provided by SAT to ensure that the rates are recorded accurately and documents the review by digitally stamping the rate sheet that was provided by SAT.

Zero-Coupon Bond securities – ODM provides the Zero-Coupon Bond pricing on an as needed basis. Currently, only two Program Agencies invest in Zero-Coupon Bonds. FIBB receives the Program Agency instructions for the purchase/redemption of Zero-Coupon Bonds through a FedInvest email notification. A Program Agency must enter Zero-Coupon Bond purchase requests into FedInvest prior to 11:00 am ET on the desired date. Once the purchase request has been entered, FedInvest sends an automated email to the FIBB accountants and the FIBB accountants forward the request to ODM for pricing. ODM prices the transaction at approximately noon and provides the pricing data to FIBB. A FIBB accountant enters the applicable pricing data and posts the requested transaction in InvestOne accounting system. Two other FIBB accountants compare the pricing information from the InvestOne accounting system to the pricing data received from ODM to ensure the pricing is accurately recorded. A confirmation is available in FedInvest to the FedInvest user. The preparer and reviewing FIBB accountants digitally stamp the supporting documentation for the transaction to document their review.

Program Agencies that have not authorized FIBB to process investment transactions on their behalf need to purchase new securities each day using FedInvest (their investments are not automatically rolled over). If a Program Agency cannot access FedInvest, the agency must request the investment via email. FIBB accountants process these overnight transactions as instructed.

### **Investment Request Processing**

Program Agency users access FedInvest using their user ID and password (access controls are outlined in Control Objective 5 – Logical Access). The Program Agency user selects the Account Fund Symbol (AFS), date, security type, and investment amount in FedInvest.

Before Prices Loaded – The FedInvest user may enter investment requests before prices are loaded in the system for up to 10 business days in the future except for Zero-Coupon Bonds and Special Issue Certificates of Indebtedness. Upon submission of the request for future dated market-based and TIPS securities, the user receives a confirmation number, which is proof to the Program Agency that their request was accepted. When prices are loaded by the FIBB accountant into the InvestOne accounting system, the FIBB accountant uses the FedInvest RPA module to load the prices into FedInvest, publish them on the website, and apply the prices to the pending investment transactions. Once the price has been applied to the transaction, it is automatically posted to the InvestOne accounting system and the confirmation number is replaced with a memo number that is also on the confirmation available to the user in FedInvest.

For future dated one-day investments, the user receives the memo number immediately. Once the one-day rate has been loaded into InvestOne accounting system/FedInvest for the effective date of the investment, a confirmation of results with rate information will be available in FedInvest to the FedInvest user.

After Prices Loaded – The FedInvest user may enter investment requests after prices are loaded into the InvestOne accounting system, except for Zero-Coupon Bonds. Since FedInvest interfaces with the InvestOne accounting system, the InvestOne accounting system automatically assigns a memo number and applies the price/rate. A confirmation of results is available in FedInvest to FedInvest users.

Zero-Coupon Bond securities – The FedInvest user may enter investment requests by 11:00 am ET. FedInvest sends the request by email to the FIBB accountants who forward the request to ODM for pricing. ODM prices the purchase of the Zero-Coupon Bond at approximately 12:00 pm ET and forwards the results to FIBB by email. The FIBB accountant enters the pricing results into the InvestOne accounting system, posts the transaction, and forwards the memo number to the FedInvest user. A confirmation of results is available in FedInvest to the FedInvest user.

Program Agencies submit the investment/redemption requests via the Internet using FedInvest. If Program Agencies are unable to access FedInvest to submit requests they can submit the investment/redemption requests via email to the Federal Investments and Borrowings Branch for manual entry. FIBB also processes investment transactions for certain Program Agencies when documentation provided by Fiscal Service Government-Wide Accounting (GWA) indicates that there are additional amounts available for investment. A FIBB accountant enters the request into FedInvest or InvestOne accounting system on behalf of the Program Agency. Then two FIBB accountants compare the transaction confirmation to the investment request to ensure the investment request is recorded accurately, posted to the correct day, and then digitally stamp the investment request to document their review. A confirmation of results is available in FedInvest to the FedInvest user the same day.

On the following business day, a FIBB accountant compares the InvestOne report (Prior Day Review) to the investment requests submitted by the Program Agency to ensure transactions were properly entered into the InvestOne accounting system. The FIBB accountant documents this review by digitally stamping the investment request.

### **Redemption Request Processing**

Program Agency users access FedInvest using their user ID and password (access controls are outlined in Control Objective 5 – Logical Access). The Program Agency user selects the AFS, date,

inventory method (First-In First-Out (FIFO) or Specific ID), security type, and redemption amount in FedInvest.

**Before Prices Loaded** – The FedInvest user may enter Market-based bill, note (fixed and floating rate), bond, and TIPS redemption requests using the FIFO inventory method before prices are loaded in the system for up to 10 business days in the future. Upon submission of the request, the user receives a confirmation number which is evidence to the Program Agency that their request was accepted. When prices are loaded by the FIBB accountant into the InvestOne accounting system, the FIBB accountant uses the FedInvest RPA module to load the prices into FedInvest, publish them on the website, and apply the prices to the pending redemption transactions. Once the price has been applied to the transaction, it is automatically posted to the InvestOne accounting system, as evidenced by the replacement of the confirmation number with a memo number that is also on the confirmation available to the user in FedInvest.

