Reserve Maintenance Seminar

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Agenda

- History and purpose of reserves
- Reserve requirement calculation
- Clearing balance requirements
- As-of adjustments
- Account maintenance and position
- Deficiencies, penalties and waivers
- ReserveCalc
History & Purpose of Reserves
Overview

- Legislation affecting reserve requirements
- Goals of Monetary Policy
- The link between Monetary Policy and the Reserves Market
- Instruments used in the implementation of Monetary Policy
Federal Reserve Act (1913)

- Section 19 of the Act empowers the Federal Reserve to require depository institutions to hold a portion of their deposits as a reserve.

- This fractional reserve system is one of the tools used to implement monetary policy.
Federal Reserve Act (1913)

- Section 19 of the Act is codified in Regulation D.

- Regulation D details the following:
  - Definition of a deposit
  - Definition of types of deposits
  - Computation and maintenance rules for reserve requirements
  - Form of reserves
Federal Reserve Act (1913)

- Regulation D details the following: (continued)
  - Deductions from reserve requirements
  - Carryover rules
  - Transitional adjustments for mergers
  - Supplemental and emergency reserve requirements
  - Penalties
  - International Banking Facilities
International Banking Act (1978)

- Brought foreign banks in the U.S. within the federal regulatory framework
- Leveled the “playing field” between domestic and foreign banks
- **Key provision for reserve requirements:**
  
  **ALL** U.S. branches and agencies of foreign banks are subject to reserve requirements
Monetary Control Act (1980)

- Reformed reserve requirements to end the problem of banks leaving the Federal Reserve System
- Imposes reserve requirements on all institutions that have transaction accounts, non-personal savings and time deposits, or Eurocurrency liabilities
- Established an exemption amount
Monetary Control Act (1980)

- **Key provisions for reserve requirements:** ALL depository institutions are subject to reserve requirements including:
  - Member/nonmember commercial banks
  - Thrift institutions (including credit unions)
  - U.S. branches and agencies of foreign banks
  - Edge and agreement corporations

Created a two week computation and maintenance period to allow flexibility in managing reserves
Garn St. Germain Act (1982)

- Includes a number of provisions to facilitate deregulation of the banking industry

- **Key provisions for reserve requirements:**
  
  Requires that institutions with less than $2 million in reservable liabilities be exempt from reserve requirements

  Requires that this amount be indexed annually based on aggregate deposit growth
Garn St. Germain Act (1982)

- Key provisions for reserve requirements:
  - Changed computation and maintenance periods for transaction accounts to contemporaneous from lagged
Riegle-Neal Interstate Banking and Efficiency Act (1994)

- Allows interstate banking and branching

- **Key provisions for reserve requirements:**
  - Allowing banks to have a multi-state presence, required significant changes to the Federal Reserve account structure

- As a result, subaccounts were created
Regulation D

- Regulation D defines depository institutions that are subject to reserve requirements, the liabilities that are reservable, and the associated reporting reserve calculations and maintenance requirements.
The primary use of reserves information is for implementing and supporting monetary policy.
The basic link between monetary policy and the economy is through the market for reserves, more commonly known as the federal funds market.

- Institutions borrow and lend on an overnight basis.
- The interest rate charged for the use of these funds is known as the federal funds rate.
• A change in the demand or supply of reserves will result in a change in the federal funds rate which in turn tends to spread quickly to other interest rates.
The Federal Open Market Committee defines the target fed funds rate necessary to promote the goals of maximum employment, stable prices, and moderate long-term interest rates.

Open Market Operations involve adjustment in the supply of bank reserves, relative to reserve demand, in order to achieve and maintain desired financial market conditions.
Draining Reserves

Federal Funds Rate

4.5
2.5

S1
S2

Demand

40 50 Non-borrowed Reserves
Reserves Market

- Demand in the Reserves Market is determined by each bank’s need to meet reserve requirements as defined in Regulation D.
Reserves Market

- The supply of reserves is the amount of reserves currently in the market which consists of:
  - Discount Window Lending (Borrowed Reserves)
  - Nonborrowed Reserves - Influenced by the purchase or sale of securities by the Open Market Trading Desk
Monetary Policy

The tools used to implement monetary policy:

- Reserve Requirements
- Discount Window Lending
- Open Market Operations
Reserve Requirement Calculation
Objectives

- Computation Period
- Maintenance Period
- Exemption
- Low Reserve Tranche
- Reserve Ratios

- Reserve Requirement Calculation
- Report of Required Reserves
- Transitional Adjustments for Mergers
Computation Period

Weekly FR 2900:

- The computation period for weekly FR 2900 reporters consists of 14 consecutive days beginning on a Tuesday and ending on the second Monday thereafter.
Weekly Reporters (FR 2900) Computation Period

Example

FR 2900 Reporting Periods

09/16/03 (Tues) to 09/22/03 (Mon)

09/23/03 (Tues) to 09/29/03 (Mon)

Computation Period

09/16/03 (Tues) to 09/29/03 (Mon)
Quarterly Reporters (FR 2900Q) Computation Period

FR 2900Q:

- The computation period for FR 2900Q reporters consists of 7 consecutive days beginning on a Tuesday and ending on the Monday thereafter.

**Example**

09/16/03 (Tues) to 09/22/03 (Mon)
Weekly FR 2900:

- A reserve maintenance period for FR 2900 reporters consists of 14 consecutive days beginning on a Thursday and ending on the second Wednesday thereafter.

Example

09/18/03 (Thurs) to 10/01/03 (Wed).
Reserve Maintenance Period

- The reserve requirement to be satisfied during a 14-day reserve maintenance period is based on the daily average level of reservable liabilities during the computation period.
The weekly reserve maintenance period starts 30 days after the beginning of a computation period.

<table>
<thead>
<tr>
<th>Computation Period</th>
<th>Maintenance Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/19/03 to 08/25/03</td>
<td>09/18/03 to 10/01/03</td>
</tr>
<tr>
<td>08/26/02 to 09/01/03</td>
<td></td>
</tr>
</tbody>
</table>
The same lag is used in the computation of vault cash which is applied to satisfy the reserve requirement.

<table>
<thead>
<tr>
<th>Vault Cash</th>
<th>Computation Period</th>
<th>Maintenance Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/19/03 to 09/01/03</td>
<td>08/19/03 to 09/01/03</td>
<td>09/18/03 to 10/01/03</td>
</tr>
</tbody>
</table>
Reserve Maintenance Period

Quarterly FR 2900:

- The reserve maintenance period for quarterly FR 2900 reporters consists of 7 consecutive days beginning on a Thursday and ending on the following Wednesday.

Example

10/16/03 (Thurs) to 10/22/03 (Wed)
The reserve requirement to be satisfied during each quarterly reserve maintenance period is based on the daily average level of reservable liabilities during the 7-day computation period.

<table>
<thead>
<tr>
<th>Computation Period (Quarterly)</th>
<th>Maintenance Periods</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/16/03 to 09/22/03</td>
<td>10/16/03 to 01/14/04</td>
</tr>
</tbody>
</table>
A quarterly reserve maintenance cycle usually consists of 13 successive one week maintenance periods that begin on the third Thursday following the end of the computation period.
**Quarterly Reserve Maintenance**

<table>
<thead>
<tr>
<th>Computation Period Cycle (Includes Vault Cash)</th>
<th>Maintenance Periods (13 Weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/16/03 to 09/22/03</td>
<td>10/16/03 to 01/14/04</td>
</tr>
<tr>
<td>12/16/03 to 12/22/03</td>
<td>01/15/04 to 04/15/04</td>
</tr>
</tbody>
</table>
Exemption Level

- The exemption level is the amount of an institution’s net transaction accounts that is subject to a reserve requirement of zero percent.
- The exemption amount is adjusted annually.
- When calculating reserve requirements, the exemption amount is subtracted from reservable liabilities before the reserve ratios are applied.
Low Reserve Tranche

- The low reserve tranche is the amount of an institution’s net transaction accounts that is subject to a reserve requirement of 3 percent.

- The low reserve tranche is adjusted annually.
Reserve Tranche

- The amount of an institution’s reservable liabilities that is over the low reserve tranche is subject to a reserve requirement of 10 percent.
- Adjusted annually
Low Reserve Tranche

Example:

Net Transaction Accounts $ 100m

- Reserved at 0 Percent $ 6.0m (exemption amount)
- Reserved at 3 percent $42.1m - $6.0m = $36.1m (low reserve tranche)
- Reserved at 10 percent $100m - $42.1m = $57.9m (amount above low reserve tranche)
Low Reserve Tranche

- Each depository institution that files the FR 2900 report is allocated the full exemption amount and low reserve tranche.
• Allocation of Low Reserve Tranche and Reservable Liabilities Exemption.
• Adjusted annually
The following institutions share a single exemption amount and a single low reserve tranche even though they file separate FR 2900 reports:

- All U.S. Branches and Agencies that share the same foreign direct parent bank, and
- Edge and Agreement corporations
Low Reserve Tranche

Example

ABC Bank in Tokyo has three separately chartered branches located in the U.S. These three U.S. branches would share a single exemption and a single low reserve tranche.
Allocation of Low Reserve Tranche and Reservable Liabilities Exemption for U.S. Branches and Agencies of Foreign Banks and Edge and Agreement Corporations

Effective for the 14-day reserve computation period beginning Tuesday, ______________.

List below for each office, or for each group of offices filing a single aggregated Report of Transaction Accounts, Other Deposits and Vault Cash (FR 2000), the amount of the low reserve tranche (Column 3) and the amount of the reservable liabilities exemption (Column 4) to be assigned to each office or group of offices.

PLEASE READ INSTRUCTIONS PRIOR TO COMPLETION OF THIS FORM.

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name and location of each office reporting on the FR 2000</td>
<td>Federal Reserve District</td>
<td>Amount of Low Reserve Tranche Allocation*</td>
<td>Amount of Reservable Liabilities Exemption Allocation*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If additional space is necessary, please attach a separate sheet.

I certify that the information shown on this report is correct.

Name and address of reporting institution

Please return to:

A copy of this report must be submitted to each Federal Reserve Bank in whose District an office or group of offices that is allocated a portion of the low reserve tranche or the reservable liabilities exemption is located, one week prior to the computation period for which the allocation reported on this form is to be effective. (Please file even if these allocations are zero.) See the instructions for this report for detailed information pertaining to the allocations and for a list of addresses for each Federal Reserve Bank.

$46.5

$4.9
 Reserve Ratios

- Reserve requirements are calculated by applying the reserve ratios to daily-average Net Transaction Accounts in a reserve computation period.
Reserve Ratios

- Reserve ratios are applied to the net transaction accounts of all U.S. depository institutions that are required to file the Report of Transaction Accounts, Other Deposits and Vault Cash (FR 2900).

- The reserve ratios that are applied to Weekly FR 2900 reporters are also applied to Quarterly FR 2900Q reporters.
# Reserve Ratios

Effective November 26, 2002

<table>
<thead>
<tr>
<th>Categories</th>
<th>Reserve Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net Transaction Accounts:</strong></td>
<td></td>
</tr>
<tr>
<td>From $0 to (&amp; including) $6.0m</td>
<td>0 Percent</td>
</tr>
<tr>
<td>Over $6.0m to (&amp; including) $42.1m</td>
<td>3 Percent</td>
</tr>
<tr>
<td>Over $42.1m</td>
<td>10 Percent</td>
</tr>
<tr>
<td><strong>Nonpersonal savings &amp; time deposits</strong></td>
<td>0 Percent</td>
</tr>
<tr>
<td><strong>Eurocurrency Liabilities</strong></td>
<td>0 Percent</td>
</tr>
</tbody>
</table>
Requirement Calculation

- Four steps to calculate your Reserve Requirement (RR):
  1. Calculate Daily Average Net Transaction Accounts
  2. Apply Exemption
  3. Apply Reserve Ratios
  4. Add RR at 3% to RR at 10% for Total RR
STEP 1: Calculate Daily Average NTA

- Total FR 2900 Week 1 and Week 2 data for:
  - Line A3, Total Transaction Accounts
  - Line B1, Due From U.S. Banks
  - Line B2, CIPC

- NTA = Total Transaction Accounts (Line A3) less Due From U.S. Banks (Line B1) less CIPC (Line B2).

