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Hon. Bill Thomas Vice Chairman

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Douglas Holtz-Eakin Commissioner

Heather H. Murren, CFA Commissioner

John W. Thompson Commissioner

Peter J. Wallison Commissioner October 1, 2010

Via Email & Mail The Honorable Sheila Bair Chairman Federal Deposit Insurance Corporation 550 17<sup>th</sup> Street, NW Washington, DC 20429

Re: Financial Crisis Inquiry Commission Hearing on September 2, 2010

Dear Chairman Bair:

Thank you for testifying on September 2, 2010 in front of the Financial Crisis Inquiry Commission and agreeing to provide additional assistance. Toward that end, please provide written responses to the following additional questions and any additional information by October 15, 2010.<sup>1</sup>

- During the hearing you mentioned the receivership staff at Washington Mutual had provided you with a "walkthrough" of the bailout's effect on Washington Mutual's capital structure. What is an FDIC "walkthrough" and how did this help you analyze the bailout's effect on Washington Mutual's capital structure? Please provide documentation on the "walkthrough".
- 2. During the hearing you mentioned the FDIC had conducted an analysis of the additional capital that would be required for bank holding companies to meet capital standards requirements of banks. Please provide this analysis.
- 3. Please provide written analysis of the level of pre-crisis "true loss absorbing capital" you mentioned during your testimony.

Wendy Edelberg Executive Director

<sup>&</sup>lt;sup>1</sup> The answers you provide to the questions in this letter are a continuation of your testimony and under the same oath you took before testifying on September 2, 2010. Further, please be advised that according to section 1001 of Title 18 of the United States Code, "Whoever, in any matter within the jurisdiction of any department or agency often United States knowingly and willfully falsifies, conceals or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be fined under this title or imprisoned not more than five years, or both."

- 4. Did the FDIC feel pressure to invoke the systemic risk exemption for IndyMac or WaMu? Please describe why or why not.
- 5. Please provide the FDIC's analysis of the predicted number of FDIC-insured depository institutions that would be expected to fail following a failure of Lehman Brothers.
- 6. During the hearing you had mentioned that after Fannie and Freddie were placed in conservatorship the FDIC conducted analysis for the Treasury regarding how many banks would likely have failed due to holding Fannie and Freddie preference shares. Please provide this analysis and also indicate how many banks actually failed due to their Fannie or Freddie holdings, along with the name, location, asset size and the fall in value of those shares.

The FCIC appreciates your cooperation in providing the information requested. Please do not hesitate to contact Sarah Knaus at (202) 292-1394 or sknaus@fcic.gov if you have any questions or concerns.

Sincerely,

Wendy Edelberg

Executive Director, Financial Crisis Inquiry Commission

cc: Phil Angelides, Chairman, Financial Crisis Inquiry Commission Bill Thomas, Vice Chairman, Financial Crisis Inquiry Commission

October 28, 2010

Ms. Wendy Edelberg Executive Director Financial Crisis Inquiry Commission 1717 Pennsylvania Avenue N.W., Suite 800 Washington, D.C. 20006

Dear Ms. Edelberg:

Thank you for your letter that includes follow-up questions from the Financial Crisis Inquiry Commission Hearing on September 2, 2010. We welcome the opportunity to respond to these questions, and our responses are enclosed.

If you have further questions, the Office of Legislative Affairs can be reached at (202) 898-7055.

Sincerely, and Nand

Paul Nash Deputy to the Chairman for External Affairs

Enclosure

### <u>Follow-Up Questions to</u> <u>the Financial Crisis Inquiry Commission Hearing</u> <u>on September 2, 2010</u>

Q1: During the hearing you mentioned the receivership staff at Washington Mutual had provided you with a "walkthrough" of the bailout's effect on Washington Mutual's capital structure. What is an FDIC "walkthrough" and how did this help you analyze the bailout's effect on Washington Mutual's capital structure? Please provide documentation on the "walkthrough".

A1: Shortly after the hearing, our staff exchanged messages with Commissioner Hennessey to follow up on Chairman Bair's offer to provide a briefing by staff to walk him through the steps the FDIC took in resolving Washington Mutual. As Chairman Bair noted during the hearing, the resolution process used for Washington Mutual is the same process taken for all insured depository institutions. Our briefing also can provide further clarification and explanation about our role as the back-up regulator of Washington Mutual and our efforts to work with its primary federal regulator – the Office of Thrift Supervision – and the bank in addressing its capital needs.

### Q2: During the hearing you mentioned the FDIC had conducted an analysis of the additional capital that would be required for bank holding companies to meet capital standards requirements of banks. Please provide this analysis.

A2: As indicated in page 2 of Attachment A, we estimated that U.S. Bank Holding Companies (BHCs) in aggregate held approximately \$163 billion in instruments designated as tier 1 capital for BHCs, but which did not meet insured bank capital standards. These bank-ineligible capital instruments are reported in the column titled "Collins restricted items," and primarily consist of trust preferred securities.

Section 171 of the Dodd-Frank Act (the Collins Amendment) requires that the generally applicable capital requirements for insured banks shall be a floor for any capital requirements the agencies may require, including the capital requirements for BHCs. This means specifically that, as a general rule, capital instruments that are impermissible to meet a regulatory capital requirement for an insured bank (the Collins-restricted items referenced above) also would not be permitted to meet that capital requirement for BHCs.

Section 171 grandfathers capital instruments issued before May 19, 2010 by depository institution holding companies that had less than \$15 billion in total consolidated assets as of year-end 2009. BHCs subject to the Federal Reserve's Small Bank Holding Company Policy Statement are completely exempt from any requirement contained in Section 171. Otherwise, Section 171 requires BHCs' tier 1 capital recognition of the restricted items identified in the table to be phased out over a period of three years beginning January 1, 2013. An agreement announced recently by the Basel Committee on Banking Supervision also requires the phase-out of tier 1 capital recognition of Trust Preferred Securities.

The FDIC strongly supports the provisions of Section 171 including the phase-out of bankineligible capital instruments from the tier 1 capital of BHCs. Undue reliance on Trust Preferred Securities, which are not true loss absorbing capital, greatly weakened the capital strength of U.S. banking organizations during the crisis and increased the FDIC's losses. Additional context on this issue is provided in Attachments B and C.

### Q3: Please provide written analysis of the level of pre-crisis "true loss absorbing capital" you mentioned during your testimony.

A3: "True loss absorbing capital" is regulatory capital in the form of common equity. As the financial crisis demonstrated, certain other forms of capital that qualified as tier 1 capital at bank holding companies, such as trust preferred securities, were not fully loss absorbing. (In the case of trust preferred securities, dividends can be deferred and accumulated for up to 20 quarters before the securities default; unlike equity, dividends that are deferred cumulate over time and must eventually be paid.)

Under the Basel Accord of 1988 (Basel I), a bank must hold a minimum amount of tier 1 capital equal to 4 percent of total risk-weighted assets. Basel I also requires that common equity be a predominant component of tier 1 capital. Although Basel I does not define "predominant," many bank regulators generally expect common equity to comprise an amount approximating half the minimum tier 1 capital requirement; this explains the Basel Committee's reference to 2 percent common equity as the minimum common equity requirement under Basel I.

U.S. regulators currently require tier 1 capital of at least 6 percent of risk-weighted assets for an insured bank to be well capitalized. This must be predominantly common equity, which implies that the minimum for common equity in the United States is 3 percent. However, no absolute requirement exists for common equity as a component of tier 1 capital.

The Basel III proposal raises common equity to at least 4.5 percent of assets, weighted according to their risk level, with an additional capital conservation buffer of 2.5 percent to withstand future stresses (a total of 7 percent tier 1 common equity to total risk- weighted assets). Basel III also increases the total tier 1 capital ratio to at least 6 percent, plus the 2.5 percent capital conservation buffer, or 8.5 percent. The new tier 1 minimum ratio of 6 percent would include 4.5 percent common equity (that is, common equity would make up 75 percent of tier 1 capital).

Attachment D contains, among other things, tables showing the distribution of loss absorbing equity for banks and bank holding companies (Tables 1 and 4 of Attachment D). As indicated in Table 1, the vast majority of insured banks by number have loss absorbing equity greater than 10 percent of risk weighted assets. In sharp contrast, Table 4 shows much lower levels of loss-absorbing equity for BHCs. This is attributable to the heavy reliance by many BHCs on Trust Preferred Securities to satisfy regulatory capital requirements.

### Q4. Did the FDIC feel pressure to invoke the systemic risk exemption for IndyMac or WaMu? Please describe why or why not.

A4: Since 1991 the Federal Deposit Insurance Act (FDI Act), as a general matter, requires the FDIC to exercise its resolution authority over insured depository institutions in the method least costly to the Deposit Insurance Fund (DIF) except in cases where a systemic determination is made. Such a determination can only be made by the FDIC's Board of Directors, in concurrence with the Board of Governors of the Federal Reserve System, with a subsequent determination by the Secretary of the Treasury, following consultation with the President. 12 USC 1823(c)(4)(G).<sup>1</sup>

FDIC staff considered whether a systemic risk determination was appropriate in the case of IndyMac, FSB (IndyMac), and Washington Mutual Bank (WaMu). Ultimately, however, because an orderly least cost resolution was feasible, such a determination was not needed. A systemic risk determination was not invoked for IndyMac or WaMu.