**After Prices Loaded** – The FedInvest user may enter Market-based bill, note (fixed and floating rate), bond and TIPS redemption requests using the FIFO or Specific ID inventory methods after prices are loaded in the InvestOne accounting system and FedInvest. If Program Agencies have tax lots (a group of the same securities purchased on different dates) and decide to apply the specific identification method rather than the FIFO method to redeem from specific tax lots, Program Agencies need to select “Specific ID” inventory method to override the InvestOne accounting system default setting of the FIFO method, and enter the principal amount to redeem for each tax lot. Since FedInvest interfaces with the InvestOne accounting system, the InvestOne accounting system automatically assigns a memo number and applies the price/rate. A confirmation of results is available in FedInvest to FedInvest users.

**Special issue par-value securities** – Special issue par-value securities have unique redemption rules that require the InvestOne accounting system to redeem them based on the order of earliest maturity date, lowest prevailing interest rate, and FIFO. The FedInvest user receives a confirmation with a confirmation number and a message that the redemption rules will be applied in accordance with Treasury Fiscal Policy. The transaction will be pending until after the close of business on the effective date. At close of business (after 3:00 pm ET) on the effective date of the redemption, the FIBB accountant uses the FedInvest RPA module to run the Post Par Value Sell Transactions that will process, post, and assign memo numbers to the pending redemption requests in the InvestOne accounting system using the unique redemption rules. A confirmation of results is available in FedInvest to FedInvest users.

**Zero-Coupon Bond securities** – The FedInvest user must enter redemption requests into FedInvest (by 11:00 am ET) and FedInvest sends an email to the FIBB accountants who forward the request to ODM for pricing. ODM prices the redemption of the Zero Coupon Bond at approximately 12:00 pm ET and forwards the results to FIBB via email. The FIBB accountant enters the pricing results into the InvestOne accounting system, posts the transaction, and forwards the memo number to the FedInvest user. A confirmation of results is available in FedInvest to the FedInvest users.

Program Agencies submit the investment/redemption requests via the Internet using FedInvest. If Program Agencies are unable to access FedInvest to submit requests they can submit the investment/redemption requests via email to the Federal Investments and Borrowings Branch for manual entry. FIBB also processes redemption transactions for certain Program Agencies when documentation provided by GWA reflects that there is a need to redeem previously invested funds. A FIBB accountant enters the request into FedInvest or the InvestOne accounting system on behalf

of the Program Agency. Then two FIBB accountants review and digitally stamp the redemption request. A confirmation of results is available in FedInvest to the FedInvest user the same day.

On the following business day, a FIBB accountant compares the InvestOne report (Prior Day Review) to the redemption requests submitted by the Program Agency to ensure transactions were properly entered into the InvestOne accounting system. The FIBB accountant documents this review by digitally stamping the redemption request.

### **Investment Maturity Processing**

If Program Agencies do not redeem securities prior to the maturity date, the InvestOne accounting system automatically matures the securities on the maturity date. A confirmation of results is available in FedInvest to the FedInvest user. Each day, a FIBB accountant compares the system generated maturities to expected maturity reports ran after the close of the previous business day. Each business day, a FIBB accountant runs a report for all one-day investments from the previous business day and the current day's maturities, reviews the report to make sure that all one-day investments matured and paid interest, and documents approval by digitally marking the daily checklist.

### **Detailed Case Management Processing**

The Securities and Exchange Commission (SEC) provides reimbursement to FIBB for the service of tracking investments at a subaccount level which is supplementary to what is required to record issues, redemptions, and maturities within the InvestOne accounting system. The SEC has a requirement to hold monies in escrow pending legal determination of ownership, which is accommodated by establishing a network of sub-accounts, or cases, that in aggregate equal the fund's investment balance. The SEC has a unique process to deposit or withdraw funds from a specific case.

For the SEC, a FIBB accountant enters the request received via email or file into FedInvest or the InvestOne accounting system on behalf of the Agency. Then two FIBB accountants review and digitally stamp the request. A confirmation of results is available in FedInvest to the FedInvest user the same day.

On the following business day, a FIBB accountant compares the InvestOne report (Prior Day Review) to the requests submitted by the Program Agency to ensure transactions were properly entered into the InvestOne accounting system. The FIBB accountant documents this review by digitally stamping the request.

### **Complementary Program Agency Controls**

Program Agencies should establish controls to:

- Ensure that the submission of investment/redemption requests in FedInvest is accurate and completed prior to 3:00 pm ET (11:00 am ET for Zero-Coupon Bonds).
- Notify FIBB if the investment/redemption requests have been processed incorrectly so that correcting transactions may be processed before 3:00 pm ET.
- Review investment/redemption/maturity/interest confirmations and Monthly Statement of Accounts to ensure that each request was processed accurately, timely, and in accordance with Program Agency instructions.
- Ensure that access to FedInvest is restricted to properly authorized individuals.
- Review detailed case management transactions and case information to ensure that each request was processed accurately, timely, and in accordance with Program Agency instructions.

