Fair Value Measurement
Fair Value Option for Assets and Financial Liabilities

Patricia Selvaggi
Statistics Department
June 10, 2008
Overview

- Fair Value Measurement (FAS 157)
- Fair Value Option for Assets and Liabilities (FAS 159)
- September 2008 Reporting Changes
Fair Value Measurement

- Fair Value Measurement (FAS 157) issued on September 2006
- Effective for financial statements issued by the parent bank for fiscal year beginning after November 15, 2007
Fair Value Measurement

Objectives

- Define fair value and establish a framework for measuring fair value
- Expand disclosures when fair value is used to give users guidance as to relative reliability of valuations
Fair Value Measurement

“Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.”

- Price used is not necessarily the transaction price (entry price), but price that would be received to sell asset or transfer liability (exit price).

- Fair value is a market-based measurement, not an entity-specific measurement.
Fair Value Measurement

- Allows recognition of “day 1” P&L but provides expanded disclosures for valuations based on significant unobservable inputs and their effect on earnings.
Established a fair value hierarchy based on inputs used for valuation

- Level 1 is based on quoted prices in active markets for identical assets/liabilities
- Level 2 is defined as other observable inputs
  - Include quoted prices for similar assets/liabilities
- Level 3 is defined as unobservable inputs
  - Based on entity’s own assumptions
The deterioration of a bank's creditworthiness reduces the market price of debt (risk the obligation will not be fulfilled).

Thus, the reduction in debt prices reduces the fair value of debt and increases earnings.
Fair Value Option for Assets and Liabilities (FAS 159) issued on February 17, 2007

- Effective for financial statements issued by the parent bank for fiscal year beginning after November 15, 2007
Objective of Fair Value Option for Assets and Liabilities (FAS 159)

- Comprehensive FV accounting model
- Mitigates the volatility in earnings of measuring related assets and liabilities differently, that would otherwise require the use of complex hedging rules of FAS 133
- Convergence with IASB Fair Value Option (IAS 39)
Fair Value Option for Assets and Liabilities (FAS 159)

- Allows entities to choose to report certain financial assets and liabilities at fair value with the changes in fair value included in earnings.

- The fair value option is applied instrument by instrument and is irrevocable.

- Certain financial assets and liabilities are scoped out including demand deposits and non-financial instruments.
Fair Value Option for Assets and Liabilities (FAS 159)

- Entities may apply the new statement to eligible items existing on the balance sheet at the effective date.

- The application is a one time option at the adoption date and cannot be applied retroactively.
The net changes in fair value of financial instruments and transition adjustment from fair value option adoption should be accounted for in the net profit or loss calculation included in gross due from or gross due to head office.
September 30, 2008 Changes

- New Schedule Q was added to collect data, by major asset and liability category, on the amount of assets and liabilities to which fair value option has been applied.
Schedule Q, Financial Assets and Liabilities Measured at Fair Value

To be completed by branch and agencies if:

– Adopted FAS 157, “Fair value Measurement”
– Elected to account for Financial instrument at fair value under a fair value option

OR

– Have trading assets of $2 million or more for any quarter of the preceding calendar year
Schedule Q, Financial Assets and Liabilities Measured at Fair Value

- Separate disclosure of the amount of assets and liabilities based on Level 1, Level 2 and Level 3 of the FASB’s fair value hierarchy.

**Schedule Q - Effective September 30, 2008**

<table>
<thead>
<tr>
<th>Dollar Amounts in Thousands</th>
<th>Fair Value Measurements for Assets and Liabilities under a Fair Value Option and Trading Assets and Liabilities (Included in Schedule RAL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Column A) Total Fair Value Reported on Schedule RAL</td>
<td>(Column B) LESS: Amounts Netted in the Determination of Total Fair Value</td>
</tr>
<tr>
<td>RCFD</td>
<td>Bil</td>
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<td>---</td>
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<tr>
<td>F243</td>
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<td>F246</td>
<td>F683</td>
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<td>F258</td>
<td>F688</td>
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<tr>
<td>F261</td>
<td>F699</td>
</tr>
</tbody>
</table>
Trading Assets/Liabilities

- Assets and liabilities may be classified as trading if the bank applies fair value accounting, with changes in fair value reported in current earnings, and manages these assets and liabilities as trading positions, subject to the controls and applicable regulatory guidance related to trading activities.
Certain loans held for sale elected to be accounted for under the fair value option may be reclassified as trading assets.
All securities within the scope of FAS 115, *Accounting for Certain Investments in Debt and Equity Securities*, that a bank has elected to report at fair value under fair value option should be classified as trading securities.
Reporting of Loans Under the Fair Value Options as Trading

- Break-down related to fair value option election will be added to Schedule RAL, Assets and Liabilities for loans measured at fair value under a fair value option that are designated as held for trading, to maintain compatibility.