### <u>IndyMac</u>

The FDIC accepted appointment by the Office of Thrift Supervision (OTS) as conservator of IndyMac on July 11, 2008.<sup>2</sup> A conservator assumes responsibility for operating an insured institution on an interim basis in accordance with applicable federal and state laws. The FDIC operated IndyMac Federal Bank, FSB, until March 19, 2009, when the FDIC completed its sale to OneWest Bank, FSB. The conservatorship allowed the FDIC the time necessary for winding down the institution and completing its sale.

### <u>WaMu</u>

JPMorgan Chase acquired the banking operations of WaMu in a transaction facilitated by the FDIC. All depositors were fully protected and the DIF did not incur any loss due to the failure of WaMu.

### Q5. Please provide the FDIC's analysis of the predicted number of FDIC-insured depository institutions that would be expected to fail following a failure of Lehman Brothers.

<sup>&</sup>lt;sup>1</sup> The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) retains the systemic risk exception as described above, but provides that this exception be made only with respect to an insured depository institution for which the FDIC has been appointed receiver. [I'll provide cite].

<sup>&</sup>lt;sup>2</sup> Under the FDI Act, the primary federal regulator (in the case of IndyMac, the OTS) has the authority to appoint the FDIC conservator for an insured depository institution. The FDIC is not required to accept such appointment, but did in the case of IndyMac. 12 USC 1821(c)(2) (A)(i).

A5: The FDIC does not have access to the information that would be required to make such a determination. For example, the FDIC does not know the identity of purchasers of Lehman Brothers bonds or securities. The uncertainty over which institutions could be affected by the failure of Lehman Brothers and which institutions could be in a similar situation as Lehman Brothers resulted in disruptions to liquidity markets that extended beyond the immediate holders of Lehman Brothers debt or other securities. The extent of the market disruption ultimately led to actions by the Federal Reserve and the FDIC, among others, to restore stability and reestablish funding channels.

Q6: During the hearing you had mentioned that after Fannie and Freddie were placed in conservatorship, the FDIC conducted analysis for the Treasury regarding how many banks would likely have failed due to holding Fannie and Freddie preference shares. Please provide this analysis and also indicate how many banks actually failed due to their Fannie or Freddie holdings, along with the name, location, asset size and the fall in value of those shares.

**A6** During the weekend that Fannie and Freddie were placed into conservatorship, the FDIC performed an analysis of insured institutions to determine which institutions would be most vulnerable to sudden and significant capital depletion, and thus pose an elevated risk to the Deposit Insurance Fund. This determination was made by adjusting the leverage ratio to include a deduction for the reported amount of GSE preferred stock. Any institution with an adjusted leverage ratio that resulted in a capital position of less than well-capitalized (i.e., adequately capitalized, undercapitalized, significantly undercapitalized, or critically undercapitalized), was placed on a list of institutions with elevated risk exposure. We determined that 35 institutions were at heightened risk of capital depletion from their exposure to GSE preferred stock. Of the 35 banks the FDIC identified in September 2008, ten have failed (see list below). Of those 10 failures, the National Bank of Commerce failure can be attributed solely to the Bank's GSE exposure. The other 9 failures were due primarily to significant loan or other asset quality issues that the GSE debt exposure exacerbated. Six of the ten banks were part of the holding company FBOP Corporation system failure that occurred in October 2009.

|       |                               |              |       | Total Bank    | Est. GSE      |              |
|-------|-------------------------------|--------------|-------|---------------|---------------|--------------|
|       |                               |              |       | Assets        | Exposure      |              |
| CERT  | Name                          | City         | State | (6/30/08)     | (6/30/08)     | Failure Date |
| 19733 | National Bank of Commerce     | Berkeley     | IL    | \$445 Million | \$72 Million  | 16-Jan-09    |
| 27837 | Cooperative Bank              | Wilmington   | NC    | \$973 Million | \$10 Million  | 19-Jun-09    |
| 27057 | Venture Bank                  | Lacev        | WA    | \$1.2 Billion | \$43 Million  | 11-Sep-09    |
| 34650 | California National Bank      | Los Angeles  | CA    | \$6.7 Billion | \$396 Million | 30-Oct-09    |
| 22504 | San Diego National Bank       | San Diego    | CA    | \$2.9 Billion | \$161 Million | 30-Oct-09    |
| 25594 | Bank USA National Association | Phoenix      | AZ    | \$196 Million | \$11 Million  | 30-Oct-09    |
| 32210 | Citizene National Pank        | Теадие       | TX    | \$111 Million | \$6 Million   | 30-Oct-09    |
| 25222 |                               | Houston      | TY    | \$465 Million | \$47 Million  | 30-Oct-09    |
| 18776 | North Houston Bank            | Houston      |       | \$262 Million | \$26 Million  | 30 Oct 09    |
| 33782 | Madisonville State Bank       | Madisonville | 1 X   |               |               | 30-001-09    |
| 27096 | The Park Avenue Bank          | New York     | NY    | \$469 Million | \$2 Million   | 12-Mar-10    |

### Capital Analysis Potential Impact of Collins Amendment

### June 2010

### **Impact of Proposed Amendment**

- Requires Bank Holding Companies' capital requirements to be no less stringent than bank requirements
- Potentially excluded from BHC tier 1 capital:
- Trust preferred securities (HC-R memo item 8d)
- Cumulative preferred shares (HC-R memo item 8c)
  - Mandatory convertible securities (HC-R item 6c)
- Other cumulative preferred share (HC-R memo item 3d)
- For analysis we assumed all trust preferred securities would be excluded from both tier 1 and tier 2 capital; in practice much would be included in tier 2
- Scope and Limitations:
- Analysis is a proxy given the items listed in the Y9C and was limited due to reporting issues |
- Data for largest banks as well as all BHCs filing Y9s I

# **Estimate of Industry Exposure to Collins Items**

|               |          |           |                   |             |           |            | Othory Cum |
|---------------|----------|-----------|-------------------|-------------|-----------|------------|------------|
|               |          | Keporting | Collins           | Mandatory   | TPS (memo | cum. rerp. |            |
| Range         | All BHCs | Collins   | Kestricted        | Convertible | 122       | Freterred  | Preierreu  |
|               |          | Items     | Items             | (9c)        | (no       | (memo 8c)  | (memo 3d)  |
| 0 billion     | 23       | 19        | \$136.0           | \$22.5      | \$107.0   | \$4.4      | \$4.6      |
| 00 billion    | 52       | 45        | \$11.8            | \$0.0       | \$11.7    | \$0.0      | \$0.1      |
| billion       | 393      | 278       | \$11.5            | \$0.1       | \$10.3    | \$1.0      | \$0.2      |
| r \$1 billion | 553      | 308       | \$3.5             | \$0.1       | \$3.3     | \$0.2      | \$0.0      |
|               | 1,021    | 650       | <b>(</b> \$162.9) | \$22.6      | \$132.2   | \$5.6      | \$4.9      |
|               |          |           |                   |             |           |            |            |

- Of the 1,021 bank holding companies reporting preliminary Y9 data as of 1Q10, roughly 650 reported at least one of the three items to be excluded from tier 1 per the Collins amendment
- These items totaled \$163 billion; trust-preferred securities comprised the majority at roughly \$132 billion

# **Preliminary Results – Holding Companies Affected**

|                       | Current | ly Below:   | Would t | e Below:   |
|-----------------------|---------|-------------|---------|------------|
| Asset Range           | 4% Lev  | 4, 4, or 8% | 4% Lev  | 4,4, or 8% |
| Over \$100 billion    | с       | ę           | ю       | 3          |
| \$10 to \$100 billion | က       | ო           | ო       | 4          |
| \$1 to \$10 billion   | 17      | 20          | 32      | 33         |
| Less than \$1 billion | 39      | 50          | 60      | Z8         |
| All BHCs              | 62      | $\zeta$ 76  | 98      | (118)      |
|                       |         |             |         |            |

The banks currently below the thresholds are included in the "would be below" threshold totals.

- These results assume no transitional relief or phase-in period.
- Impact would be mitigated by such arrangements.