## Tests of Operating Effectiveness and Results of Testing

1. For a selection of days, inspected evidence of daily procedures performed by FIBB accountants and determined FIBB-calculated prices for market-based securities were compared to prices pulled from the ODM price file, a yield curve comparison was performed to identify significant variances between the ODM price file and composite Bloomberg generic pricing source, and the FIBB accountant digitally signed off on the daily procedures checklist.
2. For a selection of new market-based securities auctioned by Treasury, inspected documentation showing evidence that a FIBB accountant manually set up the new securities with a Committee on Uniform Securities Identification Procedures (CUSIP) number assigned by the Treasury into the InvestOne accounting system and determined that a supervisor and a reviewing FIBB accountant reviewed the set-up to ensure that they were accurately recorded.
3. Inspected the population of all transactions processed in the InvestOne accounting system and identified no investment and redemption transactions were processed for Zero Coupon Bonds during the examination period.
4. For a selection of One day or special issue par-value securities, inspected documentation showing evidence that a FIBB accountant manually set up the security with a security number based on the security name and date of issue assigned by the FIBB accountant into the InvestOne accounting system, and determined that a supervisor and a reviewing FIBB accountant reviewed the set-up to ensure that they were accurately recorded.
5. For a selection of investment/redemption request processed on behalf of the Program Agency, inspected evidence of the review completed by FIBB accountants and determined that the investment/redemption was suitably entered into the system and the request was digitally signed off.
6. For a selection of special issue par-value securities created in the InvestOne accounting system, inspected documentation showing evidence that a FIBB accountant ran an InvestOne OLE report for special issues and another InvestOne OLE report for one day securities to pull the rates and determined that a FIBB accountant and the supervisor reviewed and compared the rates in InvestOne to the rates provided by SAT to ensure that the rates were recorded accurately.
7. For a selection of investment requests entered into the system by the Program Agency prior to the prices being loaded, inspected documentation showing evidence that a FIBB accountant loaded prices into InvestOne and using the RPA module, loaded the prices into FedInvest and determined once the prices were applied to the pending investment transactions, they were posted to the InvestOne accounting system and their confirmation numbers were replaced with a memo number.
8. For a selection of investment requests entered into FedInvest or InvestOne by a FIBB accountant on behalf of a Program Agency, inspected FedInvest/InvestOne Transaction records and determined two FIBB accountants compared each transaction confirmation to their respective investment request in order to ensure that the investment request was recorded accurately, posted to the correct day, and then digitally stamped the investment request documenting their review.
9. For a selection of dates, inspected FedInvest/InvestOne Transaction records and determined a FIBB accountant compared the InvestOne report (Prior Day Review Report) to the investment/redemption request submitted by the Program Agency to ensure that transactions were properly entered into the InvestOne accounting system, and noted if the FIBB accountant digitally stamped the investment/redemption request documenting the completion of their review.

10. For a selection of redemption requests entered into the system by the Program Agency prior to the prices being loaded, inspected documentation showing evidence that a FIBB accountant loaded prices into InvestOne using the RPA module, loaded the prices into FedInvest and determined that once the prices were applied to the pending redemption transactions, they were posted to the InvestOne accounting system and their confirmation numbers were replaced with a memo numbers.
11. For a selection of special issue par-value security redemptions requested in FedInvest, inspected FedInvest/InvestOne Transaction records and determined that a FIBB accountant used the FedInvest RPA module to run the Post Par Value Sell Transactions and determined that the pending redemption requests were processed, posted, and assigned memo numbers in the InvestOne accounting system using the unique redemption rules.
12. For a selection of redemption requests entered into FedInvest or InvestOne by a FIBB accountant on behalf of a Program Agency, inspected FedInvest/InvestOne Transaction records and determined that two FIBB accountants compared each transaction confirmation to their respective redemption request in order to ensure that the redemption request was recorded accurately, posted to the correct day, and then digitally stamped the redemption request documenting their review.
13. For a selection of business days, inspected documented evidence of the daily procedures performed by the FIBB accountants regarding all one-day investments for the previous business day and the current day's maturities, and determined that a FIBB accountant reviewed the reports to ensure that all one-day investments matured and paid interest and digitally stamped the daily checklist.
14. For a selection of SEC transaction requests entered into FedInvest or InvestOne accounting system by FIBB on behalf of the Program Agency, inspected FedInvest/InvestOne Transaction records and determined that two FIBB accountants compared each transaction confirmation to their respective investment request in order to ensure that the investment request was recorded accurately, posted to the correct day, and then digitally stamped the SEC transaction request documenting their review.

No exceptions noted.

## **Control Objective 10 – Confirmations**

Controls provide reasonable assurance that confirmations are processed in a timely and accurate manner.

### ***Description of Controls***

The InvestOne accounting system assigns a memo number for transactions entered in FedInvest that are posted immediately into the InvestOne accounting system.

A confirmation number is created for each transaction entered into FedInvest that is not processed immediately upon entry (e.g., market based transactions before prices are loaded, Zero-Coupon Bonds, and special issue par-value redemptions) to notify the user that the transaction is in the processing queue. Once transactions are processed into the InvestOne accounting system, the InvestOne accounting system assigns an individual memo number that replaces the confirmation number. Memo numbers are provided to Program Agency FedInvest users from InvestOne through the FedInvest interface.

For each entry into the InvestOne accounting system, the system automatically generates and posts an on-line confirmation of the transaction available in FedInvest for Program Agency reconciliation. Program Agencies access FedInvest using their user ID and password to obtain confirmations.

### **Complementary Program Agency Controls**

Program Agencies should establish controls to:

- Track investment/redemption confirmations to ensure that the Program Agency FedInvest user correctly processes all requests.
- Review and reconcile all transaction confirmations to determine that they are accurate and complete, and report discrepancies to FIBB so correcting transactions may be processed before 3:00 pm ET.
- Ensure that access to FedInvest is restricted to properly authorized individuals.
- Review investment/redemption/maturity/interest confirmations and Monthly Statement of Accounts to ensure that each request was processed accurately, timely, and in accordance with Program Agency instructions.