  - “Loans measured at fair value (including in Schedule RAL, item 1.f(2))”, Memoranda, Line 5.a through 5.c

  - “Unpaid principal balance of loans measured at fair value (reported in Schedule RAL, Memoranda item 5)”, Memoranda, Line 6. a through 6.c.
Schedule C, Part I, *Loans and Leases*, will collect data on the loans reported in this schedule that are measured at fair value under a fair value option:

- The fair value of loans at fair value measured by major loan category
  - “Loans measured at fair value”, Memoranda *Line 5.a through 5.c*
  - The unpaid principal balance of such loans by major loan category
  - “Unpaid principal balances of loans measured at fair value (reported in memorandum item 5)”, Memoranda, *Line 6.a through 6.c*
Consistent with the FFIEC 002 changes additional information are required for subsidiaries that have elected to account for financial instruments or servicing assets and liabilities at fair value under a fair value option

- **Schedule BS – Balance Sheet**
  - Financial assets and liabilities measured at fair value under a fair value option, *Memoranda, Line 1*

- **Schedule IS —Income Statement**
  - Net change in fair values of financial instruments accounted for under a fair value option, *Memorandum, Line 1*
Other Reporting Changes

Loans
Federal Funds & Resale/Repurchase Agreements
Deposits
Schedule S

Doug Herold
Statistics Department
June 10, 2008
Loans: Objectives

- Categorization
- Report form changes
- Specific and General Reserves
- FAS 159 – Fair Value Option
- Loan Classifications
Loans and leases held for trading purposes are reported as “Trading assets” at **fair value** on Schedule RAL in Line 1.f.

Loans held for sale should be reported at the **lower of cost or fair value** on Schedule C.

Loans accounted for under a **Fair Value Option** not held for trading should be reported a **fair value** on Schedule C.

All other loans should be reported at **book value** on Schedule C.
Loans should be reported net of:

1. Unearned income
2. Specific reserves
3. Unamortized loan fees
Loans: Form Changes

Schedule C (Line 1)

Loans secured by real estate

1. Loans secured by real estate:
   (a) Construction, land development, and other land loans
   (b) Secured by farmland (including farm residential and other improvements)
   (c) Secured by 1–4 family residential properties:
      (1) Revolving, open-end loans secured by 1–4 family residential properties and extended under lines of credit
      (2) Closed-end loans secured by 1–4 family residential properties
   (d) Secured by multifamily (5 or more) residential properties
   (e) Secured by nonfarm nonresidential properties
**Loans: Form Changes**

**Schedule C (Memoranda 5)**
Loans measured at fair value (held for sale)

5. Loans measured at fair value:
   a. Loans secured by real estate:
      (1) Construction, land development, and other land loans
      (2) Secured by farmland (including farm residential and other improvements)
      (3) Secured by 1–4 family residential properties:
         (a) Revolving, open-end loans secured by 1–4 family residential properties and extended under lines of credit
         (b) Closed-end loans secured by 1–4 family residential properties
      (4) Secured by multifamily (5 or more) residential properties
      (5) Secured by nonfarm nonresidential properties
   b. Commercial and industrial loans
   c. Other loans

<table>
<thead>
<tr>
<th>Description</th>
<th>Memoranda 5. a(1)</th>
<th>Memoranda 5. a(2)</th>
<th>Memoranda 5. a(3)(a)</th>
<th>Memoranda 5. a(3)(b)</th>
<th>Memoranda 5. a(4)</th>
<th>Memoranda 5. a(5)</th>
<th>Memoranda 5.b</th>
<th>Memoranda 5.c</th>
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<tbody>
<tr>
<td>Loans secured by real estate:</td>
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<td>XXXX</td>
<td>XXXX</td>
<td>XXXX</td>
<td>XXXX</td>
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<tr>
<td>(a) Revolving, open-end loans secured by 1–4 family residential properties</td>
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<td>XXXX</td>
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<tr>
<td>(b) Closed-end loans secured by 1–4 family residential properties</td>
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<td>XXXX</td>
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<td>XXXX</td>
</tr>
</tbody>
</table>
**Loans: Form Changes**

**Schedule C (Memoranda 6)**

Unpaid principal of loans measured at fair value

<table>
<thead>
<tr>
<th>6. Unpaid principal balance of loans measured at fair value</th>
<th>XXXX</th>
<th>XXXX</th>
<th>M.6.a.(1)</th>
</tr>
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<tr>
<td>(reported in Schedule C, Memorandum item 5):</td>
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</tr>
<tr>
<td>a. Loans secured by real estate:</td>
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<td></td>
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<tr>
<td>(1) Construction, land development, and other land loans</td>
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<tr>
<td>(2) Secured by farmland (including farm residential and other improvements)</td>
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<tr>
<td>(3) Secured by 1–4 family residential properties:</td>
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</tr>
<tr>
<td>(a) Revolving, open-end loans secured by 1–4 family residential properties and extended under lines of credit</td>
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<tr>
<td>(b) Closed-end loans secured by 1–4 family residential properties</td>
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<tr>
<td>(4) Secured by multifamily (5 or more) residential properties</td>
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<tr>
<td>(5) Secured by nonfarm nonresidential properties</td>
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<tr>
<td>b. Commercial and industrial loans</td>
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<tr>
<td>c. Other loans</td>
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</table>
Loans: Other Changes