Largest Banking Companies as of 1Q 2010

|                    | Tior 1         | IARF   | Restricted |          | Current |        | <b>Exclude</b> : | s Kestricte | d Items |
|--------------------|----------------|--------|------------|----------|---------|--------|------------------|-------------|---------|
|                    |                | Funds  |            |          | Tier 1  | Total  |                  | Tier 1      | Total   |
|                    | vapitai<br>/s/ | Outst. | sulati     | Leverage | Risk    | Risk   | Leverage         | Risk        | Risk    |
|                    | (c)            | (\$)   | (0)        | Katio    | Based   | Based  | Katio            | Based       | Based   |
| Bank of America    | 155.4          | 0      | 21.8       | 6.46%    | 10.23%  | 14.47% | 5.55%            | 8.79%       | 14.47%  |
| Citigroup          | 120.1          | 25.0   | 21.6       | 6.16%    | 11.28%  | 14.88% | 5.05%            | 9.26%       | 14.88%  |
| JPMC               | 131.4          | 0      | 19.6       | 6.63%    | 11.45%  | 15.11% | 5.64%            | 9.75%       | 15.08%  |
| Wells              | 98.3           | 0      | 19.3       | 8.34%    | 9.93%   | 13.90% | 6.70%            | 7.98%       | 13.90%  |
| Goldman Sachs      | 68.5           | 0      | 12.7       | 8.14%    | 15.02%  | 17.99% | 6.63%            | 12.23%      | 17.39%  |
| Morgan Stanley     | 50.1           | 0      | 10.5       | 6.10%    | 15.10%  | 16.09% | 4.83%            | 11.95%      | 16.09%  |
| USB                | 23.3           | 0      | 4.5        | 8.56%    | 9.95%   | 13.18% | 6.90%            | 8.01%       | 13.18%  |
| Capital One        | 11.5           | 0      | 3.6        | 6.04%    | 9.57%   | 16.90% | 4.13%            | 6.54%       | 16.90%  |
| BB&T               | 13.7           | 0      | 3.5        | 8.67%    | 11.63%  | 15.89% | 6.44%            | 8.65%       | 15.89%  |
| PNC                | 22.9           | 0      | 3.5        | 8.84%    | 10.25%  | 13.88% | 7.49%            | 8.69%       | 13.88%  |
| GMAC (Ally)        | 22.1           | *      | 2.8        | 12.49%   | 14.88%  | 16.42% | 10.92%           | 13.01%      | 16.26%  |
| Fifth Third        | 13.3           | 3.4    | 2.8        | 12.00%   | 13.40%  | 17.55% | 9.51%            | 10.62%      | 17.55%  |
| SunTrust           | 17.9           | 4.9    | 2.4        | 10.95%   | 13.13%  | 16.68% | 9.51%            | 11.40%      | 16.68%  |
| KeyCorp            | 10.8           | 2.5    | 1.8        | 11.60%   | 12.92%  | 17.07% | 9.67%            | 10.77%      | 17.07%  |
| BoNY Mellon        | 13.4           | 0      | 1.7        | 6.45%    | 13.27%  | 17.19% | 5.65%            | 11.62%      | 17.19%  |
| State Street       | 12.3           | 0      | 1.5        | 9.03%    | 18.05%  | 19.46% | 7.97%            | 15.93%      | 19.46%  |
| Regions            | 11.7           | 3.5    | 0.8        | 8.84%    | 11.66%  | 15.76% | 8.20%            | 10.82%      | 15.76%  |
| Metlife            | 31.1           | 0      | 0.0        | 5.65%    | 9.46%   | 9.90%  | 5.65%            | 9.46%       | 9.90%   |
| Amex               | 10.4           | 0      | 0.0        | %52.7    | 9.79%   | 11.96% | 7.75%            | 9.79%       | 11.96%  |
|                    |                |        |            |          |         |        |                  |             |         |
| Taunus Corp.       | -7.4           | 0.0    | 0.0        | -1.86%   | -7.58%  | -7.58% | -1.86%           | -7.58%      | -7.58%  |
| Barclays           | 5.0            | 0.0    | 0.0        | 1.26%    | 4.67%   | 7.78%  | 1.26%            | 4.67%       | 7.78%   |
| HSBC North Am.     | 28.0           | 0.0    | 3.0        | 7.92%    | 13.74%  | 17.36% | 7.06%            | 12.25%      | 17.36%  |
| TD Bank US         | 2.1            | 0.0    | 0.1        | 1.56%    | 3.04%   | 4.85%  | 1.50%            | 2.93%       | 4.85%   |
| Citizens Financial | 12.0           | 0.0    | 0.5        | %96.8    | 11.88%  | 13.30% | 8.58%            | 11.38%      | 13.30%  |

Data from Y9 filed as of 3/31/10. List above includes SCAP companies and those over \$100 billion in assets.

\*GMAC has repaid some TARP funds, but it appears the source of repayment was an equity stake, so it is unclear how much remains outstanding.

Restricted tems defined as items 6c, Memo 8c, 8d, and 3d; some banks are showing limited items over 25% of tier 1.

-1

# <u>Largest Banking Companies – Leverage Trend</u>

0 V U U U

| (Includes failures that          |        |        |        |        |        |
|----------------------------------|--------|--------|--------|--------|--------|
| merged into SCAP)<br>≴ n ∄ r ⊘rs | 4Q06   | 4Q07   | 4Q08   | 4Q09   | 1Q10   |
| American Express                 | n/a    | n/a    | n/a    | 9.75%  | 7.75%  |
| 3ank of America                  | 5.25%  | 4.02%  | 5.34%  | 6.06%  | 5.55%  |
| Bank of New York Mellon          | 5.46%  | 5.35%  | 6.16%  | 5.69%  | 6.44%  |
| 3B&T Corp.                       | 6.09%  | 5.71%  | 7.96%  | 6.30%  | 5.65%  |
| Capital One Financial Corp.      | 10.76% | 7.81%  | 10.07% | 7.94%  | 4.13%  |
| Citigroup Inc.                   | 4.62%  | 2.96%  | 4.85%  | 6.15%  | 5.05%  |
| Countrywide Financial Corp.      | 5.95%  | n/a    | n/a    | n/a    | n/a    |
| Fifth Third Bancorp              | 8.28%  | 6.31%  | 7.89%  | 9.87%  | 9.51%  |
| GMAC (Ally Financial)            | n/a    | n/a    | n/a    | 11.26% | 10.92% |
| Goldman Sachs                    | n/a    | n/a    | n/a    | 7.23%  | 6.63%  |
| JPMorgan Chase & Co.             | 5.26%  | 5.06%  | 5.71%  | 5.88%  | 5.64%  |
| KevCorp                          | 7.05%  | 6.46%  | 8.60%  | 9.80%  | 9.67%  |
| MetLife, Inc.                    | 5.55%  | 5.56%  | 5.77%  | 5.40%  | 5.65%  |
| Morgan Stanley                   | n/a    | n/a    | n/a    | 5.21%  | 4.83%  |
| National City Corp.              | 7.86%  | 5.11%  | n/a    | n/a    | n/a    |
| PNC Financial Services           | 8.33%  | 5.74%  | 15.42% | 8.94%  | 7.49%  |
| Regions Financial Corp.          | 8.11%  | 6.12%  | 7.75%  | 8.27%  | 8.20%  |
| State Street Corp.               | 5.26%  | 4.54%  | 7.03%  | 7.49%  | 7.97%  |
| SunTrust Banks                   | 5.86%  | 5.61%  | 8.76%  | 9.48%  | 9.51%  |
| U.S. Bancorp                     | 6.42%  | 6.11%  | 8.21%  | 6.78%  | 6.90%  |
| Wachovia Corp.                   | 5.17%  | 4.97%  | n/a    | n/a    | n/a    |
| Wells Fargo                      | 7.01%  | 5.96%  | 11.28% | 6.82%  | 6.70%  |
|                                  |        |        |        |        |        |
| Taunus Corp.                     | -0.95% | -1.25% | -2.26% | -1.93% | -1.86% |
| Barclays Group                   | 1.08%  | 0.68%  | 1.07%  | 1.17%  | 1.26%  |
| HSBC North Am.                   | 5.23%  | 4.49%  | 4.40%  | 5.87%  | 7.23%  |
| Citizens Financial               | 6.97%  | 6.56%  | 6.64%  | 8.32%  | 8.58%  |
|                                  |        |        |        |        |        |

\*Leverage ratio for 1Q10 computed per Collins analysis; in previous periods, only subtracts TPS from tier 1 TARP funds were distributed to most SCAP BHCs in 2008

Note: Due to a change in the Y9, only Trust Preferred Securities were deducted as a proxy historically

### Confidential

**Discussion Draft - Unaudited** 



June 2010

**Companies with Trust Preferred Securities** 

**Initial Risk Analysis of Bank Holding** 

Confidential

concentrations and/or loans with Negative Amortization features

- About half of these had TPS representing over 25% of Tier 1 capital Securities as regulatory capital at some point between 2005 and 2009

55 35|

283 190 8

2

196 74

112 4 က

ഗ

0

C&D Concentrated

Total BHCs Sample

with NTM Loans

163 271

25 25

22 4

500-1bil <500mil

500-1bil <500mil >10 bil 1-10bil

No TPS

1-10bil

>10 bil

Asset Breakdown

TPS

324 225

680

355 141

413 46

C&D Concentrated

Total BHCs Sample

with NTM Loans

TPS>25%

TPS

No TPS

Over the past 5 years:

**Bank Holding Company Distribution** 

- More BHCs with TPS had "higher-risk" loans: whether C&D

Roughly 680 bank holding companies included Trust Preferred

## **Time Series of Risk Metrics and Ratings**

|              | BF    | ICs with nc | TPS   |        |        |
|--------------|-------|-------------|-------|--------|--------|
|              | 4Q05  | 4Q06        | 4Q07  | 4Q08   | 4Q09   |
| Avg PDNA     | 1.43% | 1.48%       | 2.14% | 3.60%  | 4.81%  |
| Avg NCO      | 0.22% | 0.26%       | 0.38% | 1.00%  | 1.82%  |
| Avg ROA      | 1.13% | 1.15%       | 0.92% | -0.18% | -0.30% |
| % 3,4,5      | 2%    | 2%          | 2%    | 6%     | 19%    |
| C&D Conc.    | 02    | 74          | 84    | 100    | 83     |
| Neg AM Loans | n/a   | n/a         | 4     | 4      | 5      |
|              |       |             |       |        |        |

|              | BHCs with | <b>TPS</b> durin | g last 5 yea | Irs    |        |
|--------------|-----------|------------------|--------------|--------|--------|
|              | 4Q05      | 4Q06             | 4Q07         | 4Q08   | 4Q09   |
| Avg PDNA     | 1.30%     | 1.46%            | 2.29%        | 3.90%  | 5.81%  |
| Avg NCO      | 0.30%     | 0.35%            | 0.57%        | 1.37%  | 2.60%  |
| Avg ROA      | 1.10%     | 1.02%            | 0.55%        | -1.02% | -1.20% |
| % 3,4,5      | 2%        | 2%               | 3%           | 12%    | 34%    |
| C&D Conc.    | 289       | 282              | 322          | 302    | 223    |
| Neg AM Loans | n/a       | n/a              | 30           | 30     | 31     |
|              |           |                  |              |        |        |

| B            | HCs | with TPS> | 25% Tier 1 | during last | t 5 years |        |
|--------------|-----|-----------|------------|-------------|-----------|--------|
|              |     | 4Q05      | 4Q06       | 4Q07        | 4Q08      | 40Ū9   |
| Avg PDNA     | -   | 1.27%     | 1.47%      | 2.51%       | 4.23%     | 6.43%  |
| Avg NCO      |     | 0.32%     | 0.39%      | 0.66%       | 1.58%     | 2.91%  |
| Avg ROA      |     | 1.01%     | 0.89%      | 0.41%       | -1.59%    | -1.67% |
| % 3,4,5      | -   | 2%        | 2%         | 4%          | 16%       | 41%    |
| C&D Conc.    |     | 165       | 165        | 178         | 173       | 126    |
| Neg AM Loans | (0) | n/a       | n/a        | 19          | 20        | 22     |
|              |     |           |            |             |           |        |