- Daily Average NTA = NTA/14
STEPS 2 & 3: Apply Exemption & Reserve Ratios

- Calculate amount of net transaction accounts (NTA) that exceeds the exemption.
- Apply Reserve Ratios:
  
  (1) Multiply by 3 percent the amount of Daily Average NTA > $6.0 million but ≤ Low Reserve Tranche $42.1 million

(2) Multiply by 10 percent the amount of Daily Average NTA > Tranche $42.1 million
STEP 4: Sum Requirement

- Daily Average Reserve Requirement (RR) equals 3% Requirement plus 10% Requirement
Vault Cash

- Vault Cash is calculated by adding week 1 and week 2 together, then dividing by 14 (similar to how NTA was calculated) to derive the daily average.
- This figure is factored in after reserve requirements and the tranche loss adjustment have been calculated.
- Vault Cash is used to satisfy required reserves.
Reserve Requirement Calculation Workshop
### Step One- Calculate Net Transaction Accounts

#### Sample FR 2900- Week 1

($ in thousands)

<table>
<thead>
<tr>
<th></th>
<th>Tues (col.1)</th>
<th>Wed (col.2)</th>
<th>Thur (col.3)</th>
<th>Fri (col.4)</th>
<th>Sat (col.5)</th>
<th>Sun (col.6)</th>
<th>Mon (col.7)</th>
<th>TOTAL (col.8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A1b</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A1c</td>
<td>75,000</td>
<td>150,000</td>
<td>125,000</td>
<td>128,000</td>
<td>128,000</td>
<td>128,000</td>
<td>35,000</td>
<td>769,000</td>
</tr>
<tr>
<td>A2</td>
<td>5,000</td>
<td>5,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>25,000</td>
</tr>
<tr>
<td>A3</td>
<td>80,000</td>
<td>155,000</td>
<td>128,000</td>
<td>131,000</td>
<td>131,000</td>
<td>131,000</td>
<td>38,000</td>
<td>794,000</td>
</tr>
<tr>
<td>B1</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>7,000</td>
</tr>
<tr>
<td>B2</td>
<td>20,000</td>
<td>75,000</td>
<td>50,000</td>
<td>50,000</td>
<td>50,000</td>
<td>50,000</td>
<td>5,000</td>
<td>300,000</td>
</tr>
</tbody>
</table>
## Step One - Calculate Net Transaction Accounts

### Sample FR 2900 - Week 2

($ in thousands)

<table>
<thead>
<tr>
<th></th>
<th>Tues (col.1)</th>
<th>Wed (col.2)</th>
<th>Thur (col.3)</th>
<th>Fri (col.4)</th>
<th>Sat (col.5)</th>
<th>Sun (col.6)</th>
<th>Mon (col.7)</th>
<th>TOTAL (col.8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1a</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A1b</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A1c</td>
<td>200,000</td>
<td>250,000</td>
<td>50,000</td>
<td>100,000</td>
<td>100,000</td>
<td>100,000</td>
<td>100,000</td>
<td>900,000</td>
</tr>
<tr>
<td>A2</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>3,000</td>
<td>21,000</td>
</tr>
<tr>
<td>A3</td>
<td>203,000</td>
<td>253,000</td>
<td>53,000</td>
<td>103,000</td>
<td>103,000</td>
<td>103,000</td>
<td>103,000</td>
<td>921,000</td>
</tr>
<tr>
<td>B1</td>
<td>2,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>8,000</td>
</tr>
<tr>
<td>B2</td>
<td>50,000</td>
<td>100,000</td>
<td>10,000</td>
<td>50,000</td>
<td>50,000</td>
<td>50,000</td>
<td>40,000</td>
<td>350,000</td>
</tr>
</tbody>
</table>
### Step One - Calculate Daily Average NTA

**FR 2900**

<table>
<thead>
<tr>
<th></th>
<th>Week 1</th>
<th></th>
<th>Week 2</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Transaction Accounts (Line A3)</td>
<td>________</td>
<td>+</td>
<td>________</td>
<td>=</td>
<td>________</td>
</tr>
<tr>
<td>Due From U.S. Banks (Line B1)</td>
<td>________</td>
<td>+</td>
<td>________</td>
<td>=</td>
<td>________</td>
</tr>
<tr>
<td>Cash Items In Process of Collection (Line B2)</td>
<td>________</td>
<td>+</td>
<td>________</td>
<td>=</td>
<td>________</td>
</tr>
</tbody>
</table>

\[
\text{Total Transaction Accounts (Line A3)} - \text{Due From U.S. Banks (Line B1)} - \text{Cash Items In Process of Collection (Line B2)} = \text{NTA}
\]

\[
\frac{\text{NTA}}{14} = \text{Daily Average NTA}
\]
**Step Two- Apply Exemption**

Daily Average NTA  
Exemption  -6,000  
Daily Average NTA > Exemption  

**Step Three- Apply Reserve Ratios**

Daily Average NTA > 6,000 but ≤ Tranche (42,100)  
(Daily Average NTA > 6,000 but ≤ 42,100) x 3% = RR at 3%  

Daily Average NTA > Tranche (42,100)  
(Daily Average NTA > 42,100) x 10% = RR at 10%  

**Step Four- Add RR at 3% to RR at 10%**

RR at 3% + RR at 10% = Daily Average RR
Answer

![Image of a pencil marking an 'X' in a box, indicating a correct answer.](image-url)
Step One- Calculate Net Transaction Accounts

FR 2900

Week 1 + Week 2 = Totals

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Transaction Accounts (Line A3)</td>
<td>794,000</td>
</tr>
<tr>
<td>- Due From U.S. Banks (Line B1)</td>
<td>7,000</td>
</tr>
<tr>
<td>- Cash Items In Process of Collection (Line B2)</td>
<td>300,000</td>
</tr>
<tr>
<td>Total</td>
<td>1,715,000</td>
</tr>
</tbody>
</table>

Total Transaction Accounts (Line A3) = 1,715,000
- Due From U.S. Banks (Line B1) = 15,000
- Cash Items In Process of Collection (Line B2) = 650,000

= NTA = 1,050,000

NTA/14 = Daily Average NTA = 1,050,000/14 = 75,000

75,000 is the Daily Average NTA. We will use to calculate the Daily Average RR.
Step Two- Apply Exemption

Daily Average NTA 75,000
- Exemption (6,000)
=Daily Average NTA > Exemption 69,000

Step Three- Apply Reserve Ratios

Daily Average NTA > 6,000 but ≤ Tranche (42,100) 36,100
(Daily Average NTA >6,000 but ≤ 42,100) x 3% = RR at 3% 36,100 x .03 = 1,083

Daily Average NTA > Tranche (42,100) 32,900
(Daily Average NTA > 42,100) x 10% = RR at 10% 32,900 x .10 = 3,290

Step Four- Add RR at 3% to RR at 10%

RR at 3% + RR at 10% = Daily Average RR 4,373
The Federal Reserve Bank of New York calculates reserve requirements and provides a report of required reserves to depository institutions before the start of each maintenance period.
A preliminary report of required reserves is delivered via Fedline, fax, or email to each depository institution on the second Thursday of a maintenance period only if FR 2900 data for that corresponding computation period is incomplete.
However, for those institutions with complete data, a **final report** of required reserves is delivered. The final report is provided on the business day following the day we receive the complete data.

For institutions who submit their FR 2900 through Fedline, a **final report of required reserves** is transmitted on the business day following the day we receive the complete data.
FEDERAL RESERVE BANK OF NEW YORK

District: 02

REPORT OF REQUIRED RESERVES
(DAILY AVERAGES IN THOUSANDS)

RUN DATE: 021212
RUN TIME: 190115

CLASS BANK AND TRUST
1123 FEDERAL RESERVE STREET
NEW YORK NY 11111

RESERVES REQUIRED FOR BI-WEEKLY MAINTENANCE PERIOD FROM 12-12-02 to 12-25-02

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>DAILY AVG DEPOSITS (000)</th>
<th>PERCENT APPLIED</th>
<th>DAILY AVG REQUIRED (000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESERVABLE LIABILITIES REPORTED FROM 11-12-02 TO 11-25-02</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NET TRANSACTION ACCOUNTS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXEMPT</td>
<td>6,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UP TO ($ 36.100) MILLION</td>
<td>36,100</td>
<td>3.000</td>
<td>1,083</td>
</tr>
<tr>
<td>OVER ($ 36.100) MILLION</td>
<td>10,000</td>
<td>10.000</td>
<td>1,000</td>
</tr>
<tr>
<td>RESERVE REQUIREMENT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LESS TRANCHE LOSS ADJUSTMENT</td>
<td></td>
<td>800</td>
<td></td>
</tr>
<tr>
<td>LESS USABLE PORTION OF REPORTED VAULT CASH FROM 11-12-02 TO 11-25-02</td>
<td>319</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RESERVES TO BE MAINTAINED</td>
<td>964</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLEARING BALANCE REQUIREMENT</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL BALANCE REQUIRED WITH FRB NEW YORK</td>
<td>1,014</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Transitional Adjustment for Mergers

- When two institutions merge, the surviving institution’s reserve requirement is higher than the combined reserve requirements of the merging institutions.

- This is due to the loss of the low reserve tranche and exemption of the nonsurviving institution.
Transitional Adjustment for Mergers

- The increase in the requirement is phased in over a seven quarter period.
Example of a Transitional Adjustment for a Merger

<table>
<thead>
<tr>
<th></th>
<th>Bank A (nonsurvivor)</th>
<th>Bank B (survivor)</th>
<th>Bank AB (merged survivor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Average NTA</td>
<td>100,000</td>
<td>150,000</td>
<td>250,000</td>
</tr>
<tr>
<td>-Exempt</td>
<td>-6,000</td>
<td>-6,000</td>
<td>-6,000</td>
</tr>
<tr>
<td>=Daily Average NTA &gt; 6,000</td>
<td>94,000</td>
<td>144,000</td>
<td>244,000</td>
</tr>
</tbody>
</table>

Daily Average NTA > 6,000 but ≤ 42,100 x .03 = RR at 3%  
1,083  1,083  1,083

RR > 42,100 x .10 = RR at 10%  
5,790  10,790  20,790

Daily Average RR  
6,873  11,873  21,873

Merged RR (Bank AB)  
21,873

Sum of Separate RR  
6,873 + 11,873 = (18,746)

Difference is the Tranche Loss Effect  
21,873 - 18,746  3,127

Tranche Loss Adjustment = (Tranche Loss Effect) x (.875)  
3,127 x .875 = 2,736
## Transitional Adjustment for Mergers

<table>
<thead>
<tr>
<th>Maintenance periods occurring during quarters following merger</th>
<th>Number of weeks In quarter</th>
<th>Percentage applied to tranche loss effect to determine amount to be subtracted from reserve requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter 1</td>
<td>16</td>
<td>87.5</td>
</tr>
<tr>
<td>Quarter 2</td>
<td>12</td>
<td>75.0</td>
</tr>
<tr>
<td>Quarter 3</td>
<td>14</td>
<td>62.5</td>
</tr>
<tr>
<td>Quarter 4</td>
<td>12</td>
<td>50.0</td>
</tr>
<tr>
<td>Quarter 5</td>
<td>14</td>
<td>37.5</td>
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<tr>
<td>Quarter 6</td>
<td>12</td>
<td>25.0</td>
</tr>
<tr>
<td>Quarter 7</td>
<td>14</td>
<td>12.5</td>
</tr>
<tr>
<td>Quarter 8 and succeeding</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>
Summary

- Computation Period
- Maintenance Period
- Exemption
- Low Reserve Tranche
- Reserve Ratios

- Reserve Requirement Calculation
- Report of Required Reserves
- Transitional Adjustments for Mergers
Clearing Balance Requirements
Objectives

- Clearing Balance Requirement Policy
  - Define clearing balance requirement
  - When and why policy was established

- Why establish and use clearing balances

- Policies and Procedures regarding implementation of clearing balance requirements
Objectives

• Earnings Credits
  – Priced versus non-priced services
  – Calculation of earnings credits
  – Services eligible to use earnings credits
Clearing Balance Requirement Policy

- A clearing balance requirement is an amount that an institution may contract (or be required) to maintain with a Reserve Bank in addition to any reserve balance requirement.