Acceptances

Schedule C
• Holdings of own acceptances (Memoranda 2)

Schedule RAL
• Customers’ liability on acceptances (Line 1.g)
• Branch liability on acceptances executed (Line 4.d)

Schedules L & M Part V
• Participation in acceptances (Line 5)
General Reserves (FAS 5)

General reserves may be maintained by a branch as part of its internal credit policy.

- A general allowance for loan losses (ALLL) represents reserves that are held against the entire loan portfolio in order to absorb probable losses.
- General reserves are reported on Schedule M, “Due From/Due To Related Institutions”, Part IV, Line 1.
Loans: Reserves

Specific Reserves (FAS 114)

If an identified loss exists, the amount of the loss should be charged-off or a specific reserve should be established against the loan.

- Specific loan loss reserves are only maintained for identified losses.
- A full or partial write-down of a loan cannot be reversed at a later date (i.e. the cost cannot be “written-up”) and must be recognized a recovery.
Loans: Reserves

Loan Reporting

• **General Reserves:** Loan balances should be reported **gross** of any general loan loss reserves.

• **Specific Reserves:** Individual loan balances should be reported **net** of any specific reserves held against the identified loan loss.
Loans: Reserves

Accounting Entries

**General Reserves**

**Dr**  Provision for Loan Losses  
\[ (M, \text{Part I, Line 2.a, Col A}) \]

**Cr**  Allowance for Loan Losses (contra-asset)  
\[ (M, \text{Part I, 2.a, Col B; M, Part IV,1}) \]

**Specific Reserves**

**Dr**  Provision for Loan Losses  
\[ (M, \text{Part I, Line 2.a, Col A}) \]

**Cr**  Specific Reserves for Loan Losses (contra-asset)  
\[ (Deducted from a specific loan balance) \]
Loans: FVO (FAS 159)

No general or specific reserves should established for loans reported at fair value. (Part of the fair value.)
Loans: Classification

Loan Reporting

All loans are classified according to collateral, borrower or the purpose of the loan

- Real Estate
- Securities Dealer
- Primary Business of counterparty
Loans: Classification

**Real estate:** any loan secured by real estate, whether originated or purchased from others (i.e. mortgages, land contracts, deeds of trust, etc.) except for loans to states and political subdivisions.

- Schedule RAL, Line 1.f(2), Memoranda 5 and 6
- Schedule C, Line 1, Memoranda 5 and 6
**Loans: Classification**

**Purchase Securities:** all loans to brokers and dealers and any loan not secured by real estate made for the purpose of purchasing and carrying securities except for loans to depository institutions.

- Schedule RAL, Line 1.f(2), Memoranda 5 and 6
- Schedule C, Line 7, Memoranda 5 and 6
Loans: Classification

**Counterparty:** any loan not secured by real estate or made for the purpose of purchasing and carrying securities should be classified according to the primary business of the loan counterparty.

- Schedule RAL, Line 1.f(2), Memoranda 5 and 6
- Schedule C, Lines 2, 3, 4, 6 or 8, Memoranda 5 and 6
Counterparty Example

*Question:* How to classify a loan made to a leasing company?

*Answer:* Since the primary business of a leasing company is to extend credit for business purposes, the leasing company is considered an ‘other financial institution’.

- Schedule RAL, Line 1.f(2), Memoranda 5.c and 6.c
- Schedule C, Line 3, Memoranda 5.c and 6.c
Loans: Key Points

Loans should be reported at:
  • Amortized cost, except held-for-trading, held-for-sale or under FV hedge accounting
  • **Net** of specific reserves; **Gross** of general reserves
  • Fair value option does not determine classification
  • Reserves should not be established for FVO loans

Loan classification:
  • Secured by real estate
  • Purchase or carry securities
  • Primary business of loan counterparty
Other Reporting Changes

Federal Funds
Resale & Repurchase Agreements
Federal Funds

*Federal funds sold/purchased* are immediately available funds which may be secured (except by securities) or unsecured that mature in one business day or roll over under a continuing contract.

*Exclude:*

- Federal Home Loan Bank
- Federal Reserve Bank
**Resale/Repurchase Agreements**

*Securities purchased/sold under agreement to resell/repurchase* are immediately available funds which require the reporting institution to deliver the identical security (or a security that meets the definition of substantially the same) regardless of the maturity of the agreement.