- During the mid/late 90s, BHCs showed similar performance numbers
- Towards the end of 2008 and 2009, banks with TPS showed greater deterioration in asset quality and earnings
- BHCs that had higher concentrations of TPS are reporting the worst financials and ratings
  - Over 40% rated 3, 4 or 5

Confidential Note: Time series is based on the 1,035 BHCs reporting Y9s as of March 31, 2010. Not all BHCs were active in prior periods. Two known failures/mergers were added to the sample in previous periods.

### Confidential

Similar trends are noted at insured bank subsidiaries of holding companies that reported TPS in regulatory capital •

| Total        |     | 457       | 470        | 4/6         | 4/3          | 4/2    |
|--------------|-----|-----------|------------|-------------|--------------|--------|
|              |     |           |            |             |              |        |
| Banking St   | nbs | of Currei | nt BHCs wi | ith TPS dur | ing last 5 y | /ears  |
|              | 4   | .Q05      | 4Q06       | 4Q07        | 4Q08         | 4Q09   |
| Avg PDNA     |     | 1.33%     | 1.42%      | 2.20%       | 3.70%        | 5.45%  |
| Avg NCO      |     | 0.23%     | 0.18%      | 0.29%       | 0.76%        | 1.60%  |
| Avg ROA      |     | 1.17%     | 1.46%      | 0.94%       | -0.53%       | -0.65% |
| % 3.4.5      |     | 2%        | 1%         | 2%          | 8%           | 26%    |
| C&D Conc.    |     | 480       | 540        | 594         | 528          | 355    |
| Neg AM Loans |     | n/a       | n/a        | 30          | 32           | 32     |
| Total        |     | 1,192     | 1,184      | 1,210       | 1,154        | 1,077  |
|              |     |           |            |             |              |        |

| Ba           | nking subs ( | ot Current | BHUS WITH | DO IFS |        |
|--------------|--------------|------------|-----------|--------|--------|
|              | 4Q05         | 4Q06       | 4Q07      | 4Q08   | 4Q09   |
| Avg PDNA     | 1.55%        | 1.58%      | 2.11%     | 3.35%  | 4.62%  |
| Avg NCO      | 0.20%        | 0.18%      | 0.24%     | 0.59%  | 1.21%  |
| Avg ROA      | 1.11%        | 1.24%      | 1.00%     | -0.23% | -0.11% |
| % 3,4,5      | 2%           | 2%         | 2%        | 7%     | 17%    |
| C&D Conc.    | 120          | 142        | 157       | 161    | 104    |
| Neg AM Loans | n/a          | n/a        | 7         | 9      | 2      |
| Total        | 457          | 470        | 476       | 473    | 472    |
|              |              |            |           |        |        |

**Insured Banking Subsidiary Analysis** 

# **1010 Trust Preferred Securities Dependence**

| Asset Range                  | Number of<br>BHCs | With TPS | 1PS ><br>25% T1 |   |
|------------------------------|-------------------|----------|-----------------|---|
| Over \$250 billion           | 12                | 6        | 0               |   |
| \$100 to \$250 billion       |                   | 10       | N               |   |
| \$10 to \$100 billion        | 52                | 46       | n               |   |
| \$1 to \$10 billion          | 394               | 271      | 62              |   |
| \$500 million to \$1 billion | 468               | 256      | 54              | / |
| Less than \$500 million      | 96                | 50       | 24              |   |
| Total Bank Holding Co's      | 1,033             | 642      | 145             |   |
|                              |                   |          |                 |   |

Source: SNL; Y9C data as of March 31, 2010

| -           |         |        | _ |    |    |          |   |        |
|-------------|---------|--------|---|----|----|----------|---|--------|
|             | Total   | l Ulai | 9 | 63 | 40 | 28       | 6 | 145    |
| apital      | <500    | mil    | 1 | 4  | 9  | Ø        | 5 | 24     |
| of Tier 1 C | 500mil- | 1bil   | 2 | 25 | 17 | <b>б</b> | - | 54     |
| ; > 25%     |         |        | 2 | 33 | 15 | თ        | က | 62     |
| vith TPS    | 10-100  | bil    |   |    | ~  | 2        |   | с<br>С |
| BHCs v      |         |        |   | -  | ~  |          |   | 2      |
|             | BHC     | Rating | - | 2  | e  | 4        | 5 | Total  |

- Y9Cs in 1Q10, over 640 (62%) included TPS in Of the BHCs reporting 145 report TPS regulatory capital
- BHCs with assets less Half of the 145 are at more of tier 1 capital representing 25% or

than \$1 billion

- Over half of the BHCs with heavier TPS
- dependence were rated 3, 4, or 5 as of 4Q09

Confidential



FEDERAL DEPOSIT INSURANCE CORPORATION, Washington, DC 20429

June 22, 2010

SHEILA C. BAIR CHAIRMAN

> Honorable Susan Collins United States Senate Washington, D.C. 20510

Dear Senator Collins:

I am writing to express my continued support for your amendment to strengthen the capital regulation of the U.S. banking system and systemically important nonbank financial institutions.

The amendment ensures that our largest financial institutions, including those that benefited the most from federal support during the crisis, will adhere to capital requirements at least as stringent as those applying to thousands of community banks nationwide. The amendment requires bank holding companies' capital requirements to be at least as stringent as those of banks, ensuring they can serve as a source of strength to their subsidiary banks rather than a source of weakness as we saw too often during the crisis. Requiring large nonbank firms regulated by the Federal Reserve to adhere to capital requirements as strict as those faced by banks addresses the problem of regulatory capital arbitrage that fueled risk-taking in the years before the crisis.

One of the implications of the amendment has attracted a great deal of attention. Specifically, trust preferred securities, which are not permitted as tier 1 capital for insured banks, would not be permitted as tier 1 capital for bank holding companies. I view this as an important and necessary change.

Over the past several years, the capital bases at the largest financial institutions have become diluted with trust preferred securities and other debt instruments that "look" like capital in good times, but that fail to absorb losses when called upon. Institutions became very savvy at exploiting legal, accounting, and regulatory rules to create and issue well over a hundred billion dollars in trust preferred securities in the boom years of the 1990s and 2000s. Trust preferred securities proved highly attractive to investors insofar as they legally commit bank holding companies to pay dividends or risk going into default. (In fact, the tax code treats them as debt, making the interest deductible to the bank holding company.) The ease of issuing these debt-like instruments as "capital" fueled growth at many weaker institutions, allowing them to increase leverage and risk taking.

However, as the crisis hit, these securities became a significant burden on troubled bank holding companies, making them a drain -- not a source of strength -- for their subsidiary banks. The market had no confidence in trust preferred securities as loss-absorbing capital and notably, the regulators did not give credit for trust preferred securities in conducting the stress tests of capital adequacy in 2009. Another significant problem is that investors interested in recapitalizing bank holding companies have been discouraged by their inability to persuade holders of trust preferred securities to convert their shares into common equity. Because holders of trust preferred securities have legal rights to cumulative dividends, they have little incentive to subordinate their position to facilitate the infusion of fresh equity capital. This leaves potential acquirers frustrated and unable to complete an open bank transaction, making it more likely the banking organization will fail, exposing the Deposit Insurance Fund to losses that could have otherwise been avoided. The increased leverage facilitated by trust preferred securities, combined with the impediments they pose to recapitalization, will cost the Deposit Insurance Fund billions in resolution costs which must, of course, be borne by the all insured banks through increased deposit insurance assessments.

Your amendment takes aim at the financial engineering that went on in the boom years, and serves as the most concrete and meaningful legislative proposal that I have seen to improve the quality of capital at U.S. banking organizations. Contrary to the argument that your amendment would reduce credit availability, it will actually encourage renewed lending by placing the banking system on a sounder footing with real, tangible common equity. Ask any securities analyst or market participant whether or not they put much value in trust preferred securities during the crisis - the answer is a resounding no. The market believes trust preferred securities are debt – the regulators and Congress should follow suit. The end result of your amendment would be to replace weak, risky debt-like instruments with growth sustaining, true capital.

We appreciate that concerns have been raised by some in the financial services industry that banking organizations should not be required to raise capital as they seek to repair their balance sheets and provide credit support for the recovering economy. The amendments you have agreed to provide ample relief and transition time for financial institutions to adjust to these new requirements. There will always be some industry resistance to increasing capital requirements. In bad times, there will be those who argue that increased capital will constrain lending; in good times, they will argue that increased capital is unnecessary given low delinquency default rates on their loans and other assets. The process of deleveraging will be difficult whenever it occurs, but occur it must. With greater capital cushions, much of the financial crisis could have been averted. Large financial entities would have been constrained in their risk taking and better able to withstand losses, ameliorating the need for costly bailouts.