### **Tests of Operating Effectiveness and Results of Testing**

1. For an investment or redemption request entered into FedInvest, but not immediately processed into the InvestOne accounting system (due to the fact that pricing information for the investment was not yet loaded or that close of business par-value redemptions rules were not yet applied):
  - observed FedInvest and noted that a confirmation number was automatically assigned and an on-line confirmation was generated to indicate that the transaction was in the processing queue; and
  - observed FedInvest after the pricing information was loaded, or at the end of the business day, and noted that the confirmation number assigned upon data entry was replaced with a memo number, and that the request was recorded accurately and in a timely manner.

No exceptions noted.

## **Control Objective 11 – Program Balance Adjustment**

Controls provide reasonable assurance that Program Agency account balance adjustments, due to errors in processing or Program Agency errors, are processed completely and accurately.

### **Description of Controls**

Program Agencies should detect errors by reviewing confirmations. Program Agencies notify FIBB of the errors and send adjustment information. FIBB maintains a documented procedure detailing the steps that need to be performed when making a correction or adjustment. The Correction/Adjustment Check List documents the tasks that generally need to be completed when making a correction or adjustment. When necessary, a FIBB accountant enters an adjustment or corrects the original transaction in the InvestOne accounting system. The InvestOne accounting system processes the adjustment and a confirmation of the adjustment or corrected transaction is available in FedInvest to the FedInvest user.

The FIBB accountant prepares a correction package and completes the Correction/Adjustment Check List when adjustments are necessary. Two other FIBB accountants, (the supervisor and a reviewing FIBB accountant), review and approve the correction package and any transactions posted to the InvestOne accounting system, SDAS, and/or IPAC, as applicable. The review and approval process is completed by determining the necessary steps on the Correction/Adjustment Check List have been performed.

A FIBB accountant runs a report from the FIBB Menu (a COBOL collection of desktop programs) to create Monthly Statement of Accounts, which documents all transactions processed for a particular month, including any necessary adjustments. The Monthly Statement of Account is made available in FedInvest and the Summary Level Statement of Accounts are made available on the Fiscal Service’s TreasuryDirect website for review by the Program Agencies.

### **Complementary Program Agency Controls**

Program Agencies should establish controls to:

- Review investment/redemption/maturity/interest confirmations and the Monthly Statement of Accounts to ensure that each request was processed accurately, timely, and in accordance with Program Agency instructions.
- Review adjustments and make prompt and appropriate journal entries to the accounting records, to adjust the investment account balances and related interest.
- Review Monthly Statement of Accounts to verify that adjustments were processed completely and accurately.

### **Tests of Operating Effectiveness and Results of Testing**

1. For a selection of corrections and adjustments, inspected the correction package and the completed Correction/Adjustment Check List and determined that the corrections/adjustments were performed in accordance with the established procedures.
2. For a selection of fund balance adjustments, inspected the Program Agency’s adjustment request and the Correction/Adjustment Check List and determined that two other FIBB accountants, including the team leader, documented their review of each adjustment request and that the request was processed completely and accurately.



3. For a selection of Monthly Statements of Accounts, inspected the Monthly Statements of Accounts on FedInvest and determined that they were posted by the first working day after the end of the month and were made available for review to the Program Agencies.
4. For a selection of adjustments, inspected the respective Monthly Statement of Account and determined that the Monthly Statement of Account indicated that the adjustment was processed accurately.

No exceptions noted.

## **Control Objective 12 - Recordkeeping**

Controls provide reasonable assurance that support related to the investment accounts is documented and readily available.

### **Description of Controls**

Transaction confirmations and the Monthly Statement of Accounts containing InvestOne accounting system data are available in FedInvest to the FedInvest users. The Monthly Statement of Accounts Summary Level is also available on the TreasuryDirect website. FIBB maintains electronic copies of the investment/redemption requests that were processed by FIBB on behalf of the Program Agency.

On a daily basis, FIBB receives market-based security price files from ODM and FRB of New York, Zero Coupon Bond pricing as needed from ODM, and a daily email for the one-day certificate rate from ODM. On a monthly basis, FIBB receives via email the special issue par-value security rates from SAT. These quotations document the security prices/rates and are retained for future reference for a period of twenty years in accordance with the Fiscal Service document retention policies. FIBB files and retains Daily Principal Totals Reports, which detail all daily principal transactions and are reconciled to the Balances-Summary report daily.

FIBB maintains copies of the Notification of Principal & Interest (P&I) Credit, which report principal and interest activity on certain Marketable or Agency Security investments held at FRB of New York. Each month, FIBB prepares the Standard Form 1132, *Investment Funds Summary Holding Report* (SF1132), Standard Form 1133-1, *Marketable Securities Held by GAS Agencies* (SF1133-1), and Standard Form 1134-1, *Agency Securities Held by GAS Agencies* (SF1134-1) reports, which document each Program Agency's account balance, including securities held in safekeeping at FRB New York. These reports are published on the TreasuryDirect website.

### **Tests of Operating Effectiveness and Results of Testing**

1. For a selection of months, inspected the Monthly Statements of Account and determined that the reports were maintained and readily available.
2. For a selection of investment/redemption requests, inspected the confirmations and determined that confirmations were maintained and readily available.
3. For a selection of investment/redemption requests, inspected the Request for Investment/Redemption forms, email authorizations or MOUs and determined that documentation was maintained and readily available.
4. For a selection of dates, inspected the Daily Principal Totals Reports and determined that the FIBB accountants reconciled the reports to the Balances-Summary report, the reconciliation was mathematically correct and documented, and the documentation was maintained and available.
5. For a selection of dates, inspected pricing records and determined that pricing documentation was maintained and readily available.
6. For a selection of months, inspected the Notification of P&I Credit and determined that the documentation was maintained and readily available.
7. For a selection of months, inspected the SF1132, SF1133-1, and SF1134-1 reports and determined that the reports were maintained and readily available.