*Exclude:* Assets other than securities  
FHLB & FRB other borrowings
FFS/RRPs: Form Changes

Schedule RAL (Line 1.d)

Federal funds sold and securities purchased under agreements to resell

(1) Federal Funds sold:
   (a) With commercial banks in the U.S.
   (b) With nonbank brokers and dealers in securities
   (c) With others

(2) Securities purchased under agreements to resell:
   (a) With commercial banks in the U.S.
   (b) With nonbank brokers and dealers in securities
   (c) With others
FFP/RPs: Form Changes

Schedule RAL (Line 4.b)

Federal funds purchased and securities sold under agreements to repurchase

(1) Federal Funds purchased:
    (a) With commercial banks in the U.S.
    (b) With others

(2) Securities sold under agreements to repurchase:
    (a) With commercial banks in the U.S.
    (b) With others
Other Reporting Changes

Deposits
Deposits: Form Changes

Schedule O (*New Section – June 2008*)

To be completed by FDIC insured branches

Each FDIC-insured branch must complete either (1) items A through C and Memorandum items 1 through 3 or (2) items 1 through 7 and Memorandum items 1 through 5. An FDIC-insured branch that chooses to complete items A through C must continue to complete these items each quarter thereafter. An FDIC-insured branch that completes items A through C may also choose to complete items D through F, but must continue to complete items D through F each quarter thereafter.

<table>
<thead>
<tr>
<th>Reporting Branch Including Its IBF</th>
<th>RCFD</th>
<th>Bil</th>
<th>Mil</th>
<th>Thou</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Total deposit liabilities before exclusions (gross)</td>
<td>XXXX</td>
<td></td>
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</tr>
<tr>
<td>as defined in Section 3(l) of the Federal Deposit Insurance Act and FDIC regulations</td>
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<tr>
<td>B. Total allowable exclusions (including foreign deposits)</td>
<td>XXXX</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>C. Total foreign deposits (included in item B above)</td>
<td>XXXX</td>
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</tr>
<tr>
<td>D. Total daily average of deposit liabilities before exclusions (gross) as defined in Section 3(l) of the Federal Deposit Insurance Act and FDIC regulations</td>
<td>RCFD</td>
<td></td>
<td></td>
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<tr>
<td>E. Total daily average of allowable exclusions (including foreign deposits)</td>
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<tr>
<td>F. Total daily average of foreign deposits (included in item E above)</td>
<td>XXXX</td>
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</table>
Schedule O (*Changes – March 2009*)

Schedule O, Lines 1-7 will be replaced with section added in June 2008. In addition, memoranda 4 and 5 will be deleted.

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<tr>
<th>Reporting Branch Including Its IIF</th>
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<th>Bil</th>
<th>Mil</th>
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<td>XXXX</td>
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<tr>
<td>RCFD</td>
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<tr>
<td>XXXX</td>
<td>6.</td>
<td></td>
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</tbody>
</table>
Deposits: Form Changes

Schedule E (Memoranda 1.b)

Individual retirement accounts and Keogh Plan accounts

(b) Individual Retirement Accounts (IRAs) and Keogh Plan accounts included in Memorandum item 1.a, “Time deposits of $100,000 or more,” above
Deposits: Other Changes

**Brokered Certificates of Deposit** issued in $1,000 amounts under a master certificate of deposit should be excluded from Schedule E, Memorandum 1.a or 1.c

**IBF Deposits** include deposits, placements, acknowledgements of advance, or similar instruments that are *not* issued in negotiable or bearer form and that are issued to other IBFs or to nonrelated non-U.S. addressees, including Banks.
Other Reporting Changes

Schedule S
Servicing, Securitization & Asset Sale Activity
Schedule S: Form Changes

Schedule S (Column G)

Column G has been redefined to include assets other than loans and leases:

**Column Title:** (Column G)
- All Other Loans,
- All Leases, and
- All other Assets

**Column instructions:** All other loans are loans that cannot properly be reported in Columns A through F of this schedule as defined for Schedule C, part I, items 1.a, 1.b, 1.d, 1.e, 2, 3, and 6 through 8. All leases are all lease financing receivables as defined for Schedule C, part I, item 9. All other assets are all assets other than loans and leases, e.g., securities.
The FFIEC 002 report form (including a draft with changes), instructions, presentations and transmittal letters are available at:

www.newyorkfed.org/banking/reportingforms/FFIEC_002.html
Reporting Issues

Henry Castillo
Statistics Department
June 10, 2008
Securities

- FASB Statement No. 115, “Accounting for Certain Investments in Debt and Equity Securities”
  - Held-to-maturity securities (HTM)
  - Available-for-sale securities (AFS)
  - Trading securities
Securities

- Held-to-maturity securities
  - Debt securities
    - Positive intent and ability to hold to maturity
    - Carried at amortized cost on Schedule RAL, Lines 1.b and 1.c
Available-for-sale securities