We have a great opportunity to return to the basic business of banking and away from the financial games that caused significant hardship, the loss of millions of jobs, and significant losses to the Deposit Insurance Fund. The FDIC remains committed to working with you towards accomplishing this goal and we applaud your strong leadership.

Sincerely,

Sheile & Bar

Sheila C. Bair

### <u>Draft</u>

### <u>Preliminary Impact Analysis of a "4 plus 4" TCE to New RWA Requirement for</u> <u>Small Banks</u>

### Introduction

This note reports on the results of a preliminary capital impact analysis of a specific Basel 3 calibration option: a 4 percent minimum tangible common equity (TCE) to risk weighted assets (RWA) requirement and a 4 percent TCE to RWA fixed capital buffer. For convenience we will henceforth call this the "4+4 test."

In a separate note (attached at the end of this note), we outline how a 4+4 test can be viewed as a reasonable outgrowth of analysis of historical losses relative to "old RWA" and a through-the-cycle approach to translating old RWA into Basel 3 RWA. One can view this note as flowing from the first note. Alternatively, one could view this note simply as a standalone analysis of one specific calibration option.

The analysis in this note is best viewed as applicable to small banks and banking organizations. In particular, while all tables in this note include results for BHCs and insured banks of all sizes, including the largest organizations, we believe the QIS results will be more accurate and comprehensive with respect to these large organizations. Moreover, some important proposals in the Basel Committee's December papers are *de facto* irrelevant for most small banks. Other proposals are not irrelevant for small banks but because of lack of data on potential impacts or for other reasons, carve-outs should be considered for small banks.

Finally, it should be noted that the analysis is based on insured bank Call Reports and Bank Holding Company (BHC) Y-9c reports and is limited to that extent, and also limited because we currently do not have the benefit of final proposals in many areas including the definition of capital and the leverage ratio.

### <u>Analysis</u>

The current minimum tier 1 capital requirement for insured banks (IDIs) and holding companies is 4 percent of RWA, while the current tier 1 requirement for an IDI to be "well capitalized" is 6 percent of RWA (bank holding companies do not have a statutory PCA framework so the term "well capitalized does not apply to them).

Satisfaction of the 4 + 4 test would be in some sense analogous to the satisfaction of the "well capitalized" PCA threshold. Specifically, there would be some regulatory consequences of being below the buffer just as there are consequences to being less than well capitalized, but these consequences would not be as severe as the consequences of not meeting the minimum capital requirements.

Based on Call report data, of the 7,177 insured banks (excludes thrifts) reporting at March 31, 2010, 399 would not satisfy the 4+4 test (Table 1). Put another way, about 94 percent of insured banks appear to satisfy a 4+4 test. In aggregate those 399 insured banks would need to raise an estimated \$23 billion in TCE to meet the 4+4 test, an amount equal to 1.4 percent of their aggregate assets or 14 percent of their current TCE (Table 2). Analysis of normalized return on assets (ROA) for these banks could provide some insight into the amount of time required to generate this level of capital internally. 147 banks currently do not satisfy the 6 percent tier 1 risk-based capital threshold for being well capitalized (Table 3). Consequently, if we view the satisfaction of a 4+4 test as analogous to being well capitalized, the number of insured institutions not meeting a "well capitalized" tier 1 risk-based standard would increase by 252.

### Table 1. Estimated TCE to RWA ratios for insured banks

|                              | New Common to RBC Ratio |         |        |         |          |       |  |  |
|------------------------------|-------------------------|---------|--------|---------|----------|-------|--|--|
| Asset Range                  | Under 4%                | 4% - 6% | 6 - 8% | 8 - 10% | Over 10% | Total |  |  |
| Over \$250 billion           | 0                       | 1       | 1      | 3       | 1        | 6     |  |  |
| \$100 to \$250 billion       | 1                       | 0       | 2      | 5       | 5        | 13    |  |  |
| \$15 to \$100 billion        | 0                       | 1       | 4      | 9       | 24       | 38    |  |  |
| \$1 to \$15 billion          | 16                      | 9       | 34     | 105     | 354      | 518   |  |  |
| \$500 million to \$1 billion | 15                      | 13      | 24     | 99      | 484      | 635   |  |  |
| Less than \$500 million      | 72                      | 58      | 148    | 481     | 5,208    | 5,967 |  |  |
| Total Banks                  | 104                     | 82      | 213    | 702     | 6,076    | 7,177 |  |  |

Source: 1Q10 Call Reports

### Table 2. Estimated insured-bank capital raises to meet 4+4 test

| IDI's that would fall below 8% Threshold |                  |            |        |         |  |  |  |
|--|------------------|------------|--------|---------|--|--|--|
| Accet Pango                              | Number \$ Amount |            | % of   | % of    |  |  |  |
| Asset Ralige                             | of Banks         | (billions) | assets | capital |  |  |  |
| Over \$250 billion                       | 2                | \$6.2      | 1.2%   | 11%     |  |  |  |
| \$100 to \$250 billion                   | 3                | \$7.3      | 1.4%   | 13%     |  |  |  |
| \$15 to \$100 billion                    | 5                | \$3.0      | 1.3%   | 13%     |  |  |  |
| \$1 to \$15 billion                      | 59               | \$4.2      | 1.9%   | 24%     |  |  |  |
| \$500 million to \$1 billion             | 52               | \$0.9      | 2.5%   | 44%     |  |  |  |
| Less than \$500 million                  | 278              | \$1.2      | 2.1%   | 36%     |  |  |  |
| Total Banks                              | 399              | \$22.7     | 1.4%   | 14%     |  |  |  |

Source: 1Q10 Call Reports

### Table 3. Current Tier 1 to RWA ratios for insured banks

|                              |          | Current Tier 1 to RBC Ratio |        |         |          |       |  |  |  |  |
|------------------------------|----------|-----------------------------|--------|---------|----------|-------|--|--|--|--|
| Asset Range                  | Under 4% | 4% - 6%                     | 6 - 8% | 8 - 10% | Over 10% | Total |  |  |  |  |
| Over \$250 billion           | 0        | 0                           | 1      | 0       | 5        | 6     |  |  |  |  |
| \$100 to \$250 billion       | 0        | 0                           | 0      | 3       | 10       | 13    |  |  |  |  |
| \$15 to \$100 billion        | 0        | 0                           | 1      | 6       | 31       | 38    |  |  |  |  |
| \$1 to \$15 billion          | 11       | 6                           | 15     | 77      | 409      | 518   |  |  |  |  |
| \$500 million to \$1 billion | 10       | 13                          | 13     | 63      | 536      | 635   |  |  |  |  |
| Less than \$500 million      | 56       | 51                          | 101    | 376     | 5,383    | 5,967 |  |  |  |  |
| Total Banks                  | 77       | 70                          | 131    | 525     | 6,374    | 7,177 |  |  |  |  |

Source: 1Q10 Call Reports

Viewing capital needs from the perspective of BHCs, of the 1,029 BHCs filing form Y-9c at March 31, 2010, 401 institutions, or about 39 percent of all BHCs filing a Y-9c, would not satisfy the 4+4 test. (Table 4). These 401 BHCs are estimated to need to raise an additional \$181 billion in TCE to meet a 4+4 test. (Table 5), an amount that corresponds to about 1.5 percent of their aggregate assets and about 17 percent of their current TCE. Similar to the situation for insured banks, a number of BHCs do not meet existing capital standards. For example, 44 BHCs reported not meeting the existing minimum tier 1 risk based capital requirement of 4 percent of RWA (Table 6).

### Table 4. Estimated TCE to RWA ratios for BHCs

|                              | New Common RBC Ratio |         |        |         |          |       |  |
|------------------------------|----------------------|---------|--------|---------|----------|-------|--|
| Asset Range                  | Under 4%             | 4% - 6% | 6 - 8% | 8 - 10% | Over 10% | Total |  |
| Over \$250 billion           | 2                    | 3       | 4      | 2       | 1        | 12    |  |
| \$100 to \$250 billion       | 2                    | 1       | 5      | 1       | 2        | 11    |  |
| \$15 to \$100 billion        | 3                    | 4       | 6      | 6       | 11       | 30    |  |
| \$1 to \$15 billion          | 37                   | 52      | 78     | 72      | 177      | 416   |  |
| \$500 million to \$1 billion | 38                   | 42      | 72     | 102     | 214      | 468   |  |
| Less than \$500 million      | 28                   | 8       | 16     | 10      | 30       | 92    |  |
| Total Bank Holding Co's      | 110                  | 110     | 181    | 193     | 435      | 1,029 |  |

Source: SNL; Y9C data as of 1Q2010; Most holding companies under \$500 million in assets are not required to file.