- Clearing balance requirements were implemented as a result of the Federal Reserve Act (as amended by the Monetary Control Act of 1980) and the International Banking Act of 1978.
Clearing Balance Requirement Policy

- A Reserve Bank may impose a clearing balance requirement if an institution has a history of frequent overnight or daylight overdrafts.

- Balances held to meet a clearing balance requirement, up to a limit, generate earnings credits that can be used to offset service charges an institution may incur through use of eligible Reserve Bank services.
Clearing Balance Requirement Policy

- Earnings credits on maintained clearing balances provide a return comparable to what the institution would receive on funds held with a correspondent.

- The institution can use earnings credits to offset Federal Reserve service charges that settle in its own account.
- Must have a Federal Reserve Master Account
- $25 thousand minimum clearing balance requirement
- Same maintenance period used for reserve requirements applies to clearing balance requirements
- Expected to maintain a daily average balance within a range (Clearing Balance Band).
Policies and Procedures

- Clearing Balance Band is equal to the greater of $25,000 or two percent of clearing balance requirement.

Example 1
Clearing Balance Requirement is $400,000
Two Percent of $400,000 is $8,000
Therefore, the Clearing Balance Band is $25,000.
Example 2

Clearing Balance Requirement is $1,500,000
Two Percent of $1,500,000 is $30,000
Therefore, the Clearing Balance Band is $30,000.
Policies and Procedures

- If an institution fails to maintain the daily average balance above the low end of the Clearing Balance Band, then it is considered deficient and a penalty may be imposed.

- If an institution maintains daily average balances in excess of the clearing balance requirement but within the Clearing Balance Band, earnings credits are generated.
Policies and Procedures

- Clearing balance accounts are monitored for both overnight and daylight overdrafts, with penalties imposed if overdrafts occur.
- As-of adjustments can be applied to clearing balance accounts.
- Clearing balance requirements can be changed no more than once every four weeks.
Policies & Procedures

- Institutions can increase or decrease the level of earnings credits to maintain an amount sufficient to cover billable charges.

- Changes to earnings credits result from changing the clearing balance requirement.
Policies & Procedures

- To change a clearing balance requirement an institution must do the following:
  - Contact the Deposit Reports Division in writing and request a change.
  - Indicate the current clearing balance, new clearing balance and effective date for the change. Deposit Reports Division staff require 5 days notice prior to the effective date of the change.
  - The effective date of a clearing balance change must be the first day of a maintenance period.
Policies & Procedures

- Correspondence can be addressed to:
The Federal Reserve Bank of New York
Attn: Deposit Reports Division
33 Liberty Street
New York, New York 10045

- Alternately, correspondence can be faxed to:
(212) 720 - 5025
Why Use Clearing Balances

- To use Federal Reserve services
- To hold balances above reserve requirement in order to facilitate clearing needs
- To generate earnings credits to pay for priced services
Earnings Credits

- Earnings credits can only be used to offset charges for priced Federal Reserve services
- The following are considered priced services:
  - Currency and Coin Services
  - Check Clearing and Collection Services
  - Wire Transfer Services
  - Automated Clearing House Services
  - Settlement Services
Earnings Credits

• The following are also considered priced services:
  
  - Securities Safekeeping Services
  - Federal Reserve Float
  - Any new services which the Federal Reserve system offers, including but not limited to, Payment Services that affect electronic transfer of funds
Earnings Credits

- Earnings credits cannot be used to offset charges from non-priced services.

- Non-priced services are those services provided to institutions which are necessary for institutions to monitor and manage their account. Non-priced services are:
  - Accounting Information Services
  - Cash Management Services
**Earnings Credits**

Eligible earnings credits are calculated based on the following formula every maintenance cycle:

\[
\text{Eligible Clearing Balances} \times (100\% - \text{MRRP}) \times \text{Days Carried} \times \text{Average Federal funds rate/360 days}
\]

where:

<table>
<thead>
<tr>
<th>Eligible Clearing Balance =</th>
<th>the sum of the institution’s actual daily clearing balance (up to the maximum clearing balance band) divided by the days in the maintenance period (either 7 or 14 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRRP=</td>
<td>Marginal required reserve percentage calculated as 10 percent minus the institution’s calculated marginal required reserve</td>
</tr>
</tbody>
</table>
Earnings Credits

Marginal Required Reserve Rate (MRR) is defined as:

- Zero for Net Transaction accounts $\leq$ $6.0$ million
- 3% for Net Transaction accounts $> $6.0 million and $\leq$ $42.1$ million
- 10% for Net Transaction accounts $> $42.1 million
Earnings Credits

Average federal funds rate:

- Two week average federal funds rate as published on the Federal Reserve Bank of New York website can be found at the following address:

http://WWW.NEWYORKFED.ORG/PIHOM/E/ STATISTICS/DLYRATES.
Example 1:

ABC Bank has met its clearing balance requirement of $20 million every day of the maintenance period. ABC is a weekly reporter with a calculated MRR of 10 percent. The current Federal funds rate is 5.25 percent. Calculate the earnings credits.
Earnings Credits

For the maintenance period in question, this bank will accrue earnings credits calculated as follows:

EC Balance x (100% - MRRP) x Days Carried x Avg Fed Rate / 360 Days

\[ \text{MRRP} = (10\% - \text{MRR}) \]
\[ = (10\% - 10\%) \]
\[ = 0\% \]

\[ \text{\$20MM} \times (100\% - 0\%) \times 14 \times 5.25\% / 360 = \text{\$40,833.33} \]
Earnings Credits

Example 1

ABC Bank will receive $40,833.33 in earnings credits for the maintenance period. The bank will receive earnings credits on 100 percent (100 percent minus zero percent) of its clearing balance based on the MRRP factor.
Example 2:

DEF Bank has met its clearing balance requirement of $20 million every day of the maintenance period. DEF is a weekly reporter with a calculated MRR of 3 percent. The current Federal funds rate is 5.25 percent.

Calculate earnings credits.
Calculation of Earnings Credits

For the maintenance period in question, this bank will accrue earnings credits calculated as follows:

DEF BANK

<table>
<thead>
<tr>
<th>EC Balance</th>
<th>x</th>
<th>(100% - MRRP)</th>
<th>x</th>
<th>Days Carried</th>
<th>x</th>
<th>Avg Fed Rate</th>
<th>/ 360 Days</th>
</tr>
</thead>
</table>

MRRP = (10% - MRR)
= (10% - 3%)
= 7%

$ 20MM x (100% - 7%) x 14 x 5.25% / 360 = $37,975.00
Example 2:
DEF Bank will receive $37,975.00 in earnings credits for the maintenance period. The bank will receive earnings credits on 93 percent (100 percent minus seven percent) of its clearing balance based on the MRRP factor.
As-of Adjustments
Objectives

- What are as-of adjustments?
- What is the purpose of as-of adjustments?
- How does an as-of adjustment affect a depository institution’s reserves/clearing position?
- Why are as-of adjustments issued?
- Who can issue as-of adjustments?
Objectives

- What is the life cycle of an as-of adjustment?
- How are as-of adjustments applied?
- Can an as-of adjustment be unapplied or moved, after the fact?
As-Of Adjustments

- An as-of adjustment is a “memorandum” item that is applied to an institution’s reserve position.

- As-of adjustments do not affect balances held in a reserve account.
As-Of Adjustments

- The purpose of as-of adjustments are to correct transaction with an entry amount of $25,000 and an aggregate amount of $250,000 that will result in a gain or loss to an institution and to correct reporting errors.

- As-of adjustments are issued from the date the error occurred to the date prior to the adjustment date. (The number of days will usually not exceed 45.)
As-Of Adjustments

- Debit as-of adjustments reduce the reserve position of a bank, therefore the institution will need to increase its balances held in the remaining days of the maintenance period to offset the negative effect.

- Credit as-of adjustments increase the reserve position so the institution may maintain a lower balance for the remainder of the maintenance period.
As-Of Adjustments

Examples of Fed-Caused Errors:

- Failure to credit an institution’s account timely,
- Applying a debit to an institution’s account too early, or
- Processing a debit or credit to the incorrect depository institution’s account
FR 2900 Caused As-Of Adjustments

- To correct for revisions to the Report of Transaction Accounts, Other Deposits and Vault Cash (FR 2900)

- As-of adjustments are issued to periods revised to eliminate a deficiency or excess created from revised data.
FR 2900 Caused As-Of Adjustments

- An offsetting as-of adjustment will be applied to future maintenance periods only to allow an institution to make use of excess reserves held in the revised periods or to allow an institution to compensate for deficiencies that occurred in the revised periods.
Float Caused As-Of Adjustments

- To recover float
  - Depository institutions generate priced-float adjustments to pay for float associated with transportation delays of direct send and consolidated cash letter deposits
Float caused As-Ofs

- Week 1 - Float incurred
- Week 2 - As-of adjustment prepared
- Week 3 - As-of adjustment is applied on a Thursday only and always applied to the current maintenance period
As-Of Adjustments

- As-of adjustments are issued by:
  - FRB Buffalo
  - FRB Utica
Life Cycle of As-Of Adjustments

Problem Identification

• A depository institution identifies that their account was incorrectly credited or debited and notifies the appropriate FRBNY operating area.

• An FRBNY operating area identifies that an error has occurred with an accounting transaction. The institution will be notified as soon as possible.
Life Cycle of As-Of Adjustments

Creation of As-Of Adjustment

- The depository institution will be notified that an as-of adjustment will be issued to neutralize the impact of the error.
- The requesting area forwards the request to the Deposit Reports Division for approval and application.
Life Cycle of As-Ofs

Application of As-Of Adjustment

- A Deposit Reports Division staff member contacts the institution to discuss the application of the as-of adjustment if approved.

- The as-of adjustment is processed and applied to the institution’s reserve and/or clearing position.
Application of As-Of Adjustments

ERRORS:

- FRB
- Depository Institution (routine adjustments)
- Depository Institution (accommodation adjustments)
Application of As-Of Adjustments

- FRBNY usually applies as-of adjustments to the current maintenance period.
- The as-of may apply to the maintenance period in which the error occurred.
- If late in the maintenance period (day 12, 13, or 14) may consider placing the as-of to the next period.
Application of As-Of Adjustments

- When offsetting adjustments are created for depository institution’s accommodation adjustments, they both must be applied to the maintenance period in which the error occurs.

- Depository institutions should evaluate their bank’s position before choosing a maintenance period.
As-of Adjustment Workshop
Scenario 1 - Weekly Reporter

Facts

- Bank A: Debit transaction error
  Occurred: 08/07/03
  Corrected: 08/11/03 (5 days)
- Current Maintenance Period:
  08/07/03 to 08/20/03
- Deposit Reports contacts DI on 08/12/03

When can credit as-of adjustment be applied?
<table>
<thead>
<tr>
<th>Sun</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Scenario 1 - Weekly Reporter

Credit as-of adjustment can only be applied as follows:

current maintenance period
(08/07/03 to 08/20/03)
Scenario 2 - Weekly Reporter

Facts:

- Bank B: Credit transaction error
  Occurred: 07/29/03
  Corrected: 08/06/03 (9 days)
- Current Maintenance Period:
  08/07/03 to 08/20/03
- Prior Maintenance Period: 07/24/03 to 08/06/03
- Deposit Reports contacts DI on 08/08/03

When can debit as-of adjustment be applied?
Scenario 2 - Weekly Reporter

Debit as-of can only be applied as follows:

- Maintenance period in which error occurred (07/24/03 to 08/06/03)
- Current maintenance period (08/07/03 to 08/20/03)
- Prorate between the two periods
Scenario 3 - Weekly Reporter

Facts:

- Bank C: Debit transaction error
  Occurred: 08/06/03
  Corrected: 08/15/03 (10 days)
- Current Maintenance Period: 08/07/03 to 08/20/03
- Deposit Reports contacts DI on 08/18/03 (day 12 of maintenance period)

When can credit as-of adjustment be applied?
<table>
<thead>
<tr>
<th>Sun</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
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<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td>31</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Credit as-of can be applied as follows:

- Maintenance period in which error occurred 07/24/03 to 08/06/03 (1 day of as-of adjustment only)
- Current maintenance period 08/07/03 to 08/20/03
- Next maintenance period 08/21/03 to 09/03/03
Account Maintenance & Position
Objectives

- Account Structure
- How to Satisfy Reserve/Clearing Requirement
- Account Maintenance
- Position and Position Reports
- Tools for Managing Position
Account Structure

- Master Account (Direct Account)
- Subaccount
- Correspondent/Pass-through Account
- Respondent
- Pass-Through Reserves
Account Structure

Master Account

- The Federal Reserve’s account structure assigns each separately chartered (or licensed) institution a single master account at a designated Reserve Bank where all its activities with the Federal Reserve will be settled
Account Structure

- Foreign-related institutions, U.S. branches and agencies of the same foreign parent bank, and the offices of an Edge or agreement corporation will have a single master account for each group of offices located in the same state and same Federal Reserve District.
What is a Master Account?