- Debt or equity securities
  - The institution does not have the intent and ability to hold to maturity
  - It does not intend to trade actively
  - Reported at fair value on Schedule RAL, Lines 1.b and 1.c
Securities

■ Trading securities
  
  – Debt or equity securities
    
    ➢ The institution holds to capitalize on the short term movement
    ➢ Reported at fair value Schedule RAL, Lines 1.f
Securities

- Some circumstances when the sale or transfer from the held-to-maturity classification is considered consistent with FAS 115
  - Evidence of a significant deterioration in the issuer's creditworthiness
  - A change in tax law that eliminates or reduces the tax exempt status of interest on the debt security
  - A major business combination or major disposition
  - A change in statutory or regulatory requirements
Securities

- **Circumstances when the sale or transfer from the held-to-maturity classification is considered “inconsistent” with FAS 115**

  - Changes in foreign currency risk
  - Changes in market interest rates
  - Changes in available alternative investments
  - Changes in funding sources and terms
  - Changes in the security's prepayment risk
  - Changes in the marginal tax rate
  - A liquidity need
Securities

  - Held-to-maturity securities (HTM)
  - Available-for-sale securities (AFS)
  - Trading Assets
FASB Interpretation No. 46
FASB Interpretation No. 46

- Requires consolidation of variable interest entities ("VIEs") by enterprises that have controlling financial interest.

- VIEs are special purpose entities ("SPEs") where either of the following conditions exist:
  - Total equity at risk is not sufficient to cover expected losses
  - Holders of equity at risk:
    - Lack ability to make decisions about the entity’s activities
    - Lack obligation to absorb expected losses or receive residual gains.
Enterprise that has a variable interest or combination of variable interests that will absorb a majority of the VIE’s expected losses or receive a majority of the VIE’s expected residual returns is the VIE’s primary beneficiary.

The primary beneficiary is the equivalent of the accounting parent and thus consolidates the VIE.
Variable interests are contractual, ownership, or other financial interests in a VIE that changes with the VIE’s net asset value (e.g., equity interest, loans or debt securities, guarantees).

An equity investment of less than 10% is presumed to be insufficient to finance a VIE’s activities.
Exception provided to mutual funds in the form of trusts and trusts of a bank’s trust department unless used by the enterprise to circumvent FIN 46(R).
Whenever the design of an entity or ownership interests change, the determination of VIE status must be reconsidered.
FIN 46(R) - Recognition of Goodwill

- Requires that an enterprise recognize goodwill if it becomes the primary beneficiary of a VIE that is a business.
Controlling interest used in FIN 46(R) is defined in terms of non-voting interest, which is not covered in Reg Y’s definition of a subsidiary.

As defined by 225.2 of Regulation Y, a subsidiary generally includes:
- Companies 25% or more owned or controlled by another company
- Companies that control in any manner the election of a majority of the Board of Directors of another company
- Companies that have a controlling interest over another company.
The primary beneficiary should follow the guidance specified in paragraphs 43, 44 and 45 of FAS 141, Business Combinations, when consolidating the VIE, as if the initial consolidation had resulted from a business combination.
Line-by-line consolidation (asset and liabilities accounts are reported as part of the bank in the same manner if the conduit was reported as a separate entity, equity and intercompany accounts are eliminated in consolidation).
Offsetting

- Regulatory reports generally require reporting on a gross basis

- Financial Interpretation No. 39 (FIN 39)
  - Allows offsetting of certain contracts when a “right of setoff” exists
Offsetting

FIN 39 Offsetting Criteria

- There are two parties to the transaction, each owes the other determinable amounts.
- Reporting party has the right to set off the amount owed by the other.
- Reporting party intends to set off.
- Right of setoff is enforceable by law.
Offsetting Under Master Netting Agreement

- Fair value of derivative contracts reported on the balance sheet that fall under a contractual agreement providing for the net settlement through a single payment can be reported net under FIN 39.
FIN 39 Amendment

FASB has issued an amendment to FIN 39 to allow the netting of cash collateral from derivative contracts accounted for at fair value with the same counterparty under a master netting agreement.

- Effective for financial statements issued by the parent bank for fiscal year after November 15, 2007. Early adoption is permitted.
FIN 39 Amendment
A reporting entity’s choice to offset fair value amounts or not must be applied consistently.