### Table 5. Estimated BHC capital raises to meet a 4+4 test

| Companies that would fall below 8% Threshold |                   |                         |                |                 |  |  |  |  |
|--|-------------------|-------------------------|----------------|-----------------|--|--|--|--|
| Asset Range                                  | Number<br>of BHCs | \$ Amount<br>(billions) | % of<br>assets | % of<br>capital |  |  |  |  |
| Over \$250 billion                           | 9                 | \$133.9                 | 1.4%           | 17%             |  |  |  |  |
| \$100 to \$250 billion                       | 8                 | \$20.6                  | 1.6%           | 15%             |  |  |  |  |
| \$15 to \$100 billion                        | 13                | \$13.6                  | 2.3%           | 22%             |  |  |  |  |
| \$1 to \$15 billion                          | 167               | \$10.1                  | 2.1%           | 23%             |  |  |  |  |
| \$500 million to \$1 billion                 | 152               | \$2.2                   | 2.0%           | 25%             |  |  |  |  |
| Less than \$500 million                      | 52                | <b>\$0</b> .7           | 3.5%           | 56%             |  |  |  |  |
| Total Bank Holding Co's                      | 401               | \$181.1                 | 1.5%           | 17%             |  |  |  |  |

Source: SNL; Y9C data as of March 31, 2010

### Table 6. Current Tier 1 to RWA ratios for BHCs

|                              | Current Tier 1 RBC Ratio |         |        |         |          |       |  |  |  |
|------------------------------|--------------------------|---------|--------|---------|----------|-------|--|--|--|
| Asset Range                  | Under 4%                 | 4% - 6% | 6 - 8% | 8 - 10% | Over 10% | Total |  |  |  |
| Over \$250 billion           | 1                        | 1       | 0      | 3       | 7        | 12    |  |  |  |
| \$100 to \$250 billion       | 1                        | 0       | 0      | 2       | 8        | 11    |  |  |  |
| \$15 to \$100 billion        | 2                        | 0       | 0      | 4       | 24       | 30    |  |  |  |
| \$1 to \$15 billion          | 10                       | 11      | 16     | 54      | 325      | 416   |  |  |  |
| \$500 million to \$1 billion | 15                       | 12      | 22     | 60      | 359      | 468   |  |  |  |
| Less than \$500 million      | 15                       | 8       | 11     | 7       | 51       | 92    |  |  |  |
| Total Bank Holding Co's      | 44                       | 32      | 49     | 130     | 774      | 1,029 |  |  |  |

Source: SNL; Y9C data as of 1Q2010; Most holding companies under \$500 million in assets are not required to file.

The difference between the impact of a 4+4 test on insured banks versus BHCs is striking. Only 6 percent of insured banks are estimated not to meet a 4+4 test; the corresponding figure for BHCs is 39 percent. This difference is directly attributable to the differences between banks and BHCs in the percentages of potentially deducted items in tier 1 capital. In this analysis, 42 percent of BHC tier 1 capital consists of items that would potentially be deducted from equity, whereas only 16 percent of insured bank capital consists of potentially deducted items (Tables 7 and 8). Again, for BHCs the QIS

will give a better analysis of potential deductions, and the size of those deductions is likely to be higher than reported here. BHCs appear to face higher deductions mostly because of the roughly \$130 billion in trust preferred securities the BHCs carry in tier 1 capital, and their much greater use of preferred stock.

|                              |                   |                    | % of Current Tier 1 for Each Item: |                                      |                               |                      |                          |         |  |  |  |
|------------------------------|-------------------|--------------------|------------------------------------|--------------------------------------|-------------------------------|----------------------|--------------------------|---------|--|--|--|
| Bank Holding<br>Companies    | Current<br>Tier 1 | Preferred<br>Stock | Trust<br>Preferred<br>Sec.         | Currently<br>Included<br>Intangibles | Currently<br>Included<br>DTAs | Minority<br>Interest | Gains/<br>Loss on<br>AFS | Sum     |  |  |  |
| Over \$250 billion           | \$727             | 7.8%               | 11.7%                              | 11.7%                                | 9.6%                          | 2.9%                 | 1.2%                     | 45%     |  |  |  |
| \$100 to \$250 billion       | \$140             | 17.3%              | 13.8%                              | 8.5%                                 | 6.0%                          | 1.2%                 | 0.9%                     | 48%     |  |  |  |
| \$15 to \$100 billion        | \$114             | 12.1%              | 8.0%                               | 2.0%                                 | 5.2%                          | 2.9%                 | -0.2%                    | 30%     |  |  |  |
| \$1 to \$15 billion          | \$114             | 9.6%               | 11.5%                              | 1.4%                                 | 3.4%                          | 1.8%                 | 1.3%                     | 29%     |  |  |  |
| \$500 million to \$1 billion | \$29              | 5.5%               | 10.1%                              | 0.7%                                 | 3.2%                          | 0.8%                 | 1.3%                     | 22%     |  |  |  |
| Less than \$500 million      | \$3               | 5.0%               | 15.6%                              | 0.7%                                 | 3.4%                          | 2.0%                 | 0.4%                     | 27%     |  |  |  |
| Totals in \$ billions        | \$1,127           | \$107.4            | \$130.1                            | \$101.1                              | \$89.3                        | \$28.6               | \$11.7                   | \$468.2 |  |  |  |

### Table 7. Estimated deductions from BHC tier 1 capital

Source: SNL; Y9C data as of March 31, 2010; Most holding companies under \$500 million in assets are not required to file.

### Table 8. Estimated deductions from insured bank tier 1 capital

|                              |                   |                    | % of Current Tier 1 for Each Item: |                                      |                               |                      |                          |         |  |
|------------------------------|-------------------|--------------------|------------------------------------|--------------------------------------|-------------------------------|----------------------|--------------------------|---------|--|
| Insured Banks                | Current<br>Tier 1 | Preferred<br>Stock | Trust<br>Preferred<br>Sec.         | Currently<br>Included<br>Intangibles | Currently<br>Included<br>DTAs | Minority<br>Interest | Gains/<br>Loss on<br>AFS | Sum     |  |
| Over \$250 billion           | \$443             | 0.1%               | n/a                                | 16.1%                                | 5.7%                          | 1.6%                 | 0.5%                     | 24%     |  |
| \$100 to \$250 billion       | \$162             | 0.0%               | n/a                                | 9.4%                                 | 9.6%                          | 3.5%                 | -0.1%                    | 22%     |  |
| \$15 to \$100 billion        | \$197             | 2.2%               | n/a                                | 2.0%                                 | 3.7%                          | 1.0%                 | -0.3%                    | 9%      |  |
| \$1 to \$15 billion          | \$175             | 1.5%               | n/a                                | 2.3%                                 | 3.2%                          | 0.5%                 | 0.9%                     | 8%      |  |
| \$500 million to \$1 billion | \$45              | 0.5%               | n/a                                | 0.7%                                 | 3.0%                          | 0.1%                 | 1.2%                     | 5%      |  |
| Less than \$500 million      | \$99              | 0.6%               | n/a                                | 0.4%                                 | 1.6%                          | 0.0%                 | 1.7%                     | 4%      |  |
| Totals in \$ billions        | \$1,121           | \$8.4              | n/a                                | \$95.4                               | \$56.6                        | \$15.6               | \$5.3                    | \$181.3 |  |

Source: Bank call reports as of 1Q10

Whether viewed through the lens of banks or BHCs, the capital raises required to meet the 4+4 test vary within a relatively narrow range when expressed as a percentage of the consolidated assets of the organizations needing to raise the capital. For example, 11 of the 12 capital raises for various size ranges of institutions reported in Tables 2 and 5 range between 1.2 percent of assets and 2.5 percent of assets; the 3.5 percent capital raise pertains to small BHCs filing a Y-9c, a population that may include some institutions in special situations. Analysis of normalized earnings potential could shed light on the amount of time required to complete these capital raises if all equity had to be generated internally.

We have also included estimates of the capital raises required to meet other standards than a 4+4 test. Tables 9 and 10 report such estimates for a "3+3" test (3 percent TCE minimum and 3 percent TCE buffer); Tables 11 and 12 provide the same information for a "5+5" requirement. Comparison of Tables 2, 9 and 11 indicates that as the total TCE to RWA standard increases from 6 to 8 to 10, the impact increases markedly at TCE ratios above 8. For example, the number of insured banks failing to meet the requirements is 186 for a 6 percent requirement, 399 for an 8 percent requirement, and 1101 for a 10 percent requirement.

### Table 9. Alternative "3+3" test for insured banks

| IDI's that would fall below 6% Threshold |          |            |        |         |  |  |  |  |
|--|----------|------------|--------|---------|--|--|--|--|
| Assat Danas                              | Number   | \$ Amount  | % of   | % of    |  |  |  |  |
| Asset Range                              | of Banks | (billions) | assets | capital |  |  |  |  |
| Over \$250 billion                       | 1        | \$0.5      | 0.2%   | 2%      |  |  |  |  |
| \$100 to \$250 billion                   | 1        | \$3.6      | 2.5%   | 24%     |  |  |  |  |
| \$15 to \$100 billion                    | 1        | \$0.7      | 1.3%   | 14%     |  |  |  |  |
| \$1 to \$15 billion                      | 25       | \$2.1      | 2.5%   | 47%     |  |  |  |  |
| \$500 million to \$1 billion             | 28       | \$0.5      | 2.3%   | 54%     |  |  |  |  |
| Less than \$500 million                  | 130      | \$0.5      | 2.0%   | 46%     |  |  |  |  |
| Total Banks                              | 186      | \$7.8      | 1.3%   | 15%     |  |  |  |  |

Source: 1Q10 Call Reports

### Table 10. Alternative "3+3" test for BHCs

| Companies that would fall below 6% Threshold |                   |                         |                |                 |  |  |  |  |
|--|-------------------|-------------------------|----------------|-----------------|--|--|--|--|
| Asset Range                                  | Number<br>of BHCs | \$ Amount<br>(billions) | % of<br>assets | % of<br>capital |  |  |  |  |
| Over \$250 billion                           | 5                 | \$35.7                  | 0.8%           | 9%              |  |  |  |  |
| \$100 to \$250 billion                       | 3                 | \$7.7                   | 1.4%           | 16%             |  |  |  |  |
| \$15 to \$100 billion                        | 7                 | \$6.6                   | 1.9%           | 22%             |  |  |  |  |
| \$1 to \$15 billion                          | 89                | \$5.3                   | 2.3%           | 29%             |  |  |  |  |
| \$500 million to \$1 billion                 | 80                | \$1.0                   | 1.8%           | 25%             |  |  |  |  |
| Less than \$500 million                      | 36                | \$0.5                   | 3.3%           | 74%             |  |  |  |  |
| Total Bank Holding Co's                      | 220               | \$56.8                  | 1.0%           | 12%             |  |  |  |  |