No exceptions noted.

## **Control Objective 13 – Segregation of Duties**

Controls provide reasonable assurance that the duties of authorizing, processing information, and verifying documents are appropriately segregated.

### **Description of Controls**

FIBB has established policies and procedures documenting that the following responsibilities are segregated for Program Agencies using FedInvest:

- Program Agencies are responsible for requesting access to FedInvest.
- External FedInvest users must have their supervisor's approval along with FAO ISSR approval documented on an Access Request/Revoke form before access is granted to or revoked from FedInvest.
- Access permissions are assigned to FedInvest and the InvestOne accounting system users commensurate with their job responsibilities by the FAO ISSRs.
- FIBB Accountants set up accounts in InvestOne accounting system/FedInvest and FAO ISSRs set up users in InvestOne accounting system/FedInvest.
- Program Agencies access FedInvest and submit investment purchase and redemption requests.
- FedInvest interfaces with the InvestOne accounting system which processes and posts the investment and redemption requests and provides the data for the confirmations that are available in FedInvest to the FedInvest users.

FIBB has established policies and procedures documenting that the following responsibilities are segregated when FIBB processes transaction requests on behalf of the Program Agencies:

- Program Agencies prepare and submit investment/redemption requests to FIBB via email.
- FIBB personnel enter the investment purchase or redemption request into FedInvest or the InvestOne accounting system.
- The InvestOne accounting system processes the investment and redemption requests and provides the data for the confirmations that are available in FedInvest to the FedInvest users.
- To verify that transactions have been processed accurately, two FIBB accountants other than the one who entered the transaction will review and compare a copy of the investment/redemption request from the Agency or tax deposit amounts provided by GWA to the data entered into the InvestOne accounting system. Both the accountant entering the transaction and those reviewing it digitally stamp the file copies to document that the procedure has been performed.
- On the following business day, a FIBB accountant compares the InvestOne report (Prior Day Review Report) to the investment/redemption request submitted by the Program Agency to ensure transactions were properly entered into the InvestOne accounting system. The FIBB accountant documents completion of this review by digitally stamping the investment/redemption request.

### **Complementary Program Agency Controls**

Program Agencies should establish controls to:

- Ensure that access to FedInvest is restricted to properly authorized individuals.

### **Tests of Operating Effectiveness and Results of Testing**

1. For a selection of new FedInvest users, inspected documented user access request forms and determined if access was authorized by FIBB and the user's supervisor.
2. For a selection of new FedInvest users, inspected documented user access request forms and determined if the access granted commensurate with their job responsibilities.
3. For a selection of investment/redemption requests, inspected the signed Investment/Redemption request form or emailed authorization and determined the Program Agency authorized FIBB to process the request prior to entry into the InvestOne accounting system and the investment/redemption request was digitally stamped by the FIBB accountant recording entry and documented that the procedure was performed.
4. For a selection of dates, inspected records for transactions processed by FIBB on behalf of Program Agencies and determined that a FIBB accountant compared the InvestOne report (Prior Day Review Report) to the investment/redemption request submitted by the Program Agency and ensured that transactions were properly entered into the InvestOne accounting system, and the FIBB accountant digitally stamped the comparison documenting the completion of their review.

No exceptions noted.

## **Control Objective 14 – Interest Calculation and Payments**

Controls provide reasonable assurance that interest is calculated accurately and interest reinvestments are completed accurately.

### **Description of Controls**

#### Interest

FIBB has documented the methods for calculating interest for Government Account Series (GAS) securities in written desktop procedures. One-day securities pay interest at maturity, special issue par-value securities pay interest semi-annually on June 30 and December 31, and market-based notes, bonds and TIPS pay interest semi-annually on various dates. Market Based FRNs pay interest quarterly. The market-based bills and Zero Coupon Bonds do not pay periodic interest and therefore interest income is equal to the discount earned. The InvestOne accounting system calculates the amount of interest to be paid when holdings are redeemed or interest payments are due. The InvestOne accounting system calculates interest based on the security set-up and investment terms in the system in accordance with the requirements of 31 CFR Chapter II, Part 306, Subpart E, and Part 356, Appendix B, with the exception of one-day securities. The InvestOne accounting system calculates interest for one-day securities using the rate that FIBB receives from ODM.

The InvestOne accounting system reports the results of the calculations on confirmations available in FedInvest for Program Agency reconciliation and re-computation. The confirmation generation process is summarized as follows.

Program Agencies access FedInvest using their user ID and password. Since FedInvest interfaces with the InvestOne accounting system, the InvestOne accounting system data is displayed on the confirmations that are immediately available in FedInvest to the FedInvest user.

The InvestOne accounting system also calculates certain accrued interest amounts and Inflation Compensation Earned (ICE) on the TIPS. The InvestOne accounting system calculates ICE in accordance with the requirements of 31 CFR Chapter II, Part 356, Appendix B.

FIBB accountants can verify the accuracy of the InvestOne accounting system interest calculations by manually recalculating interest for redemptions, maturities and semi-annual payment dates.

A COBOL program uses extracted data from the InvestOne accounting system to generate Monthly Statement of Accounts (a cash basis statement that reflects the Agency's investment reporting, and shows interest income paid on each security). To create the Monthly Statement of Account, a FIBB accountant runs the COBOL program for both tax lot and summary levels. This creates two text files for each fund. The FIBB accountant sends the tax lot and summary level Monthly Statement of Account via email to the Fiscal Service Internet for review and publishing in FedInvest and the Summary Level Statement of Accounts are available on the TreasuryDirect website.