- It is a record of financial transactions that reflects the financial rights and obligations of an account holder and the Reserve Bank.
Account Structure

How is a Master Account used?

- A Master Account allows a DI to settle and pay for services and/or maintain balances needed to meet their reserve requirement.

- The Reserve Bank handling your master account will also administer all aspects of your account management which include reserve/clearing balance administration.
Account Structure

How to establish a master/direct account

• Execute a Master Account Agreement form (included in Operating Circular 1, Account Relationships)

• Submit the Agreement to FRBNY’s Accounting Operations Division at least 30 business days before the date you wish to open the account
Account Structure

Example

Master Account
Bank A New York, NY

Bank B
Atlanta, GA

Bank C
San Francisco, CA

Bank D
Boston, MA
Account Structure

Subaccounts

- A subaccount is an informational record of a subset of transactions that affect the master account
How to establish a subaccount

- Must complete the “Subaccount Designation” form (included in Operating Circular 1, Account Relationships)

- Submit request to the Accounting Operations Division at least 15 business days before you wish the subaccount opened
Account Structure

Example:

Master Account
Bank A, New York

Subaccount
Bank B, Cleveland Ohio
Correspondent (Pass-Through Account)

- A correspondent is an institution that has authorized a Reserve Bank to allow transactions to its master account on behalf of one or more respondents.
Account Structure

Respondent

- A respondent is an institution that settles some or all of its non-Fedwire transactions in another institution’s master account.
Account Structure

How to establish Pass-through Relationships

• Both the correspondent and respondent institutions must complete a Pass-Through Agreement form (included in Operating Circular 1, Account Relationships)

• Submit request to FRBNY’s Deposit Reports Division at least 5 business days before you wish to establish the relationship
Account Structure

Example:

- Bank USA (Correspondent Account) located in FRBNY District
- Bank SA (Pass-through respondent) located in FRB Atlanta District
  - Bank SA must file its deposit reports directly with the Federal Reserve Bank of Atlanta which is the District in which it is located.
Account Structure

Pass-Through Reserves

- Any depository institution that is required to maintain reserve balances and is a non-member depository institution, a U.S. branch or agency of a foreign bank, or an Edge or agreement corporation
# Satisfying Reserve/Clearing Requirements

<table>
<thead>
<tr>
<th>Reserve Requirement</th>
<th>Clearing Balance Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vault Cash</td>
<td>Account Balances</td>
</tr>
<tr>
<td>Account Balances</td>
<td>- Direct Account</td>
</tr>
<tr>
<td>- Direct Account</td>
<td>- Pass-through Account</td>
</tr>
</tbody>
</table>
Satisfying Reserve Requirement

Vault Cash

- Same computation period as deposit data
- Cannot be used to meet reserve requirements in a different maintenance period
- Cannot be used to offset clearing balance requirement
Satisfying Reserve Requirement

Account Balances

- Net total of all transactions (debits/credits) held in the master account at the end of day (EOD) at a Federal Reserve Bank
Account Maintenance

- What is a maintenance period and settlement day?
- When is a maintenance period finalized?
- What is Position?
Account Maintenance

Maintenance period

- Weekly reporters
  14-Day period in which to maintain and settle required reserves and/or clearing balances

- Quarterly reporters
  7-Day period in which to maintain and settle required reserves and/or clearing balances
Account Maintenance

When is a maintenance period finalized?

- For both weekly and quarterly reporters, a maintenance period is finalized 28 days after the maintenance period has ended.
Account Maintenance

Weekly Lagged Maintenance Cycle (14-day cycle)

Computation Period

Report Week 08/05/03 - 08/11/03 (Week One)
Report Week 08/12/03 - 08/18/03 (Week Two)

Maintenance Period
09/04/03 through 09/17/03
Thurs                          Wed
Quarterly Maintenance Cycle
(7-day cycle for 13 weeks)

**Computation Period**

- Report week 06/17/03 - 06/23/03

**Actual Quarter**

- Beginning 07/17/03
- Ending 10/15/03

**Maintenance periods**

- 07/17/03 through 10/15/03

**FR 2900 & Vault Cash**
Position

- Position is a measure of a depository institution’s compliance with reserve and/or clearing balance requirements.

- Position is initially determined by evaluating the difference between total maintained and total required.
Position

- If negative, deficient in reserves and/or clearing balance requirement.
- If positive, excess in reserves and/or clearing balance requirement.
Factors that affect position are:

- Vault Cash
- Account Balances
- Overnight Overdrafts
- As-of Adjustments
- Clearing Balance Band
- Carryover
- Carryin
Position

Overnight Overdrafts

- Negative end of day (EOD) balance in a Direct or Pass-Through account
  - Direct impact (decrease) on total maintained balances
Position

As-of Adjustments

- Directly impacts total maintained balances
  - a debit as-of reduces total maintained balances for the maintenance period
  - a credit as-of increases total maintained balances for the maintenance period
Position

Clearing Balance Band

• If maintained within the upper level, can earn extra earnings credits.

• If maintained within the lower level, can offset the effect of a deficiency.
Position

Carryover

- Carryover is an excess or deficient amount that can be carried over to the next maintenance period.

- Cannot be carried over to subsequent periods.
Position

Carry-in

- The amount of carryover brought into the current maintenance period from the previous maintenance period.
How is carryover calculated?

- Gross RR plus RQCB (if any) equals total requirement;
- Multiply total requirement by 4% or $50,000 whichever is greater;
- Subtract the RQCB band, if any (the RQCB band is computed at 2% of the RQCB or $25,000 whichever is greater);

Equals Maximum Allowable Carryover
Example:
Reserve Requirement 1,231
Clearing Balance Requirement 200
(1) Total Requirement 1,431

(2) Total requirement 1,431 x 4%
or $50,000, whichever is greater 57
(3) Minus the Clearing Balance Band (25)
Allowable Carryover 32
Position

- Mechanics of Position Calculation
- Funding Account
Position Calculation

- Position is calculated in daily averages in thousands.
- Gross Position equals Total Maintained less Total Required Reserves.
Example

(1)
Reserve Requirement $1,231
Plus: Clearing Balance
Requirement $  200
Equals Total Required $1,431
Example

(2)

Usable Vault Cash $ 300
Plus: Account Balances 1,100
Credit As-of Adjustments 100

Total Maintained $1,500
Example

(3)

Total Maintained Balances $1,500
Less: Total Required Balances 1,431

Gross Position 69
## Preliminary Position

($ in 000s)

<table>
<thead>
<tr>
<th></th>
<th>09/04/03</th>
<th>08/21/03</th>
<th>08/07/03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserve Requirement</td>
<td>3,000</td>
<td>1,231</td>
<td>2,000</td>
</tr>
<tr>
<td>Clearing Balance Req.</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total Required</strong></td>
<td>3,200</td>
<td>1,431</td>
<td>2,200</td>
</tr>
<tr>
<td>Usable Vault Cash</td>
<td>300</td>
<td>300</td>
<td>500</td>
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<tr>
<td>Account Balances Held</td>
<td>2,200</td>
<td>1,100</td>
<td>1,700</td>
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<tr>
<td>For 13 days (09-16-03)</td>
<td>2,200</td>
<td>1,100</td>
<td>1,700</td>
</tr>
<tr>
<td>As-Of Adjustments</td>
<td>500</td>
<td>100</td>
<td>0</td>
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<tr>
<td><strong>Total Maintained</strong></td>
<td>3,000</td>
<td>1,500</td>
<td>2,200</td>
</tr>
<tr>
<td><strong>Gross Position</strong></td>
<td>-200</td>
<td>69</td>
<td>0</td>
</tr>
<tr>
<td>Carryover from Prior Period</td>
<td>32</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Clearing Balance Band</td>
<td>-25</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>-143</td>
<td>44</td>
<td>0</td>
</tr>
<tr>
<td>Allowable Carryover</td>
<td>-103</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td>Offset in Next Period</td>
<td>0</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td><strong>Net Position</strong></td>
<td>-143</td>
<td>12</td>
<td>0</td>
</tr>
</tbody>
</table>
Funding Account

Weekly Settler (14-days)

- Required reserve balance $2 million on a daily basis.

- Over 14-days, aggregate required reserve balance is $28 million ($2 million daily average multiplied by 14 days).
## Position

### Required Balance & Funding Account
(Total in thousands)

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
<th>Sun</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ex.1</td>
<td>Ex.2</td>
<td>Ex.3</td>
<td>Ex.3</td>
<td>Ex.3</td>
<td>Ex.3</td>
<td>Ex.3</td>
</tr>
<tr>
<td></td>
<td>2,000</td>
<td>0</td>
<td>2,000</td>
<td>2,000</td>
<td>2,000</td>
<td>2,000</td>
<td>2,000</td>
</tr>
</tbody>
</table>
## Position

### Required Balance & Funding Account
(Total in thousands)

<table>
<thead>
<tr>
<th>Week 2</th>
<th>Thurs</th>
<th>Ex.1</th>
<th>Fri</th>
<th>Ex.2</th>
<th>Sat</th>
<th>Ex.2</th>
<th>Sun</th>
<th>Ex.3</th>
<th>Mon</th>
<th>Ex.3</th>
<th>Tues</th>
<th>Ex.3</th>
<th>Wed</th>
<th>Ex.3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2,000</td>
<td></td>
<td>0</td>
<td>2,000</td>
<td></td>
<td>0</td>
<td>2,000</td>
<td></td>
<td>2,000</td>
<td></td>
<td>2,000</td>
<td></td>
<td>2,000</td>
</tr>
<tr>
<td>Total Balances Held</td>
<td>Ex.1</td>
<td>28,000</td>
<td>Ex.2</td>
<td>28,000</td>
<td>Ex.3</td>
<td>28,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Deficiency

- Shortfall between the total balance maintained in a direct account or pass-through account and the Reserve Balance Requirement
### Final Position

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserve Requirement</td>
<td>2,000</td>
</tr>
<tr>
<td>Clearing Balance Requirement</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total Required</strong></td>
<td>2,200</td>
</tr>
<tr>
<td>Usable Vault Cash</td>
<td>500</td>
</tr>
<tr>
<td>Account Balances Held</td>
<td>1,000</td>
</tr>
<tr>
<td>As-Of Adjustments</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total Maintained</strong></td>
<td>1,600</td>
</tr>
<tr>
<td><strong>Gross Position</strong></td>
<td>- 600</td>
</tr>
<tr>
<td>Carryover From Prior Period</td>
<td>0</td>
</tr>
<tr>
<td>Clearing Balance Band</td>
<td>- 25</td>
</tr>
<tr>
<td>Subtotal</td>
<td>- 575</td>
</tr>
<tr>
<td>Allowable Carryover</td>
<td>-63</td>
</tr>
<tr>
<td><strong>Offset in Next Period</strong></td>
<td>-63</td>
</tr>
<tr>
<td><strong>Net Position</strong></td>
<td>- 512</td>
</tr>
</tbody>
</table>
# Final Position