- A reporting entity may not offset fair value amounts recognized for derivative instruments without offsetting fair value amounts recognized for the right to reclaim cash collateral or the obligation to return cash collateral.
Offsetting

FIN 39 Amendment

Offsetting of amounts recognized for the right to reclaim cash collateral or the obligation to return cash collateral against derivative positions is not allowed if:

- Those amounts were not fair value amounts or,
- arose from instruments in a master netting agreement that are not eligible for offset.
Offsetting

- **FIN 39 Amendment**

A reporting entity that chooses to offset fair value amounts must separately disclose amounts recognized for the right to reclaim cash collateral or the obligation to return cash collateral that have been offset against net derivative positions.
Offsetting

- Financial Interpretation No. 41 (FIN 41)
  - Allows netting of repurchase and reverse repurchase agreements that meet the legal right of setoff
Offsetting

FIN 41 Offsetting Criteria

- The offsetting Agreements must be executed with the same counterparty.
- The transaction must have the same explicit settlement date at the inception of agreement.
- The offsetting must be executed in accordance with a Master Netting Agreement.
Offsetting

FIN 41 Offsetting Criteria

- The securities underlying the agreements must exist in “book entry” form
- The agreements must be settled on a securities transfer system
Offsetting

FIN 41 Offsetting Criteria

- Institutions intend to use same account at clearing bank for cash inflows and cash outflows resulting from settlement of these agreements
  - Netting of repurchase agreements under FIN 41 should also be reflected in reporting of quarterly averages on Schedule K
FIN 39 and FIN 41 Offsetting Criteria

- Institution meeting the criteria for offsetting should have policies and procedures in place for reviewing the transactions and supporting documentation to ensure compliance with FIN 39 and FIN 41.
Reporting of Suspense Accounts

- Suspense accounts
  - Temporary holding accounts where items are carried until they can be identified and posted to the proper account
Reporting of Suspense Accounts

- Suspense accounts should be reviewed prior to the submission of the FFIEC 002 and reported in the appropriate account.
Derivatives

Mike Tursi
Statistics Department
June 10, 2008
Reporting of Derivative Contracts

- Reporting of derivative contracts
- FASB Statement No. 133, "Accounting for Derivatives Instruments and Hedging Activities" (FAS 133)
- Example of a derivative contract
- Credit Derivatives
What is a “derivative”?  
- A derivative instrument is a financial instrument or other contract with all of the following characteristics: 
  - It has (1) one or more underlying and (2) one or more notional amounts or payment provisions or both  
  - Requires little or no initial net investment  
  - Its terms require or permit net settlement
Embedded Derivatives
Definition

- *Embedded derivatives* are implicit or explicit terms that effect the cash flows or value of other exchanges required by a contract in a manner similar to derivative.
- The combination of the *host contract* and an embedded derivative is referred to as a *hybrid contract*.
- Examples of hybrid contracts
  - Structured notes
  - Convertible securities
  - Securities with caps, floors, or collars
Embedded Derivatives - Bifurcate:

- Not “clearly and closely related” to host contract
- The hybrid instrument is not remeasured at fair value under otherwise applicable GAAP with changes in fair value reported in earnings.
- A separate instrument with the same terms as the embedded derivative instrument would be a derivative instrument subject to the requirements of SFAS No. 133.
Embedded Derivative - When Does a Contract Have an Embedded Derivative Requiring Bifurcation

- Would it be a derivative if it were freestanding? Yes → Is it clearly and closely related to the host contract? No → Is the contract carried at fair value through earnings? No → Do Not Apply this Statement

- Would it be a derivative if it were freestanding? No → Yes

- Is it clearly and closely related to the host contract? Yes → Do Not Apply this Statement

- Is the contract carried at fair value through earnings? Yes
Clearly and closely related refers to:

- Economic characteristics
- Risks

Factors to be considered:
- The type of host
- The underlying
An option to convert preferred stock (not mandatorily redeemable) to common is clearly and closely related to the equity host, and therefore is not separated.

A call option on an entity’s own equity security would not be a derivative if it were free standing, but only if classified on the entity’s books.
The underlying is interest rates and *either*:

- The investor may not recover substantially all of its initial investment, or
- The investor’s yield may increase to twice the market rate or more and at least twice the initial rate.
Contingently exercisable call or put option *either*:
- With related host debt issued at a substantial premium or discount
- Exercisable based on something other than inflation, interest, or creditworthiness of the debtor

An interest rate cap, floor, or collar that is “in the money” at the purchase date.

A term extension (optional or contingent) that does not reset the interest rate to market
Accounting for Certain Hybrid Financial Instruments

How does FAS 155 Improve Financial Reporting?

- Simplifies accounting for hybrids by allowing the fair value election for the entire instrument.
- Eliminates the exemption for beneficial interests in securitized financial assets from the bifurcation requirements of FAS 133 (prospectively).
- Similar instruments are now accounted for the same.
Requirements of FAS 155

- FAS 155 provides entities with relief from having to separately determine the fair value of an embedded derivative that would otherwise be required to be bifurcated from its host contract in accordance with FAS 133.

- FAS 155 allows an entity to make an irrevocable election to measure such a hybrid financial instrument at fair value in its entirety, with changes in fair value recognized in earnings.
requirements of FAS 155

- The election may be made on an instrument-by-instrument basis.