The Monthly Statement of Accounts and confirmations are available to the Program Agencies for reconciliation with their accounting records. In addition, previous months' statements are available for reference purposes. If the Program Agency identifies any errors, the Program Agency should inform FIBB so the necessary adjustments may be made.

### Amortization of Premiums and Discounts

The InvestOne accounting system automatically calculates amortization of discount/premium based on the security set-up and investment terms in the system. FIBB has documented the methods for calculating the discount/premium amortization in written desktop procedures. The system calculates amortization for market-based bills (i.e., short-term securities) using the straight-line method and for market-based notes/FRN/bonds/TIPS/Zero Coupon Bonds (i.e., long-term securities), using the level yield method, which is an interest method. A COBOL program is used to create monthly Accrual Confirmation and Accrual Activity Reports for each account, which contain the amortization amounts that are published in FedInvest for Program Agency reconciliation and re-computation. To create the Accrual Confirmation and Accrual Activity Reports, a FIBB accountant selects and runs the “accrual report” option from the FIBB report menu. This generates two text files that include the Accrual Confirmation and Accrual Activity Reports for each fund. The FIBB accountant sends the Accrual Confirmation and Accrual Activity Reports via email to the Fiscal Service Internet for review and publishing in FedInvest. In addition, previous months’ statements are available for reference purposes. If the Program Agency identifies any errors, the Program Agency should inform FIBB so the necessary adjustments may be made.

### Accrued Interest

The InvestOne accounting system automatically calculates accrued interest based on the security set-up and investment terms in the system. FIBB has documented the methods for calculating the accrued interest in written desktop procedures. The FIBB Menu accrual report program reports the results of interest accruals in the monthly Accrual Confirmation and Accrual Activity Report and publishes the report in FedInvest for Program Agency reconciliation and re-computation. To create the Accrual Confirmation and Accrual Activity Reports, a FIBB accountant selects and runs the “accrual report” option from the FIBB report menu that generates two text files that include the Accrual Confirmation and Accrual Activity Reports for each fund. The FIBB accountant sends the Accrual Confirmation and Accrual Activity Reports via email to the Fiscal Service Internet for review and publishing in FedInvest. In addition, previous months’ statements are available for reference purposes. If the Program Agency identifies any errors, the Program Agency should inform FIBB so the necessary adjustments may be made.

### Interest Reinvestments

On a weekly basis in June and December, FIBB prepares an Investment Rollover Projection for the Office of Fiscal Projections that includes principal balances from the InvestOne accounting system and interest accruals that are associated with those balances as of the date of the report. For the December 31 interest payments on special issue par-value securities, the interest is reinvested into a certificate of indebtedness maturing the following June 30.

For June 30 maturities and interest payments, FIBB receives written documentation from each agency that holds special issue par-value securities that states how they want their interest and maturities reinvested. June 30 is the only date in which agencies can invest in longer term special issue par-value securities (par-value bonds). Using this information, FAO prepares the Fiscal Assistant Secretary (FAS) memorandum. FAO reviews and approves the FAS Memorandum for accuracy and sends the report to Treasury headquarters. The Fiscal Assistant Secretary of Treasury approves and returns the FAS Memorandum for FIBB to process on June 30. The interest-reinvestment process for the non- par-value securities is the same as and subject to the regular investment process discussed in Control Objective 9.

### Interest Allocations

According to their individual needs, Program Agencies subscribing to detailed case management services establish relationships between their investments and their cases using either a pooled or non-pooled strategy. Currently, Administrative Office of the United States Court's (AOUSC's) Registry Funds account utilizes a pooled strategy and SEC's Disgorgement and Penalty Amounts Held for Investors uses a non-pooled strategy. Additional information on case management processes can be found in Control Objective 9 under the 'Detailed Case Management Processing' section.

A pooled investment strategy uses the CMS module in FedInvest to group cases into Program Agency defined pools. The sum of balances within each pool is then used by the customer to purchase/maintain a portfolio of securities (similar to a mutual fund). For agencies with a pooled investment strategy, the total balance of all cases must equal the total balance of all investments. The CMS module is also used to allocate interest by calculating the portion of total investment interest that is owed to each case based on the percentage of the pool's balance held by the case. The formula used to calculate and allocate interest to case balances includes withholding fees, as required by statute. Program agencies are responsible for verifying and inputting these fee amounts into CMS. Case and investment balances are reconciled for pooled investment funds both prior to and after the allocation of interest by a FIBB accountant prior to and after the allocation of interest.

Program Agencies with a non-pooled investment strategy track each case balance in an equivalent investment account within FedInvest. As such, each security that is purchased will tie directly to a specific case, as will the subsequent interest allocations.

### **Complementary Program Agency Controls**

Program Agencies should establish controls to:

- Program Agency investments should be geared toward assuring maturities match needs since the rate of return cannot be changed.
- Reconcile interest payments and allocations received as presented in the confirmations and Monthly Statement of Accounts and recalculate interest for accuracy.
- Approve reinvestments of interest after review for accuracy, completeness, and compliance with instructions.
- Recalculate interest accrual and amortization of premium and/or discount and compare the results to the Fiscal Service provided monthly Accrual Confirmation and Accrual Activity Reports.
- Report any interest accrual discrepancies noted on the monthly Accrual Confirmation and Accrual Activity Reports to Fiscal Service for resolution.
- Report any premium and/or discount amortization discrepancy noted on the monthly Accrual Confirmation and Accrual Activity Reports to Fiscal Service for resolution.
- Verify the accuracy of Program Agency requested fee amounts entered by both FIBB and agency accountants.