(in thousands)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserve Requirement</td>
<td>2,000</td>
</tr>
<tr>
<td>Clearing Balance Requirement</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total Required</strong></td>
<td><strong>2,200</strong></td>
</tr>
<tr>
<td>Usable Vault Cash</td>
<td>500</td>
</tr>
<tr>
<td>Account Balances Held</td>
<td>3,000</td>
</tr>
<tr>
<td>As-Of Adjustments</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total Maintained</strong></td>
<td><strong>3,600</strong></td>
</tr>
<tr>
<td><strong>Gross Position</strong></td>
<td><strong>1,400</strong></td>
</tr>
<tr>
<td>Carryover From Prior Period</td>
<td>0</td>
</tr>
<tr>
<td>Clearing Balance Band</td>
<td>25</td>
</tr>
<tr>
<td>Subtotal</td>
<td>1,375</td>
</tr>
<tr>
<td>Allowable Carryover</td>
<td>63</td>
</tr>
<tr>
<td><strong>Offset in Next Period</strong></td>
<td><strong>63</strong></td>
</tr>
<tr>
<td><strong>Net Position</strong></td>
<td><strong>1,312</strong></td>
</tr>
</tbody>
</table>
Types of Accounts

- Reserve Only
- Clearing Balance Requirement Only
- Reserve and Clearing Balance Requirement

Types of Position Reports

- Preliminary
- Final
Position Report

Report frequency

- Preliminary Position - Daily
- Final Position
  - Bi-weekly (every other Wednesday for weekly or 14-day reporters)
  - Weekly (every Wednesday for quarterly reporters and non reporters)
Position Report

Information provided on a Position Report

- Direct Account (no respondents)
  - Maintenance Period
  - Reserve Requirement
  - Clearing Balance Requirement
  - Usable Vault Cash
  - Account Balances
  - As-of Adjustments
  - Total Maintained
Position Report

Information provided on a Position Report

- Direct Account (no respondents) cont’d
  - Gross Position
  - Carryover From Prior Period
  - Clearing Balance Band
  - Allowable Carryover
  - Offset in Next Period
  - Net position
Position Report

- Direct Account with Pass-through respondents
  - Maintenance Period
  - Reserve Requirement
    - Own
    - Weekly Respondents
    - Quarterly Respondents
  - Clearing Balance Requirement
  - Total Requirement
Position Report

- Direct Account with Pass-through respondents
  - Usable Vault Cash
    - Own
    - Weekly Respondents
    - Quarterly Respondents
  - Account Balances
  - As-of Adjustments
  - Total Maintained
Position Report

- Direct Account with Pass-through respondents
  - Gross Position
  - Carryover From Prior Period
  - Clearing Balance Band
  - Allowable Carryover
  - Offset in Next Period
  - Net position
Position Reports

Type of Delivery

- Mail
- Electronically via Fedline
- FedMail (E-mail or Fax)
Tools for Managing Position

- Carryover
- Required Clearing Balance
- Discount Window
Summary

- Account structure
- How to satisfy reserve/clearing requirement
- Account maintenance
- Position and position reports
- Tools for managing position
Summary

**REMEMBER**

- Always fund Account timely
  - Excess = Waste
  - Deficient = Penalty
Deficiencies, Penalties, & Waivers
Reserve Deficiency vs. Clearing Deficiency

- Reserve Deficiency - Portion of the reserve requirement that is not satisfied by vault cash and/or balances held directly at a Reserve Bank or indirectly in a pass-through account.

- Clearing Deficiency - Portion of the clearing balance that is not satisfied by balances held directly at a Reserve Bank.
Overview

Timeline for Finalizing Deficiencies

October 1
Last day of maintenance period

October 29
Maintenance period finalized

November 10 thru November 18
Notification and advice of charges

November 19
Charge date
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount ($ in 000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserve Requirement</td>
<td>$8,700</td>
</tr>
<tr>
<td>Clearing Balance Requirement</td>
<td>0</td>
</tr>
<tr>
<td>Usable Vault Cash</td>
<td>0</td>
</tr>
<tr>
<td>Account Balance</td>
<td>8,500</td>
</tr>
<tr>
<td>As-Of Adjustment</td>
<td>0</td>
</tr>
<tr>
<td>Carryover From Prior Period</td>
<td>0</td>
</tr>
<tr>
<td>Clearing Balance Band</td>
<td>0</td>
</tr>
<tr>
<td>Allowable Carryover</td>
<td>(200)</td>
</tr>
</tbody>
</table>
Reserve Deficiency

- Allowable Carryover - Not to exceed the greater of:
  - 4% of (Required Reserves + Required Clearing Balance) - Clearing Balance Band.
  - $50,000 - Clearing Balance Band

(Example)

4% ($8,700,000 + 0) - 0 = $348,000
$50,000 - 0 = $ 50,000
Reserve Deficiency

Net Excess / (Deficiency)

Required Reserve $ 8,700
Required Clearing Balance 0

Total Requirement $ 8,700

Less: Vault Cash 0
Account Balance 8,500
As-Of Adjustment 0

Gross Position [Excess(Deficiency)] (200)

Prior Period Carryover 0
Clearing Balance Band 0
Allowable Carryover (200)

Offset in Next Period 0

Net Excess (Deficiency) (200)
Reserve Deficiency

Required Reserve Penalty

- Penalty = (Primary Rate + 2%) * (# Days in Maintenance Period) * (Deficiency) / (# Days in Year)

Example

\[(4\% \times 14 \times \$200,000) / 365 = \$307\]
Clearing Deficiency

Example

($ in 000)

Reserve Requirement $ -
Clearing Balance Requirement 2,500
Usable Vault Cash 0
Account Balance 750
As-Of Adjustment 0
Carryover From Prior Period 0
Clearing Balance Band 50
Allowable Carryover 0
Clearing Deficiency

- Clearing Balance Band - Greater of:
  - $25,000 or
  - 2% of Required Clearing Balance

Minimum = $25,000
$2,500,000 * 2% = $50,000

- Allowable Carryover

Allowable carryover is not allowed for reporters with only a clearing balance requirement.
Reserve Deficiency

Net Excess / (Deficiency)

Required Reserve $ -
Required Clearing Balance 2,500
Total Requirement $ 2,500
Less: Vault Cash 0
Account Balance 750
As-Of Adjustment 0 750
Gross Position [Excess(Deficiency)] (1,750)
Prior Period Carryover 0
Clearing Balance Band 50
Allowable Carryover 0
Offset in Next Period 0
Net Excess (Deficiency) (1,700)
Clearing Deficiency

Penalty

- Part 1: Required Clearing Balance * 20% * # Days in Maintenance Period / # Days in Year

- Part 2: Net Deficiency - (Required Clearing Balance * 20%) * # Days in Maintenance Period / # Days in Year
Clearing Deficiency

- Calculation
  2% of Part 1  + 4% of Part 2

Example

(1) 2% * ($2,500,000 * 20%) * 14/365 = $383

(2) 4% * ($1,700,000 - ($2,500,000 * 20%)) * 14/365 = $1,841

Total Penalty = $2,224
## Comprehensive Reserve & Clearing Deficiencies

**Example**

($ in 000)

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserve Requirement</td>
<td>$ 4,500</td>
</tr>
<tr>
<td>Clearing Balance Requirement</td>
<td>500</td>
</tr>
<tr>
<td>Usable Vault Cash</td>
<td>900</td>
</tr>
<tr>
<td>Account Balance</td>
<td>3,700</td>
</tr>
<tr>
<td>As-Of Adjustment</td>
<td>(1,000)</td>
</tr>
<tr>
<td>Carryover From Prior Period</td>
<td>75</td>
</tr>
<tr>
<td>Clearing Balance Band</td>
<td>25</td>
</tr>
<tr>
<td>Allowable Carryover</td>
<td>(175)</td>
</tr>
</tbody>
</table>
Comprehensive Reserve & Clearing
Deficiencies

- Clearing Balance Band - Greater of:
  - $25,000 or
  - 2% of Required Clearing Balance

Minimum = $25,000
$500,000 * 2% = $10,000
Comprehensive Reserve & Clearing Deficiencies

- Allowable Carryover - Not to exceed the greater of:
  - 4% of (Required Reserves + Required Clearing Balance) - Clearing Balance Band.
  - $50,000 - Clearing Balance Band

(Example)

4% ($4,500,000 + 500,000) - 25,000 = $175,000
$50,000 - 25,000 = $ 25,000
Comprehensive Reserve & Clearing Deficiencies

Net Excess / (Deficiency)

Required Reserve $ 4,500
Required Clearing Balance $ 500

Total Requirement $ 5,000

Less: Vault Cash $ 900
Account Balance $ 3,700
As-Of Adjustment (1,000) $ 3,600

Gross Position [Excess(Deficiency)] (1,400)

Prior Period Carryover $ 75
Clearing Balance Band $ 25
Allowable Carryover (175)

Offset in Next Period $ 0

Net Excess (Deficiency) (1,300)
Comprehensive Reserve & Clearing Deficiencies

Allocation of Deficiency

- Clearing Balance Deficiency

Total Deficiency - (Required Reserve - Total Maintained - Clearing Balance Band)

$1,300,000 - ($4,500,000 - $3,600,000 - $25,000)

= $ 425,000
Comprehensive Reserve & Clearing Deficiencies

Clearing Balance Penalty

- Part 1: \((\text{Required Clearing Balance} \times 20\%)\)
  \[\$500,000 \times 20\% = \$100,000\]

- Part 2: \(\text{Clearing Balance Deficiency} - (\text{Required Clearing Balance} \times 20\%)\)
  \[\$425,000 - (\$500,000 \times 20\%) = \$325,000\]
Comprehensive Reserve & Clearing Deficiencies

- 

\[
\text{Clearing Penalty} = \left(\frac{2\% \text{ of Part 1 of Clearing Deficiency}}{} \times \frac{\text{Days in Maintenance Period}}{\text{Days in Year}}\right) + \left(\frac{4\% \text{ of Part 2 of Clearing Deficiency}}{} \times \frac{\text{Days in Maintenance Period}}{\text{Days in Year}}\right)
\]

\[
= \frac{14}{365} \times \left(2\% \times \frac{100,000}{100,000} \right) \times 14 \times \frac{14}{365} = \frac{14}{365} \times 77\%
\]

\[
= \frac{14}{365} \times 499\%
\]

Total Clearing Penalty = $576
Comprehensive Reserve & Clearing Deficiencies

• Reserve Deficiency
  – Gross Deficiency - Required Clearing Balance Deficiency

$1,300,000 - $425,000 = $ 875,000
Comprehensive Reserve & Clearing Deficiencies

- Required Reserve Penalty
  - Reserve Deficiency * (Primary Rate + 2%)
    * # Days in Maintenance Period / # Days in Year = Reserve Penalty

  \[ ($875,000 \times 4\%) \times \frac{14}{365} = $1,342 \]
Comprehensive Reserve & Clearing Deficiencies

- Total Penalty

  Clearing Penalty = $576
  Required Reserve Penalty = 1342
  Total Penalty = $1,918
Waivers

- “A” - Waiver
  Penalty $25 or less - May be waived and the institution may be required to explain the deficiency.