Source: SNL; Y9C data as of March 31, 2010

### Table 11. Alternative "5+5" test for insured banks

| IDI's that would fall below 10% Threshold |          |            |        |         |  |  |  |  |
|---|----------|------------|--------|---------|--|--|--|--|
| Areat Develo                              | Number   | \$ Amount  | % of   | % of    |  |  |  |  |
| Asset Range                               | of Banks | (billions) | assets | capital |  |  |  |  |
| Over \$250 billion                        | 5        | \$65.9     | 1.4%   | 14%     |  |  |  |  |
| \$100 to \$250 billion                    | 8        | \$21.1     | 1.7%   | 16%     |  |  |  |  |
| \$15 to \$100 billion                     | 14       | \$9.1      | 1.4%   | 12%     |  |  |  |  |
| \$1 to \$15 billion                       | 164      | \$9.7      | 1.7%   | 21%     |  |  |  |  |
| \$500 million to \$1 billion              | 151      | \$1.8      | 1.8%   | 23%     |  |  |  |  |
| Less than \$500 million                   | 759      | \$2.6      | 1.7%   | 22%     |  |  |  |  |
| Total Banks                               | 1,101    | \$110.3    | 1.5%   | 15%     |  |  |  |  |

Source: 1Q10 Call Reports

| Companies that would fall below 10% Threshold |         |            |        |         |  |  |  |  |
|---|---------|------------|--------|---------|--|--|--|--|
| Accest Denge                                  | Number  | \$ Amount  | % of   | % of    |  |  |  |  |
| Asset Range                                   | of BHCs | (billions) | assets | capital |  |  |  |  |
| Over \$250 billion                            | 11      | \$249.2    | 2.3%   | 29%     |  |  |  |  |
| \$100 to \$250 billion                        | 9       | \$38.7     | 2.6%   | 25%     |  |  |  |  |
| \$15 to \$100 billion                         | 19      | \$25.6     | 2.9%   | 27%     |  |  |  |  |
| \$1 to \$15 billion                           | 239     | \$18.8     | 2.7%   | 28%     |  |  |  |  |
| \$500 million to \$1 billion                  | 254     | \$4.4      | 2.4%   | 27%     |  |  |  |  |
| Less than \$500 million                       | 62      | \$1.1      | 4.4%   | 65%     |  |  |  |  |
| Total Bank Holding Co's                       | 594     | \$337.7    | 2.4%   | 28%     |  |  |  |  |

### Table 12. Alternative "5+5" test for BHCs

Source: SNL; Y9C data as of March 31, 2010

There are important limitations to this analysis that need to be emphasized. Not all of the deductions contemplated in the December proposals can be captured with analysis of public financial reports. One example is deducted financial equity exposures. To the extent this analysis misses important deductions it understates the impact of the proposals. Moreover, this analysis does not consider the impact of a new leverage ratio requirement, the final form of which is not yet known, that includes off balance sheet items. Other considerations work in the other direction. For example, if the BCBS decides not to require full deduction of some items, the required capital raise would be mitigated, as it also would be to the extent any deducted items are grandfathered.

Attachment

### Basel 3 Risk-based Capital Calibration and Translation from Old to New RWA

This note starts from the presumption that minimum and buffer capital requirements should, taken together, provide for a high degree of confidence that banks can continue to operate while absorbing losses of a magnitude that might be expected in a severe scenario. Thus, loss absorbing equity (we will refer to this as tangible common equity or TCE) should be maintained at levels that will provide a high degree of protection against stressed losses relative to risk-weighted assets.

Also, while not taking a position on the precise form of a capital surcharge for systemically important financial institutions (SIFIs), this note presumes that the numerical capital requirements applied to SIFIs will not be lower than the numerical capital requirements applied to non-SIFIs.

The note presumes that there is an overriding policy interest in a strong and credible minimum capital requirement. Accordingly, the numerical value of the minimum capital requirement is presumed to be not less than that of the buffer.

The note includes a very brief overview of calibration of the TCE requirement to old RWA, a discussion of how these requirements might translate to requirements expressed in new RWA, and a "straw man" calibration option for discussion.

### Solvency standard and calibration to old RWA

The Basel Committee's Top Down Calibration Group (TCG) has analyzed the historical distribution of negative net income as a percent of RWA, to shed light on how much loss absorbing equity relative to RWA is needed to provide a suitable degree of loss absorption in a stressful scenario. For example, the attachment (reproduced from Table 2 of "Capital Calibration Work Stream: Summary of Initial Results," 18 May 2010, prepared by the Federal Reserve Bank of New York on behalf of the TCG's Capital Calibration work-stream) presents the return on risk-weighted assets (RRWA) for the top 20 BHCs at various solvency standards. The 99.9 percent solvency standard is of interest because it was the standard the Committee agreed for the calibration of Basel II. Depending on the measurement concept used (annual data, and rolling average of last 4, 6 or 8 quarters), the RRWA for the top 20 BHCs ranges from -6.5 percent to -11.3 percent (measured relative to "old" RWAs).

A number of considerations suggest a calibration for the minimum plus the buffer that is relatively close to the upper end of this range. Periods of high loss can persist for more than 4 quarters; peak losses are important and can exceed cumulative losses over any given period; losses may have exceeded those actually realized absent substantial governmental support during the crisis; and losses in the attached table may be biased downwards on account of "survivorship bias."

For discussion purposes, a calibration of TCE/old RWA at 5 percent minimum plus 5 percent buffer seems a reasonable starting point for analysis.

### Translation to new RWA

The historical loss analysis described above was relative to the experience with the "pre-Basel 3" definition of risk weighted assets; and in fact much of the loss experience for this exercise was relative to Basel I risk-weighted assets. In these discussions, pre-Basel 3 RWA has been referred to as "old RWA."

A recent note, for example, discussed a minimum requirement of tangible common equity (TCE) to old RWA in the range of 4-6 percent. If we suppose for the sake of discussion that increasing the amount of required high quality capital to this range will provide an appropriate regulatory minimum, then changes in RWA layered on top of the new numerical minimum could have unintended consequences for the effective minimum capital requirement. For example, if RWA going forward were expected to be substantially less than the RWA used for the calibration exercise, the result could be to undo the effects of the higher numerical minimum requirements, resulting in insufficient capital. Conversely, if RWA going forward were substantially more than the RWA used for calibration, the effective capital raise required could greatly exceed the capital raise that was suggested as necessary by the calibration exercise.

For example, if the Committee believed a 6 percent minimum TCE to old RWA requirement was warranted, but RWA under Basel 3 were expected to be half of "old RWA," then a 12 percent minimum requirement as a percent of new RWA would be needed to obtain the same degree of protection. Conversely, if new RWA were expected to be double the old RWA, a 3 percent requirement as a percent of new RWA would give the same protection as a 6 percent requirement expressed relative to old RWA.

A simple way to express these concepts is as follows:

Required capital/new RWA = (required capital /old RWA)\*(old RWA/new RWA)

In the above, "old RWA/new RWA" can be viewed as a translation factor for converting requirements expressed in old RWA into a requirement expressed in new RWA.

This note assumes that we want the new Basel 3 requirements to ensure that banks will have enough capital as they enter the next period of financial stress, even after any potential pro-cyclical reduction in RWA that can expected to occur during an economic expansion. This objective would not be satisfied if we greatly overestimate the RWA the new framework will deliver on a through-the-cycle basis. Thus, in the above formulation, "old RWA" and "new RWA" should be viewed as through-the-cycle averages of RWA for the industry-wide portfolio of exposures viewed at different times in the cycle. For example, the same portfolio that appears very risky today, 5 years ago might have been deemed low risk and received a negligible risk-weighting.

One way to operationalize the translation described above would be to simply use the old and new RWA reported in the Comprehensive QIS exercise. For a number of reasons, we believe it is conceptually incorrect to translate old RWA to new RWA using a simple extrapolation of RWA results reported in the Comprehensive QIS. This is primarily because there is reason to believe the RWA reported in the QIS may be cyclically high and does not reflect the desired through-the-cycle measurement (QIS could even reflect some estimation bias since banks may have an incentive to overestimate the capital required by the proposals, but this note does not address this issue). We believe that a number of factors suggest that the increase in RWA under Basel 3 will be considerably less than what a simple extrapolation based on the QIS results would suggest. These factors are as follows.

<u>Credit risk</u>. With the exception of the correlation assumption for large financial exposures, the Basel 3 proposals did not change the supervisory formulas that assign risk-weights for credit risk. Pillar 1 contains no requirements for the use of stressed values of the PDs, LGDs and EADs that are inputs to these formulas. Consequently, for purposes of estimating these risk inputs, the experience of the crisis will be reflected in the advanced approach capital requirements by the addition of a few years worth of new data points in a long time series of credit loss history.

Experience and analysis suggests that peak-to-trough variation in credit risk RWA under the advanced approach is substantial. Moreover, in comparison to the credit risk RWA under Basel I that were the basis of much of the calibration work performed by the Capital Calibration Working Group, credit risk RWA under the advanced approach tends to be markedly lower in periods where economic conditions are benign (and in a number of countries this has been true even throughout the crisis).