### **Tests of Operating Effectiveness and Results of Testing**

1. For a selection of interest transactions, for a selection of each type of GAS security (other than one-day securities), verified the InvestOne accounting system interest calculations by manually recalculating interest for redemptions, maturities and semi-annual payment dates and determined InvestOne is automatically calculating interest accurately.

2. Inspected interest calculation procedures and determined they were consistent with the requirements of 31 CFR, Chapter II, Part 306, Subpart E and Part 356, Appendix B.
3. For sample of one interest transaction for a one-day security, verified the accuracy of the InvestOne accounting system interest calculations by manually recalculating the interest for one-day security using the rate FIBB received from ODM and determined InvestOne is automatically calculating interest accurately.
4. For a selection of interest transactions processed in the InvestOne accounting system, inspected confirmations and determined subsequent to transactions posting in the InvestOne accounting system, the system automatically generates and posts an online confirmation of the transaction available in FedInvest to Program Agencies.
5. Inspected confirmations and determined each confirmation contained appropriate and necessary information to allow for Program Agency reconciliation and re-computation of transactions.
6. For a selection of Accrual Confirmation Reports and Accrual Activity Reports, inspected FedInvest and determined the reports were available in FedInvest to Program Agencies.
7. For a selection transactions from the Accrual Confirmation Reports, recalculated the amortization for both premium and discount and determined the amortization was calculated accurately or the level yield method utilized by FIBB for long-term securities approximated the interest method.
8. For a selection of Accrual Confirmation Reports and Accrual Activity Reports, inspected evidence and determined the reports contained the necessary information for Program Agencies to reconcile and re-compute the accrual and amortization and that the information documented was accurate.
9. For a selection of Accrual Activity Reports, inspected the Accrual Confirmation Report for the same day and determined the amortization recorded for the month was also calculated and reported accurately and used the appropriate amortization method (short term = straight line, long term = level yield/effective interest).
10. For a selection of Investment Rollover Reports, inspected the reports and determined that FIBB management documented its review and approval of each report prior to distributing it to the respective Program Agencies and FIBB maintained the written interest and maturities reinvestment requests from the Program Agencies.
11. Inspected the June 2017 Investment Rollover Report and determined the report contained documented evidence of FIBB management's review and approval of each rollover plan and was approved by the Fiscal Assistant Secretary of the Treasury prior to processing.
12. For a sample of one case management investment fund interest allocation, re-performed the interest allocations and determined the formula was properly applied.
13. For a selection of fund interest earnings and withholding fee allocations for pooled investments, inspected documentation and determined a FIBB accountant reconciled the case balances both before and after the allocation, accurately input the fee amounts into InvestOne, and that two FIBB accountants reviewed and digitally stamped the request.

No exceptions noted.



## **Control Objective 15 – Statement Rendering**

Controls provide reasonable assurance that daily activity and monthly reports are processed in a timely and accurate manner.

### **Description of Controls**

#### Monthly Statement of Accounts

A FIBB Menu program extracts data from the InvestOne accounting system to produce the Monthly Statement of Account that details cash basis reporting of a Program Agency's beginning balance, investment/redemption activity, unrealized discount, premium/discount recognized, interest earnings, adjustments processed and ending balance for the month. These reports are available in FedInvest and the Summary Level Statement of Account is available on the TreasuryDirect website by the 1st working day after the end of the month to be accessed by Program Agencies for transaction reconciliation, investment monitoring, and investment strategy initiatives. To create the report, the FIBB accountant runs a COBOL program that uses InvestOne accounting system data to create text files of the Monthly Statement of Accounts at both the summary level and tax lot level for each fund. The FIBB accountant sends the tax lot and summary level Monthly Statement of Accounts via email to the Fiscal Service Internet for review and publishing in FedInvest and on the TreasuryDirect website. In addition, previous months' statements are available for reference purposes. If the Program Agency identifies any errors, the Program Agency should inform FIBB so the necessary adjustments may be made. FIBB's policy requires that FIBB accountants complete and forward Monthly Statement of Accounts at the tax lot and summary level to the Fiscal Service Internet for review and publishing in FedInvest and the Summary Level Statement of Accounts are available on the TreasuryDirect website by the 1st working day after the end of the month.

#### IPAC and CARS Statement of Transactions

FIBB is able to report daily investment activity to GWA on behalf of the Program Agencies by submitting FIBB's daily IPAC file to GWA. FIBB creates the FIBB daily IPAC file, which is a configured system report, using a mainframe job. The file includes the Program Agency's Treasury Account Symbol (TAS) and the Business Event Type Code (BETC) allowing the activity to be classified in the Central Accounting and Reporting System (CARS) Account Statement. FIBB reports the investment activity for all investment Program Agencies.

Additionally, FIBB prepares a daily Classification Transactions and Accountability file to report non-IPAC activity, which consists of reclassification entries. FIBB creates the Classification Transactions and Accountability file using a mainframe program and the InvestOne accounting system. FIBB uploads the Classification Transactions and Accountability file to GWA using the CARS system and creates a GWA Statement of Transactions report. FIBB instructs Program Agencies to obtain access to the CARS Account Statement application in order to verify the activity submitted by FIBB.

### **Complementary Program Agency Controls**

Program Agencies should establish controls to:

- Review FIBB provided Monthly Statement of Accounts to ensure that transactions are recorded accurately and timely, and report discrepancies to FIBB so correction processes may occur.
- Reconcile investment activity from GWA application CARS Account Statements to the FIBB provided Monthly Statement of Accounts to verify that investment activity is being properly reported by FIBB on the Program Agencies' behalf.