- “C” - Waiver
  Penalty > $25 and < or equal to 5% of daily average requirement - May be waived once every 2 years.
Summary

Key Points

• Vault cash cannot be used to satisfy Required Clearing Balance.
• Reserve balances are used to satisfy Required Reserves before Required Clearing Balance.
• A deficiency cannot be carried over to a subsequent deficient period.
• No Allowable Carryover for institutions with only a clearing balance.
• Certain penalties MAY be waived.
Additional References


An online guide to regulatory and financial reporting and reserves information can be found at www.reportingandreserves.org

Federal Reserve Bank of New York Contacts

Ben Annoscia 212-720-8920 Linda Mason 212-720-5799
Eartha Collins 212-720-5993 Brian Osterhus 212-720-8023
Claudette Knight 212-720-5798 Cheryl Rasmussen 212-720-5460
Anthony LaRocca 212-720-8414 Vincent West 212-720-1851
ReserveCalc

Claudette Knight
ReserveCalc

Reserve Maintenance Information

• Balance Calculator
• Position
• Account Balances
• As-of Adjustments
• Requirement
• Reservable Liabilities
• Position History
• Useful links
If your institution has a direct account at the Federal Reserve, from which position is calculated, you’ll start with the Balance Calculator.
### The Balance Calculator

**DEPOSITORY INSTITUTION**

<table>
<thead>
<tr>
<th>Maintenance Period Status: Preliminary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correspondent: No</td>
</tr>
<tr>
<td>Merger Survivor: No</td>
</tr>
<tr>
<td>Correspondent: No</td>
</tr>
<tr>
<td>Merger Survivor: No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Balance Requirement</th>
<th>Aggregate</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>72,096</td>
<td>5,110</td>
</tr>
<tr>
<td></td>
<td>1,022</td>
<td>73</td>
</tr>
<tr>
<td>Total Balance To Be Held</td>
<td>71,104</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FRB Actual Balances (11 Days)</th>
<th>Aggregate</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRB Actual Balances (11 Days)</td>
<td>58,225</td>
<td>5,293</td>
</tr>
<tr>
<td>FRB Actual As-ofs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Estimated As-ofs</td>
<td>308</td>
<td>-22</td>
</tr>
<tr>
<td>User Estimated As-ofs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Balance Held (includes Estimates)</td>
<td>57,917</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional amount to be held for remaining 3 days</th>
<th>Aggregate</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional amount to be held for remaining 3 days</td>
<td>13,147</td>
<td>4,382</td>
</tr>
</tbody>
</table>

**A ZERO POSITION CAN BE ACHIEVED ANYWHERE BETWEEN:**

<table>
<thead>
<tr>
<th>Lowest Balance (Carryover to next period = -317)</th>
<th>Aggregate</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest Balance (Carryover to next period = -317)</td>
<td>8,360</td>
<td>2,787</td>
</tr>
<tr>
<td>Highest Useful Balance (Carryover to next period = 317)</td>
<td>17,996</td>
<td>5,979</td>
</tr>
</tbody>
</table>

**In Thousands of Dollars**

**Federal Reserve Bank of San Francisco**

11/25/2002 12:45 PM ET
## The Balance Calculator

**Balance Calculator**

**Depository Institution**
ABA: 123456789

**Maintenance Period Status:** Preliminary

<table>
<thead>
<tr>
<th>Aggregate</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>72,000</td>
<td>5,445</td>
</tr>
</tbody>
</table>

**Total Balance Requirement**

<table>
<thead>
<tr>
<th>Carrying From Prior Period</th>
<th>Aggregate</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,022</td>
<td>71,064</td>
<td>73</td>
</tr>
</tbody>
</table>

**FRB Actual Balances (11 Days)**

<table>
<thead>
<tr>
<th>User Estimated Balances (0 Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>58,225</td>
</tr>
</tbody>
</table>

**FRB Actual As-ofs**

<table>
<thead>
<tr>
<th>User Estimated As-ofs</th>
</tr>
</thead>
<tbody>
<tr>
<td>-308</td>
</tr>
</tbody>
</table>

**Total Balance Held (includes Estimates)**

| 57,917                  |

**Additional amount to be held for remaining 3 days**

| 13,147                  |

**A ZERO POSITION CAN BE ACHIEVED ANYWHERE BETWEEN:**

**Lowest Balance (Carryover to next period = 317** )

| 8,360                  |

**Highest Useful Balance (Carryover to next period = 317** )

| 17,936                 |

In Thousands of Dollars

**Federal Reserve Bank of San Francisco**

11/25/2002 12:45 PM ET
## The Balance Calculator

**Balance Calculator**

**Depositary Institution**
ABA 123456789

**Maintenance Period Status:** Preliminary

<table>
<thead>
<tr>
<th>Maintenance Period</th>
<th>Aggregate</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirement</td>
<td>72,086</td>
<td>5,149</td>
</tr>
<tr>
<td>Carryover From Prior Period</td>
<td>1,022</td>
<td>73</td>
</tr>
<tr>
<td>Total Balance To Be Held</td>
<td>71,064</td>
<td></td>
</tr>
<tr>
<td>FRB Actual Balances (11 Days)</td>
<td>58,225</td>
<td>5,293</td>
</tr>
<tr>
<td>User Estimated Balances (0 Days)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>FRB Actual As-Ofs</td>
<td>-309</td>
<td>-22</td>
</tr>
<tr>
<td>User Estimated As-Ofs</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td>Total Balance Held (includes Estimates)</td>
<td>57,917</td>
<td></td>
</tr>
<tr>
<td>Additional amount to be held for remaining 3 days</td>
<td>13,147</td>
<td>4,382</td>
</tr>
</tbody>
</table>

**A Zero Position can be Achieved Anywhere Between:**
- Lowest Balance (Carryover to next period = 317)
- Highest Useful Balance (Carryover to next period = 317)

<table>
<thead>
<tr>
<th>Least Useful Balance</th>
<th>Highest Useful Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,360 (÷ 3)</td>
<td>2,787</td>
</tr>
<tr>
<td>17,926 (÷ 3)</td>
<td>5,979</td>
</tr>
</tbody>
</table>

**In Thousands of Dollars**

*Federal Reserve Bank of San Francisco*

11/25/2002 12:45 PM ET
# The Balance Calculator

<table>
<thead>
<tr>
<th>Maintenance Period</th>
<th>Aggregate</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Balance Requirement</td>
<td>75,086</td>
<td>5,149</td>
</tr>
<tr>
<td>FRB Actual Balances (11 Days)</td>
<td>58,225</td>
<td>5,293</td>
</tr>
<tr>
<td>User Estimated Balances (0 Days)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Balance Held (includes Estimates)</td>
<td>57,017</td>
<td>4,382</td>
</tr>
</tbody>
</table>

**Total Balance To Be Held**

<table>
<thead>
<tr>
<th>Maintenance Period</th>
<th>Aggregate</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Balance Requirement</td>
<td>71,064</td>
<td>90</td>
</tr>
<tr>
<td>FRB Actual As-ofs</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>User Estimated As-ofs</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**A Zero Position Can Be Achieved Anywhere Between:**

- Lowest Balance (Carryover to next period = -317) | 5,000 | 2,707 |
- Highest Useful Balance (Carryover to next period = 317) | 17,936 | 5,979 |

**Target Balance**

11/25/2002 12:45 PM ET

Federal Reserve Bank of San Francisco
# The Balance Calculator

**MAINTENANCE PERIOD 11/27/2002**

**DEPOSITORY INSTITUTION**
ABA 123456789

**Correspondent:** No  
**Merger Survivor:** No

**Maintenance Period Status:** Preliminary

<table>
<thead>
<tr>
<th>Aggregate</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Balance Requirement</td>
<td>72,086</td>
</tr>
<tr>
<td>Carryover From Prior Period</td>
<td>11,022</td>
</tr>
<tr>
<td><strong>Total Balance To Be Held</strong></td>
<td>71,064</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FRB Actual Balances (11 Days)</th>
<th>User Estimated Balances (6 Days)</th>
<th>FRB Actual As-ofs</th>
<th>User Estimated As-ofs</th>
</tr>
</thead>
<tbody>
<tr>
<td>58,225</td>
<td>5,290</td>
<td>-388</td>
<td>-22</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Total Balance Held (includes Estimates)** 57,917

**Additional amount to be held for remaining 3 days** 13,147  ( ÷ 3 )  4,382

**A ZERO POSITION CAN BE ACHIEVED ANYWHERE BETWEEN:**

- Lowest Balance (Carryover to next period = -317 ) 8,360  ( ÷ 3 )  2,787
- Highest Useful Balance (Carryover to next period = 317 ) 17,936  ( ÷ 3 )  5,979

---

**In Thousands of Dollars**
Federal Reserve Bank of San Francisco

11/27/2002 12:45 PM ET
**The Balance Calculator**

<table>
<thead>
<tr>
<th>Maintenance Period Status: Preliminary</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Aggregate</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>72,896</td>
<td>5,149</td>
</tr>
</tbody>
</table>

| Total Balance Requirement | 1,022  | 71,064 |

| FRB Actual Balances (11 Days) | 58,225  | 5,233  |
| User Estimated Balances (0 Days) | 0  | -22  |
| FRB Actual As-ofts | -308  |
| User Estimated As-ofts | 0  |

| Total Balance Held (includes Estimates) | 57,917 |

| Additional amount to be held for remaining 3 days | 13,147  | 4,382  |

**A Zero Position Can Be Achieved Anywhere Between:**

- Lowest Balance (Carryover to next period = -317) | 8,360  | 2,787  |
- Highest Useful Balance (Carryover to next period = 317) | 17,936  | 5,379  |

In Thousands of Dollars

Federal Reserve Bank of San Francisco

11/25/2002 12:45 PM ET
The Balance Calculator

<table>
<thead>
<tr>
<th>BALANCE CALCULATOR</th>
<th>MAINTENANCE PERIOD 11/27/2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEPOSITORY INSTITUTION</td>
<td>RSSD 987554</td>
</tr>
<tr>
<td>ABA 123456789</td>
<td></td>
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</table>

Maintenance Period Status: **Preliminary**

<table>
<thead>
<tr>
<th>Aggregate</th>
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<tbody>
<tr>
<td>Total Balance Requirement</td>
<td>72,096</td>
</tr>
<tr>
<td>Carrvoyer From Prior Period</td>
<td>1,022</td>
</tr>
<tr>
<td>Total Balance To Be Held</td>
<td>73,104</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FRB Actual Balances (11 Days)</th>
<th>User Estimated Balances (0 Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>58,225</td>
<td>0</td>
</tr>
<tr>
<td>(± 11)</td>
<td>5,293</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FRB Actual As-ofs</th>
<th>User Estimated As-ofs</th>
</tr>
</thead>
<tbody>
<tr>
<td>-308</td>
<td>0</td>
</tr>
<tr>
<td>(± 14)</td>
<td>-22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Balance Held (includes Estimates)</th>
</tr>
</thead>
<tbody>
<tr>
<td>57,911</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional amount to be held for remaining 3 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>13,147</td>
</tr>
<tr>
<td>(± 3)</td>
</tr>
</tbody>
</table>

**A ZERO POSITION CAN BE ACHIEVED ANYWHERE BETWEEN:**

<table>
<thead>
<tr>
<th>Lowest Balance (Carryover to next period = -317)</th>
<th>8,360</th>
<th>2,787</th>
</tr>
</thead>
<tbody>
<tr>
<td>(± 3)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Highest Useful Balance (Carryover to next period)</th>
<th>17,936</th>
<th>5,979</th>
</tr>
</thead>
<tbody>
<tr>
<td>(± 3)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Balance Calculator - Detail

**Depository Institution**
ABA 123456789

**Maintenance Period** 11/27/2002

**RSSD** 987654

#### Instructions

**Estimate Account Balances (in dollars):**

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Amount (in thousands)</th>
<th>Date</th>
<th>Amount (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday</td>
<td>11/14/02</td>
<td>5,542,798.39</td>
<td>11/21/02</td>
<td>5,294,612.86</td>
</tr>
<tr>
<td>Friday</td>
<td>11/15/02</td>
<td>5,276,915.45</td>
<td>11/22/02</td>
<td>5,244,391.17</td>
</tr>
<tr>
<td>Saturday</td>
<td>11/16/02</td>
<td>5,276,915.45</td>
<td>11/23/02</td>
<td>5,244,391.17</td>
</tr>
<tr>
<td>Sunday</td>
<td>11/17/02</td>
<td>5,276,915.45</td>
<td>11/24/02</td>
<td>5,244,391.17</td>
</tr>
<tr>
<td>Monday</td>
<td>11/18/02</td>
<td>5,166,659.48</td>
<td>11/25/02</td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td>11/19/02</td>
<td>5,431,577.36</td>
<td>11/26/02</td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td>11/20/02</td>
<td>5,225,976.67</td>
<td>11/27/02</td>
<td></td>
</tr>
</tbody>
</table>

**Current FRB As-Of Adjustments (in thousands):**

-308

**Estimate Additional Aggregate As-Ofs (in dollars):**

- Enter value

---

**Federal Reserve Bank of San Francisco**

11/25/2002 2:11 PM ET

---

https://www.federalreserve.org/reserves/reserves/rwi/asof_adjustments.jsp?030d0f555e5c595
...and instructions pop up.