- The election can be made only when a hybrid financial instrument is initially recognized or when certain events occur that constitute a remeasurement (i.e., new basis) event for a previously recognized hybrid financial instrument.
Accounting for Certain Hybrid Financial Instruments

- Requirements of FAS 155
  - An entity must document its election to measure a hybrid financial instrument at fair value, either concurrently or via a preexisting policy for automatic election.
  - Once the fair value election has been made, the hybrid financial instrument may not be designated as a hedging instrument.
Reporting of Derivative Contracts

- Balance Sheet Reporting
  (Schedule RAL)

- Income Statement Effect
  (Schedule M, Part I, Line 2.a)

- Schedule L and M, Part V
  (Disclosures and Fair Value Examples)
Schedules L and M, Part V
Disclosures & Fair Value Examples

Schedules L and M Part V Disclosures

- Notional Value
  - Risk characteristics
  - Purpose

- Fair Values
  - Risk characteristics
  - Purpose

- Credit Derivatives
Schedules L and M Part V Disclosures & Fair Value Examples

Schedules L and M Part V Disclosures

- **Schedule L** includes off-balance sheet transactions with **nonrelated** institutions and **related non-depository** institutions

- **Schedule M, Part V**, includes off-balance sheet transactions with **related depository** institutions
The **notional** value to be reported for an off-balance sheet derivative contract is the underlying **principal amount upon which the exchange of funds is based**.
For example, a swap contract with a stated notional amount of $1,000,000 whose terms call for quarterly settlement of the difference between 5.0% and LIBOR multiplied by 10 has an effective notional amount of $10,000,000
Contracts with multiple risk characteristics should be classified based upon the predominant risk characteristic.

Report in Line 9 the notional amount of all outstanding futures and forward contracts, exchange-traded and over-the-counter option contracts, and swaps contracts, as appropriate based on the predominant risk characteristic.
The definition of “fair value” is based on FAS 157

FAS 157 is effective for financial statements issued by the parent bank for fiscal year beginning after November 15, 2007.
Gross Positive and Negative Fair Value

- Report in Line 12 gross positive and negative fair values of derivative contracts held for trading and for purposes other than trading.
The FV of derivative contracts held for trading should be reported **gross** (unless FIN 39 applies) on Schedule RAL, Line 1.f, “Trading assets” or in Line 4.e, “Trading liabilities”

The gain/loss should be reported as a part of the calculation of unremitted profit/loss on Schedule M, Part I, Line 2.a
FAS 133

- Accounting and reporting standards for derivative instruments and hedging activities
  - Cash flow hedging/Fair value hedging
FAS 133

- Types of hedges
  - The fair value of all non-trading derivatives will be reported on “Other assets” or “Other liabilities”
  - For depository institutions, the two predominate types of hedges are
    - Fair Value
    - Cash Flow
Fair Value Hedges

- The hedged items are reported at fair value for the portion of the risk being hedged

- The mark-to-market gains are reported in earnings with the hedging contract

- To the extent the hedging relationship is effective earning will be uneffected
Cash Flow Hedges

- Cash Flow Hedges apply to hedging the risk of changes in cash flows for variable rate assets and liabilities
The difference between a **Cash Flow** and **Fair Value** hedge

- The hedged item is not reported at fair value
FAS 133

- Reporting on the FFIEC 002
  - The mark-to-market gains and losses from fair value and cash flow hedges should be reported in the institution’s “Net unremitted profit/(loss),” Schedule M, Part I, Line 2.a
Intercompany transactions
- Derivatives with the parent bank or another office of the reporting branch’s or agency’s parent bank may qualify for hedge accounting provided
  - The counterparty (e.g., the other member of the consolidated group) has entered into a contract with an unrelated party that offsets the inter-company derivative completely
Example of a Derivative Contract

- Option
Options

- Options transfer the right but not the obligation to buy or sell an underlying asset, instrument, or index on or before the option’s exercise date at a specified price (the strike price).
Options

Fair value

- For an exchange-traded option, the change in the price from the inception of the contract is the fair value.

- For an over-the-counter option, the change in the price as determined by an option pricing model (e.g., Black-Scholes).
Hedging Market Risk

Example

GHI Company purchases equity securities and will hedge the market risk with an at-the-money put option.