### **Tests of Operating Effectiveness and Results of Testing**

1. For a selection of Monthly Statements of Account, inspected the Monthly Statement of Account on FedInvest and determined they were posted by the first working day after the end of the month.
2. For a selection of transactions, inspected the respective Monthly Statement of Account and determined the transactions were accurately reflected on the Monthly Statement of Account..
3. For a selection of posted Monthly Statements of Account, attempted to modify the published Monthly Statements of Account and determined that the modification of the statement was prevented.
4. For a selection of business days, inspected documentation of the daily procedures performed by the FIBB accountants regarding the daily IPAC file submission and determined that the accountants followed the established policies and procedures, as evidenced by the FIBB accountant digitally checking off and digitally initialing the applicable procedures on the daily procedures checklist.
5. For a selection of daily CTA file submissions, inspected the CTA submissions and determined that the FIBB accountant performed the appropriate procedures, as evidenced by the FIBB accountant digitally checking off and digitally initialing the applicable procedures on the daily checklist.

No exceptions noted.

## **MONITORING CONTROLS**

### **Control Objective 16 – Monitoring Sub-service Organizations**

Controls provides reasonable assurance that SOC 1 reports or other control related documentation provided by sub-service organizations are reviewed and documented timely in accordance with Fiscal Service policies and procedures.

#### **Description of Controls**

FIBB has documented procedures for staff to follow for reviewing SOC 1 Reports and other control related documentation.

Fiscal Service obtains relevant SOC 1 reports from sub-service organizations. If a SOC 1 Report is not available, Fiscal Service will request alternative documentation that outlines or analyzes current controls. These documents are reviewed to determine if any control exceptions impact FIBB's control environment. FIBB will assess existing complementary controls and determine if additional control changes are needed. Once completed, the assessments will be reviewed and approved by management.

#### **Tests of Operating Effectiveness and Results of Testing**

1. Inspected written procedures for reviewing SOC 1 reports and system verification letters and determined the consistent use of the procedures provides reasonable assurance that SOC 1 reports and system verification letters are appropriately reviewed and approved.
2. Inspected system verification letters and determined that management review was documented and approved.
3. Inspected documentation for sub-service organizations that did not provide a SOC 1 and determined that FIBB performed alternative review procedures and was reviewed by management.

**V. OTHER INFORMATION PROVIDED BY THE BUREAU OF THE  
FISCAL SERVICE**

## CONTINGENCY PLANNING

### System Back Up

The InvestOne accounting system is included in the Debt Information Management System (DIMS) information system contingency plan (ISCP) managed by the Fiscal Accounting Operations (FAO), Business Technology Division (BTD), Security Compliance Branch (SCB). This plan is part of the DIMS System Security Plan (SSP), which is managed by the DIMS Information System Security Officer (ISSO) in BTD/SCB. There is a formal SALD, Business Continuity Plan (BCP), which is part of a larger BCP for Fiscal Accounting Operations (FAO) and the Bureau of the Fiscal Service (Fiscal Service) Continuity of Operations Plan (COOP). Throughout the year, the Federal Investments and Borrowings Branch (FIBB) performs contingency tests on all Mission Essential Functions requiring the InvestOne accounting system<sup>8</sup>

The ISS performs backups of the InvestOne accounting system on a regular schedule. ISS retains the backup tapes according to a pre-set schedule at an offsite facility. ISS stores one copy in the production tape library, and the other copy is shipped to an offsite facility. If a backup tape needs to be restored, the request will be made from BTD. ISS will then load the backup tape.

### Continuity of Operations

A fire alarm and sprinkler system that is managed, maintained, and tested by the building management protects the data center<sup>9</sup>. Sprinkler heads are located in the ceiling of each room of the buildings. This is a pre-action dry pipe system, charged with nitrogen, with individual heads that discharge water.<sup>10</sup>

The FAO Business Continuity Plan (BCP) calls for resumption of operations and critical applications of essential functions within a pre-set time frame<sup>11</sup>. The InvestOne accounting system has been classified as a critical application.

As part of the FAO BCP, should the facility supporting InvestOne accounting system and FedInvest become unavailable, designated FIBB personnel will relocate to reestablish their daily operations. When applicable, Fiscal Service will revert to manual procedures until the FIT-MF and InvestOne accounting system are fully recovered.

---

<sup>8</sup> FIBB performs emergency telework tests on all essential InvestOne functions a minimum of quarterly. The focus of these tests is to provide assurances that connectivity can be made and these functions will continue with minimum interruption during any emergency that may occur with or without warning. FIBB also participates in the annual Fiscal Service Disaster Recovery Exercise, which tests FISMA compliance and business continuity capabilities.

<sup>9</sup> Alarms are active 24 hours a day, 7 days a week, and are tied in to the local fire department over phone lines for spontaneous notification

<sup>10</sup> In the event the main building, where the InvestOne accounting system is run, becomes inoperable, FIT-MF operations would be relocated to the Fiscal Service contingency facility in accordance with the ISS data center recovery plan. This facility employs a warm site strategy for recovery of FIT-MF operations

<sup>11</sup> 4 hour time frame.



**REPORT WASTE, FRAUD, AND ABUSE**

**Treasury OIG Hotline: 1-800-359-3898**

Hotline@oig.treas.gov

**Gulf Coast Restoration Hotline: 1-855-584.GULF (4853)**

gulfcoastrestorationhotline@oig.treas.gov

Access Treasury OIG reports and other information online:

[www.treasury.gov/about/organizational-structure/ig](http://www.treasury.gov/about/organizational-structure/ig)