Estimate Account Balances and As-of Adjustments

With the Balance Calculator you can estimate Federal Reserve account balances to hold to achieve a zero position. Estimated balances can be entered for today and subsequent days in a maintenance period. An estimated aggregate for additional as-of adjustments can also be provided. After calculation, the Balance Calculator will provide you with the average balances required for the remaining days of the period.

Instructions:

1. Enter any estimated balance(s) and/or an estimated aggregate as-of adjustment.
2. Click on the "Calculate" button.
3. An updated Summary Report and an Estimated Balance Range reflecting the average balance to be held for the remaining days of the period will be displayed. Note that the estimates will remain on screen until you calculate another estimate or exit.

Tips:

- At least one estimate must be provided to perform a calculation.
Enter estimated balances and estimated as-of adjustments in dollars and cents.

For holidays, estimated balances entered by the user, should be identical to the balance for the previous day.

ReserveCalc automatically uses Friday’s estimated balance for the following Saturday and Sunday.
The Balance Calculator

Entering the estimated balance

And then clicking here
### The Balance Calculator

**BALANCE CALCULATOR - YOUR ESTIMATES**

<table>
<thead>
<tr>
<th></th>
<th>Aggregate</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Balance Requirement</td>
<td>72,086</td>
<td>( ± 14 )</td>
</tr>
<tr>
<td>Carryover From Prior Period</td>
<td>1,022</td>
<td>( ± 14 )</td>
</tr>
<tr>
<td><strong>Total Balance To Be Held</strong></td>
<td><strong>71,064</strong></td>
<td></td>
</tr>
<tr>
<td>FRB Actual Balances (11)</td>
<td>56,225</td>
<td>( ± 11 )</td>
</tr>
<tr>
<td>User Estimated Balances (5)</td>
<td>3,250</td>
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</tr>
<tr>
<td>FRB Actual As-ofs</td>
<td>-308</td>
<td>( ± 14 )</td>
</tr>
<tr>
<td>User Estimated As-ofs</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Total Balance Held (includes Estimates)</strong></td>
<td><strong>91,107</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Additional amount to be held for remaining 2 days**

- **9,897** (± 2) | **4,949**

**A ZERO POSITION CAN BE ACHIEVED ANYWHERE BETWEEN:**

- **Lowest Balance (Carryover to next period = -317)**
  - **5,625** (± 2) | **2,555**
- **Highest Useful Balance (Carryover to next period = 317)**
  - **14,686** (± 2) | **7,043**

**In Thousands of Dollars**

- Federal Reserve Bank of San Francisco

**MAINTENANCE PERIOD 11/27/2002**

**ROGD 987654**
### The Balance Calculator

**MAINTENANCE PERIOD 11/27/2002**

**DEPOSITORY INSTITUTION**
ABA 123456789

**INSTRUCTIONS**

**ESTIMATE ACCOUNT BALANCES (in dollars):**

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Amount</th>
<th>Date</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saturday</td>
<td>11/16/2002</td>
<td>5,276,915.45</td>
<td>11/17/2002</td>
<td>5,276,915.45</td>
</tr>
<tr>
<td>Sunday</td>
<td>11/17/2002</td>
<td>5,276,915.45</td>
<td>11/18/2002</td>
<td>5,166,659.48</td>
</tr>
<tr>
<td>Monday</td>
<td>11/18/2002</td>
<td>5,166,659.48</td>
<td>11/19/2002</td>
<td>5,431,577.56</td>
</tr>
<tr>
<td>Tuesday</td>
<td>11/20/2002</td>
<td>5,431,577.56</td>
<td>11/21/2002</td>
<td>5,542,798.39</td>
</tr>
<tr>
<td>Wednesday</td>
<td>11/20/2002</td>
<td>5,225,576.67</td>
<td>11/21/2002</td>
<td>5,294,612.86</td>
</tr>
<tr>
<td>Thursday</td>
<td>11/21/2002</td>
<td>5,294,612.86</td>
<td>11/22/2002</td>
<td>5,244,331.17</td>
</tr>
</tbody>
</table>

**CURRENT FRB AS-OF ADJUSTMENTS (in thousands):**

- **ESTIMATE ADDITIONAL AGGREGATE AS-OFs (in dollars):**

- **Calculate**

---

Federal Reserve Bank of San Francisco  
11/27/2002 2:11 PM ET
## DIRECT PRELIMINARY POSITION

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserve Requirement</td>
<td>8,560</td>
<td>8,794</td>
<td>8,337</td>
</tr>
<tr>
<td>Clearing Balance Requirement</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total Requirement</strong></td>
<td><strong>8,585</strong></td>
<td><strong>8,819</strong></td>
<td><strong>8,362</strong></td>
</tr>
<tr>
<td>Usable Vault Cash</td>
<td>3,411</td>
<td>2,960</td>
<td>3,190</td>
</tr>
<tr>
<td>Account Balances</td>
<td>5,293</td>
<td>5,933</td>
<td>5,267</td>
</tr>
<tr>
<td>As-of Adjustments</td>
<td>-22</td>
<td>-1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total Maintained</strong></td>
<td><strong>8,602</strong></td>
<td><strong>8,902</strong></td>
<td><strong>8,457</strong></td>
</tr>
<tr>
<td>Gross Position</td>
<td>122</td>
<td>98</td>
<td>126</td>
</tr>
<tr>
<td>Carry Over From Previous Period</td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
<tr>
<td>Clearing Balance Band</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>97</strong></td>
<td><strong>73</strong></td>
<td><strong>95</strong></td>
</tr>
<tr>
<td>Allowable Carryover</td>
<td>97</td>
<td>73</td>
<td>95</td>
</tr>
<tr>
<td>Offset in Next Period</td>
<td>97</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Net Position</strong></td>
<td>0</td>
<td>73</td>
<td>95</td>
</tr>
</tbody>
</table>

### In Thousands of Dollars

Federal Reserve Bank of San Francisco

11/25/2002 12:51 PM ET
The Preliminary Position Report

**DIRECT PRELIMINARY POSITION**

<table>
<thead>
<tr>
<th>DEPOSITORY INSTITUTION</th>
<th>MAINTENANCE PERIOD 11/27/2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Period End Dates</td>
<td></td>
</tr>
<tr>
<td>Reserve Requirement</td>
<td>8,535</td>
</tr>
<tr>
<td>Clearing Balance Requirement</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total Requirement</strong></td>
<td>8,560</td>
</tr>
<tr>
<td>Usable Vault Cash</td>
<td>3,411</td>
</tr>
<tr>
<td>Account Balances</td>
<td>5,293</td>
</tr>
<tr>
<td>As-of Adjustments</td>
<td>-22</td>
</tr>
<tr>
<td><strong>Total Maintained</strong></td>
<td>8,082</td>
</tr>
<tr>
<td>Grt</td>
<td>120</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>97</td>
</tr>
<tr>
<td>Allowable Carrover</td>
<td>97</td>
</tr>
<tr>
<td>Offset in Next Period</td>
<td>97</td>
</tr>
<tr>
<td><strong>Net Position</strong></td>
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</tr>
</tbody>
</table>

In Thousands of Dollars

Federal Reserve Bank of San Francisco

11/25/2002 12:51 PM ET
## DIRECT PRELIMINARY POSITION

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
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<td>8,535</td>
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<tr>
<td>Clearing Balance Requirement</td>
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<td>25</td>
</tr>
<tr>
<td>Total Requirement</td>
<td>8,560</td>
<td>8,560</td>
<td>8,560</td>
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<tr>
<td>Usable Vault Cash</td>
<td>3,411</td>
<td>2,960</td>
<td>3,410</td>
</tr>
<tr>
<td>Account Balances</td>
<td>5,293</td>
<td>5,933</td>
<td>5,267</td>
</tr>
<tr>
<td>As-of Adjustments</td>
<td>-22</td>
<td>-1</td>
<td>0</td>
</tr>
<tr>
<td>Total Maintained</td>
<td>8,082</td>
<td>8,892</td>
<td>8,457</td>
</tr>
<tr>
<td>Gross Position</td>
<td>122</td>
<td>98</td>
<td>120</td>
</tr>
<tr>
<td>Carry Over From Previous Period</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Clearing Balance Band</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Subtotal</td>
<td>97</td>
<td>73</td>
<td>95</td>
</tr>
<tr>
<td>Allowable Carryover</td>
<td>97</td>
<td>73</td>
<td>95</td>
</tr>
<tr>
<td>Offset in Next Period</td>
<td>97</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Net Position</td>
<td>0</td>
<td>73</td>
<td>95</td>
</tr>
</tbody>
</table>

In Thousands of Dollars

Federal Reserve Bank of San Francisco

11/25/2002 12:51 PM ET
# Account Balances

**MAINTENANCE PERIOD 11/27/2002**

Average Account Balances (in thousands)  
Total Account Balances  

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Balance</th>
<th>Date</th>
<th>Balance</th>
<th>Date</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday</td>
<td>11/14/2002</td>
<td>5,542,798.39</td>
<td>11/21/2002</td>
<td>5,294,612.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td>11/15/2002</td>
<td>5,276,915.45</td>
<td>11/22/2002</td>
<td>5,244,331.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td>11/16/2002</td>
<td>5,276,915.45</td>
<td>11/23/2002</td>
<td>5,244,331.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td>11/17/2002</td>
<td>5,276,915.45</td>
<td>11/24/2002</td>
<td>5,244,331.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monday</td>
<td>11/18/2002</td>
<td>5,106,039.48</td>
<td>11/25/2002</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td>11/19/2002</td>
<td>5,431,372.36</td>
<td>11/26/2002</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td>11/20/2002</td>
<td>5,225,376.87</td>
<td>11/27/2002</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Federal Reserve Bank of San Francisco**  
11/25/2002 12:52 PM ET
### Account Balances

**DEPOSITORY INSTITUTION**

ABA 123456789

**RGSID 887654**

#### Maintenance Period

**11/27/2002**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday</td>
<td>5,542,798.39</td>
<td>5,276,015.45</td>
<td>5,276,015.45</td>
<td>5,276,015.45</td>
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<td>5,166,650.48</td>
<td>5,431,572.36</td>
<td>5,225,576.67</td>
<td>0.00</td>
</tr>
<tr>
<td>Friday</td>
<td>5,294,612.86</td>
<td>5,244,331.17</td>
<td>5,244,331.17</td>
<td>5,244,331.17</td>
<td>5,244,331.17</td>
<td>5,244,331.17</td>
<td>5,244,331.17</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Saturday</td>
<td>5,294,612.86</td>
<td>5,244,331.17</td>
<td>5,244,331.17</td>
<td>5,244,331.17</td>
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</tr>
<tr>
<td>Sunday</td>
<td>5,294,612.86</td>
<td>5,244,331.17</td>
<td>5,244,331.17</td>
<td>5,244,331.17</td>
<td>5,244,331.17</td>
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<tr>
<td>Monday</td>
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<td>5,244,331.17</td>
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**Total Account Balances**

- **Average Account Balances (in thousands)**: 5,294,612.86
- **Total Account Balances**: 58,224,950.62