- Equity securities price: $50 per share (100 shares)
- Premium of put option: $600 (strike price $65)
GHI Company exercises the option prior to the option’s expiration on December 31, 2006.
<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 2004</td>
<td>Debit</td>
<td>Credit</td>
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<tr>
<td>All other securities (Line 1.c(4))</td>
<td>$5000</td>
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<td>Cash and balances due from depository inst. (Line 1.a)</td>
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<td>$5000</td>
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<tr>
<td>(To record purchase of MBI shares)</td>
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<tr>
<td>December 31, 2004</td>
<td>Debit</td>
<td>Credit</td>
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<td>All other securities (Line 1.c(4))</td>
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<td>Net due to/from Head Office (Schedule M, Part I, 2.a)</td>
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<td>$1500</td>
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<tr>
<td>(To record appreciation of MBI shares)</td>
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<tr>
<td>Other assets (Line 1.h)</td>
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## Options

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
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<tbody>
<tr>
<td>December 31, 2005</td>
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<tr>
<td>Other assets (Line 1.h)</td>
<td>$500</td>
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<tr>
<td>Net due to/from Head Office (Sch. M, Part I, 2.a)</td>
<td>$500</td>
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<td>(To record the increase in the intrinsic value of the option)</td>
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<tr>
<td>Net due to/from Head Office (Sch. M, Part I, 2.a)</td>
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<td>$500</td>
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<tr>
<td>All other securities (Line 1.c(4))</td>
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<td>(To record the decrease in the fair value of the MBI shares)</td>
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<td>$250</td>
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<td>Other assets (Line 1.h)</td>
<td>$250</td>
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<td>(To record the ineffective portion of the change in FV of the option)</td>
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</table>
# Options

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
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<tbody>
<tr>
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<tr>
<td>Other assets (Line 1.h)</td>
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<tr>
<td>Net due to/from Head Office (Sch. M, Part I, 2.a)</td>
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<tr>
<td>(To record the increase in the intrinsic value of the option)</td>
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<tr>
<td>Net due to/from Head Office (Sch. M, Part I, 2.a)</td>
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<tr>
<td>All other securities (Line 1.c(4))</td>
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<tr>
<td>(To record the decrease in the fair value of MBI shares)</td>
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<td>Other assets (Line 1.h)</td>
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<td>(To record the ineffective portion of the change in FV of the option)</td>
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<tr>
<td>Cash and balances due from depository inst. (Line 1.a)</td>
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<td>Other assets (Line 1.h)</td>
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<td>All other securities (Line 1.c(4))</td>
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<td>(To record the exercise of the option on 12/31/06 by delivering shares.)</td>
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</tbody>
</table>
Multiple Risk Contracts

- Derivative contracts that contain two or more risk characteristics
- Contracts should be classified on Schedule L, line 9, of the FFIEC 002 by their predominant risk characteristic (i.e., interest rate, foreign exchange, equity or commodity)
- Example of this type of contract is a cross-currency interest rate swaps.
Reporting of Credit Derivatives

Reporting of credit derivatives is addressed in SR 96-17 (GEN) and FAS 133

- Credit derivatives are off-balance sheet arrangements that allow one party (the "beneficiary") to transfer credit risk of a specific asset to another party (the "guarantor")
  - Allow the beneficiary to mitigate its credit risk concentration to a particular borrower
  - Guarantor assumes the credit risk associated with the asset without directly purchasing it
Reporting of Credit Derivatives

- Certain financial guarantees are not subject to this statement if these provide for payments to the guaranteed party for a loss incurred because the debtor defaults on a payment when payment is due (¶ 10, FAS 133)
  - However, financial guarantees (e.g., credit derivatives) are subject to FAS 133 if the contract is indexed to the credit worthiness of the borrower
Reporting of Credit Derivatives

- Credit derivatives subject to FAS 133 should be reported:
  - On the balance sheet in the same manner as any other derivative product
  - Schedule L, line 6, breakout by:
    - Line 6a – Notional amounts by type of product (Credit Default, TROR, etc.)
    - Line 6b – Gross fair value, positive & negative
  - Schedule M, Part V
Two Common Types of Credit Derivatives

(1) **Credit Default Swaps**

- The beneficiary agrees to pay guarantor a fixed payment (i.e., a certain number of basis points either quarterly or annually)

- In return the guarantor agrees to pay the beneficiary an agreed upon amount if there is a default
Credit Default Swap Structure

Bank A

Bank B

Fixed payments per quarter

Payments upon default

In case of a default, B pays A for the depreciated amount agreed upon at the outset.

Loan

Principal & Interest

Borrower (Loan reference asset)
Two Common Types of Credit Derivatives

(2) Total Rate of Return Swaps (TROR)

- The beneficiary agrees to pay the guarantor the total return (e.g., principal and interest as well as any appreciation in the market value of the asset)
  - The guarantor agrees to pay spread over funding costs plus an depreciation in the value of the asset
The guarantor in a TROR could be viewed as having “synthetic ownership” of the asset since it assumes the risks and rewards of the asset over the agreement period.
Total Rate of Return Swaps Structure

Bank A
(Beneficiary)

Bank B
(Guarantor)

Principal & Interest plus appreciation
LIBOR plus spread plus depreciation
Payment on default

Borrower
(Loan reference asset)

Loan
Principal & Interest

or