---

**Federal Reserve Bank of San Francisco**

**11/25/2002 12:52 PM ET**
### As-of Adjustments Summary Report

**Maintenace Period:** 11/27/2002

**Depository Institution:**
- ABA: 123456789
- RSSD: 987654

#### Average As-of Adjustments (in thousands)

<table>
<thead>
<tr>
<th>Day</th>
<th>As-of Date</th>
<th>As-of</th>
<th>As-of Date</th>
<th>As-of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday</td>
<td>11/14/2002</td>
<td>0.00</td>
<td>11/21/2002</td>
<td>0.00</td>
</tr>
<tr>
<td>Friday</td>
<td>11/15/2002</td>
<td>0.00</td>
<td>11/22/2002</td>
<td>0.00</td>
</tr>
<tr>
<td>Saturday</td>
<td>11/16/2002</td>
<td>0.00</td>
<td>11/23/2002</td>
<td>0.00</td>
</tr>
<tr>
<td>Sunday</td>
<td>11/17/2002</td>
<td>0.00</td>
<td>11/24/2002</td>
<td>0.00</td>
</tr>
<tr>
<td>Monday</td>
<td>11/18/2002</td>
<td>0.00</td>
<td>11/25/2002</td>
<td>0.00</td>
</tr>
<tr>
<td>Tuesday</td>
<td>11/19/2002</td>
<td>0.00</td>
<td>11/26/2002</td>
<td>0.00</td>
</tr>
<tr>
<td>Wednesday</td>
<td>11/20/2002</td>
<td>0.00</td>
<td>11/27/2002</td>
<td>0.00</td>
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</table>

**Total As-of Adjustments:**

-303,726.04

**Applied on a Date Before this Maintenance Period Began:**

-303,726.04

**Applied on a Date After this Maintenance Period Ended:**

0.00

**Federal Reserve Bank of San Francisco**

11/25/2002 12:54 PM ET
### As-of Adjustments Summary Report

**Reserves - Netscape**

Select Date and Reserve Report

11/27/2002

- Balance Calculator
- Position
- Account Balances
- As-of Adjustments
- Requirement
- Reservable Liabilities
- Position History

**ReserveCalc**

#### AS-OF ADJUSTMENTS - SUMMARY

**MAINTENANCE PERIOD 11/27/2002**

<table>
<thead>
<tr>
<th>DEPOSITORY INSTITUTION</th>
<th>ABA 123456789</th>
<th>RSSD 987654</th>
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</thead>
<tbody>
<tr>
<td>Average As-of Adjustments (in thousands)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total As-of Adjustments</td>
<td>-303,726.04</td>
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<table>
<thead>
<tr>
<th>Day</th>
<th>Date of Transaction</th>
<th>As-of Adjustments</th>
<th>As-of Date</th>
<th>Total As-of Adjustments</th>
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<td>11/21/2002</td>
<td>-303,726.04</td>
</tr>
<tr>
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<td>11/15/2002</td>
<td>0.00</td>
<td>11/22/2002</td>
<td>0.00</td>
</tr>
<tr>
<td>Saturday</td>
<td>11/16/2002</td>
<td>0.00</td>
<td>11/23/2002</td>
<td>0.00</td>
</tr>
<tr>
<td>Sunday</td>
<td>11/17/2002</td>
<td>0.00</td>
<td>11/24/2002</td>
<td>0.00</td>
</tr>
<tr>
<td>Monday</td>
<td>11/18/2002</td>
<td>0.00</td>
<td>11/25/2002</td>
<td>0.00</td>
</tr>
<tr>
<td>Tuesday</td>
<td>11/19/2002</td>
<td>0.00</td>
<td>11/26/2002</td>
<td>0.00</td>
</tr>
<tr>
<td>Wednesday</td>
<td>11/20/2002</td>
<td>0.00</td>
<td>11/27/2002</td>
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</table>

For example, clicking here

**Federal Reserve|** 11/25/2002 12:54 PM ET
## As-of Adjustments Detail Report

**DEPOSITORY INSTITUTION**

**ABA 123456789**

<table>
<thead>
<tr>
<th>Entry Date</th>
<th>Approved Date</th>
<th>Apply Date</th>
<th>Entry Amount</th>
<th>Applied Amount</th>
</tr>
</thead>
</table>

Federal Reserve Bank of San Francisco

11/25/2002 12:55 PM ET
### As-of Adjustments Detail Report

**Maintence Period:** 11/27/2002

**Depository Institution:**
- 

#### AS-OF ADJUSTMENTS DETAIL - FUTURE

<table>
<thead>
<tr>
<th>Entry Date</th>
<th>Approved Date</th>
<th>Apply Date</th>
<th>Entry Amount</th>
<th>Applied Amount</th>
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</thead>
</table>

**Federal Reserve Bank of San Francisco**

11/25/2002 12:55 PM ET

---

**Reserve calc**

- Select Date and Reserve Report
- Balance Calculator
- Position
- Account Balances
- As-of Adjustments
- Requirement
- Reserveable Liabilities
- Position History

**Useful Links**

- FSR Reporting & Reserves
- AMI Account Mgt.
**The Requirement Report**

**ReserveCalc**

**Select Date and Reserve Report**

<table>
<thead>
<tr>
<th>Date</th>
<th>Reserve Calculation</th>
<th>Net Transaction Accounts</th>
<th>Reserve Calculation</th>
<th>Total Reserve Requirement</th>
<th>Balance Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/27/2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Reservable Liabilities From:** 10/15/2002 - 10/28/2002

**Net Reserve Requirement**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Depository Institution</td>
<td></td>
</tr>
<tr>
<td>ABA 123456789</td>
<td></td>
</tr>
<tr>
<td>RSSD 987654</td>
<td></td>
</tr>
<tr>
<td><strong>Deposit Data Status:</strong> Final</td>
<td></td>
</tr>
<tr>
<td><strong>Gross Reserve Requirement</strong></td>
<td>8,535</td>
</tr>
<tr>
<td>Less Tranche Loss Adjustment</td>
<td>0</td>
</tr>
<tr>
<td><strong>Net Total Reserve Requirement</strong></td>
<td>8,533</td>
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<tr>
<td>Reported Vault Cash</td>
<td>3,411</td>
</tr>
<tr>
<td>Less Usable Vault Cash</td>
<td>3,411</td>
</tr>
<tr>
<td><strong>Reserves to be Maintained</strong></td>
<td>3,124</td>
</tr>
<tr>
<td>Clearing Balance Requirement</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total Balance Required</strong> with FRB San Francisco</td>
<td>5,149</td>
</tr>
</tbody>
</table>

**In Thousands of Dollars**

Federal Reserve Bank of San Francisco

11/25/2002 12:56 PM ET
...and a glossary pops up.

<table>
<thead>
<tr>
<th>Data Status Definitions</th>
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</thead>
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<tr>
<td><strong>Final:</strong></td>
</tr>
<tr>
<td>The FR2900/FR2900Q report(s) for this period has been entered.</td>
</tr>
<tr>
<td><strong>Revised Final:</strong></td>
</tr>
<tr>
<td>The FR2900/FR2900Q report(s) for this period has been entered and revised.</td>
</tr>
<tr>
<td><strong>Estimated:</strong></td>
</tr>
<tr>
<td>The FR2900/FR2900Q report(s) entered for this period is estimated data.</td>
</tr>
<tr>
<td><strong>Revised Estimated:</strong></td>
</tr>
</tbody>
</table>
## The Requirement Report

### ReserveCalc

#### Select Date and Reserve Report
- 11/27/2002
- Balance Calculator
- Account Balances
- As-of Adjustments
- Requirement
- Reservable Liabilities
- Position History

#### Useul Links
- RSR Reporting & Reserves
- AMI Account Mgt.

#### ReserveCalc Menu

### REQUIREMENT
**DEPOSITORY INSTITUTION**
ABA 123456789

### MAINTENANCE PERIOD 11/27/2002

<table>
<thead>
<tr>
<th>Reserve Liabilities From:</th>
<th>7/2/2002 - 10/20/2002</th>
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<tbody>
<tr>
<td><strong>Net Transaction Accounts</strong></td>
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<td>Exempt</td>
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<tr>
<td>Up to (35.6)</td>
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<td>Over (35.6)</td>
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### Reserve Calculation

<table>
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<tr>
<th>Gross Required</th>
<th>0,525</th>
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<tr>
<td>Net Total Required</td>
<td>8,535</td>
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</table>

<table>
<thead>
<tr>
<th>In Thousands of Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported Vault Cash</td>
</tr>
<tr>
<td>Less Usable Vault Cash</td>
</tr>
<tr>
<td>Reserve to be Maintained</td>
</tr>
</tbody>
</table>

### Clearing Balance Requirement
25

**Total Balance Required with FRB San Francisco**
5,149

**In Thousands of Dollars**
Federal Reserve Bank of San Francisco

**11/25/2002 12:56 PM ET**
### Reservable Liabilities

**ReserveCalc**

**Select Date and Reserve Report**
- 11/27/2002

**Useful Links**
- Reporting & Reserves
- AMI Account Mgt.

### Reservable Liabilities Table

**DEPOSITORY INSTITUTION**
- ABA 123456789

**MAINTENANCE PERIOD 11/27/2002**
- RSSD 987654

#### Deposits

| Report Item | Description | A1A 21 | 145 | A1B 880 | 402 | A1C 452,779 | 442,105 | A2 426,515 | 423,465 | B1 21,198 | 20,777 | B2 43,041 | 37,737 | E1 25,407 | 22,344 | F2 200,782 | 209,229 | AA1 0 | 0 | AA2 0 | 0 |
|-------------|-------------|--------|-----|---------|------|------------|---------|-----------|--------|---------|------|------------|------|---------|------|--------|------|-------|

#### Eurocurrency

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**In Thousands of Dollars**

Federal Reserve Bank of San Francisco

11/25/2002 4:22 PM ET
...and a glossary pops up.

<table>
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<th>Reservable Liabilities Report Item Names</th>
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</thead>
<tbody>
<tr>
<td><strong>A1A:</strong></td>
</tr>
<tr>
<td>Due to Depository Institutions.</td>
</tr>
<tr>
<td><strong>A1B:</strong></td>
</tr>
<tr>
<td>Of U.S. Government.</td>
</tr>
<tr>
<td><strong>A1C:</strong></td>
</tr>
<tr>
<td>Other Demand.</td>
</tr>
<tr>
<td><strong>A2:</strong></td>
</tr>
<tr>
<td>ATS Accounts and NOW Accounts/Share Drafts, and Telephone and Preauthorized Transfers.</td>
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</tbody>
</table>
Reservable Liabilities

Selecting 01/23/2002

And then clicking “Position History”
## The Position History

### Position History

**Depository Institution**

ABA 123456789

**MAINTENANCE PERIOD 01/23/2002**

**R08D 987654**

<table>
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<th>Final Position (in thousands)</th>
<th>Clearing Charge</th>
<th>Reserve Charge</th>
<th>Total Charge</th>
<th>Charge Disposition</th>
<th>Charge Date</th>
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<tr>
<td>11/13/2002</td>
<td>15 *</td>
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<td>N/A</td>
<td>N/A</td>
<td></td>
<td></td>
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<td>10/30/2002</td>
<td>31 *</td>
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<td>N/A</td>
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<tr>
<td>08/21/2002</td>
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*Unfinalized Position Data*

Federal Reserve Bank of San Francisco

11/25/2002 12:59 PM ET
The Final Position Report

<table>
<thead>
<tr>
<th>DIRECT FINAL POSITION</th>
<th>MAINTENANCE PERIOD 08/21/2002</th>
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<tbody>
<tr>
<td>DEPOSITORY INSTITUTION</td>
<td>ABA 123456789</td>
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<tr>
<td>Reserve Requirement</td>
<td>1,757</td>
</tr>
<tr>
<td>Clearing Balance Requirement</td>
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<tr>
<td>Total Requirement</td>
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<tr>
<td>Usable Vault Cash</td>
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<td>Account Balances</td>
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<td>As-of Adjustments</td>
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<td>Total Maintained</td>
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<td>Carry Over From Previous Period</td>
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<td>Allowable Carryover</td>
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<td>Offset in Next Period</td>
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<tr>
<td>Net Position</td>
<td>-413</td>
</tr>
</tbody>
</table>

Penalty Information:
- Clearing Balance Deficiency Penalty
  - Penalty Calculated At 2.0%
  - Penalty Calculated At 4.0%

- Reserve Deficiency Penalty
  - Penalty Calculated At 3.25%

Total Penalty: 514.84

In Thousands of Dollars
Federal Reserve Bank of San Francisco
11/25/2002 12:59 PM ET