<u>Market risk</u>. Currently anticipated increases in market risk RWA, especially for the largest U.S. banks, are driven heavily by the preponderance of speculative grade and unrated securitizations in their trading books. Capital treatments alternative to deduction are available for unrated securitizations, and it is not anticipated that banks would adopt a long term strategy of holding deducted unrated securitizations in their trading books. We would also not expect during an economic expansion to see heavy exposures to downgraded securitizations in trading books. Accordingly, we believe current market risk QIS results may have a pronounced bias towards much higher RWAs than are likely to be realized.

Further, apart from mandated securitization deductions, new market risk charges causing increases in RWA are modeled charges based on banks' own estimates. There is considerable softness in these numbers and considerable uncertainty as to the amounts of RWA that will be realized. For example, Table 18 of "Analysis of the Fourth Quantitative Impact Study" reports that the Incremental Risk Charge adds 59 percent to market risk capital requirements, but with a standard deviation across the reporting banks of 48 percent; that the changes to the correlation trading portfolios would add 67 percent to market risk capital requirements, but with a standard deviation of 73 percent; and that stressed VAR requirements would add 59 percent to market risk capital requirements would add 59 percent to market risk capital requirements would add 59 percent.

<u>CVA</u>. Large CVA charges in the recent QIS have been almost universally criticized as being too high. A number of proposals to recalibrate the CVA charge to produce lower capital requirements have been put forward and one or more of these changes will probably be adopted.

<u>Applicability of a translation to various types of banks</u>. For a bank operating under the Basel II standardized approach, the conceptually correct RWA translation from Basel I RWAs is likely to be negligible.

For a bank that operates under the advanced approach, specializes in credit risk and does not have trading operations or a large derivatives portfolio, the appropriate translation from Basel I RWA to its new RWA is most likely opposite in direction to the type of translation that has been considered for the largest banks with large trading operations and derivatives businesses. Thus, for example, a 5 percent charge under the old RWA for such a bank might be quantitatively equivalent to a 6-7 percent charge under the new RWA.

This note does not address these "cross-bank" issues. Given that there will be a single set of capital requirements applicable to all banks (except possibly for a SIFI surcharge for the largest banks), a prudent policy response might be to limit how "aggressive" any downward RWA translation adjustment would be.

### **RWA** Scenarios

Table 1 is intended to illustrate how various assumptions about the trend in credit risk RWA and market risk RWA might affect one's view of the appropriate translation between old and new RWA. Table 1 takes as a starting point a stylized initial RWA composition and makes simplified assumptions about future RWA for operational risk and CVA, assumptions that are held fixed for purposes of the Table. We have shaded some of the cells of the Table to correspond to a range of potential corrections for future pro-cyclicality in credit risk RWA and market risk RWA that we (FDIC staff) believe to be plausible.

As an example of how this analysis might be applied, if the shading of cells in Table 1 were deemed reflective of a likely range of RWA scenarios, we might conclude that, in round numbers, a 5 percent minimum TCE requirement in terms of old RWA might translate roughly to a 4 percent minimum TCE requirement in terms of new RWA.

| 2a) RWA scenario    | os for credit ris               | k and marke | et risk      |             |       |      |  |  |  |
|---------------------|---------------------------------|-------------|--------------|-------------|-------|------|--|--|--|
| Increase in RWA     |                                 | Multiple    | e on current | credit RW   | /A:   |      |  |  |  |
| for Market Risk     | 120%                            | 100%        | 90%          | 80%         | 70%   | 60%  |  |  |  |
| 4.6 times           | 179                             | 164         | 156.5        | 149         | 141.5 | 134  |  |  |  |
| 4 times             | 170                             | 155         | 147.5        | 140         | 132.5 | 125  |  |  |  |
| 3.4 times           | 161                             | 146         | 138.5        | 131         | 123.5 | 116  |  |  |  |
| 2.8 times           | 152                             | 137         | 129.5        | 122         | 114,5 | 107  |  |  |  |
| 2.2 times           | 143                             | 128         | 120.5        | 113         | 105.5 | 98   |  |  |  |
| 1.6 times           | <u>134</u>                      | 119         | 111.5        | 104         | 96.5  | 89   |  |  |  |
|                     |                                 |             |              |             |       |      |  |  |  |
| 2b) Implied transla | ation from old                  | RWA to nev  | v RWA        |             |       |      |  |  |  |
| Increase in RWA     | Multiple on current credit RWA: |             |              |             |       |      |  |  |  |
| for Market Risk     | 120%                            | 100%        | 90%          | 80%         | 70%   | 60%  |  |  |  |
| 4.6 times           | 0.56                            | 0.61        | 0.64         | 0.67        | 0.71  | 0.75 |  |  |  |
| 4 times             | 0.59                            | 0.65        | 0.68         | 0.71        | 0.75  | 0.80 |  |  |  |
| 3.4 times           | 0.62                            | 0.68        | 0.72         | 0.76        | 0.81  | 0.86 |  |  |  |
| 2.8 times           | 0.66                            | 0.73        | 0.77         | 0.82        | 0.87  | 0.93 |  |  |  |
| 2.2 times           | 0.70                            | 0.78        | 0.83         | 0.88        | 0.95  | 1.02 |  |  |  |
| 1.6 times           | 0.75                            | 0.84        | 0.90         | 0.96        | 1.04  | 1.12 |  |  |  |
|                     |                                 |             |              |             |       |      |  |  |  |
| 2c) Implied transla | ation of 5 perc                 | ent TCE to  | old RWA in I | terms of ne | w RWA |      |  |  |  |
| Increase in RWA     |                                 | Multiple    | e on curren  | t credit RV | VA:   |      |  |  |  |
| for Market Risk     | 120%                            | 100%        | 90%          | 80%         | 70%   | 60%  |  |  |  |
| 4.6 times           | 2.8                             | 3.0         | 3.2          | 3.4         | 3.5   | 3.7  |  |  |  |
| 4 times             | 2.9                             | 3.2         | 3.4          | 3.6         | 3.8   | 4.0  |  |  |  |
| 3.4 times           | 3.1                             | 3.4         | 3.6          | 3.8         | 4.0   | 4.3  |  |  |  |
| 2.8 times           | 3.3                             | 3.6         | 3.9          | 4.1         | 4.4   | 4.7  |  |  |  |
| 2.2 times           | 3.5                             | 3.9         | 4.1          | 4.4         | 4.7   | 5.1  |  |  |  |
| 1.6 times           | 3.7                             | 4.2         | 4.5          | 4.8         | 5.2   | 5.6  |  |  |  |

Table 1. RWA assumptions for market and credit risk and implied translation from old RWA to new RWA

Notes: Table assumes old RWA of 100 as follows: non-CVA credit=75; op risk=10, market risk=15; and CVA=0. New RWA for non-CVA credit risk as a percentage of old is assumed to vary as described in the column headings. New RWA for market risk is assumed to increase 4 times, from 15 to 60, as indicated in row 2 of tables 2a, 2b and 2c. Row 1 assumes 120% of the increase in market risk RWA is realized; row 3 assumes 80% of the increase is realized; row 4 assumes 60% of the increase is realized; row 5 assumes 40% of the increase is realized; and row 6 assumes 20% of the increase is realized. RWA for operational risk remains constant at 10, and the new RWA for CVA is assumed equal to 10 (this corresponds very roughly to what CVA relative to old RWA might be for a sample of large U.S. banks, after elimination of the 5 times multiple). Table assumes that a capital requirement expressed in old RWA would be translated as follows: Ratio to new RWA = (old RWA/new RWA)\*(ratio to old RWA).

Attachment

### Percentiles of the Distribution of Return on Risk-Weighted Assets Using After-tax Net Income for U.S. Bank Holding Companies\*

|                               |                           | Percentile |       |          |           |            |            |            |  |
|-------------------------------|---------------------------|------------|-------|----------|-----------|------------|------------|------------|--|
|                               | Number of<br>Observations | 95/5       | 99/1  | 99.5/0.5 | 99.9/0.10 | 99.95/0.05 | 99.97/0.03 | 99.99/0.01 |  |
| Annual Data 1981 - 20         | 009                       |            |       |          |           |            |            |            |  |
| Entire Sample                 | 9534                      | -1.01      | -5.44 | -7.45    | -13.07    |            | -19.41     | -29.18     |  |
|                               |                           |            |       |          |           |            |            |            |  |
| By Asset Size                 |                           |            |       |          |           | ( 50       | ( 50       | 6.50       |  |
| Top 20                        | 580                       | -1.35      | -4.08 | -4.91    | -6.50     | -6.50      | -6.50      | -0.50      |  |
| Below Top 20                  | 8954                      | -0.93      | -5.52 | -7.53    | -13.08    | -17.30     | -19.41     | -29.10     |  |
|                               |                           |            |       |          |           |            |            |            |  |
| <b>Rolling 4 Quarters 198</b> | 86 - 2009                 |            |       |          |           |            |            | 20.49      |  |
| Entire Sample                 | 26862                     | -1.13      | -5.77 | -7.89    | -14.86    | -20.35     | -24.23     | -28.48     |  |
|                               |                           |            |       |          |           |            |            |            |  |
| By Asset Size                 |                           |            |       |          |           |            | 11.22      | 11.22      |  |
| Top 20                        | 1775                      | -1.36      | -2.95 | -4.76    | -6.50     | -11.32     | -11.32     | -11.32     |  |
| Below Top 20                  | 25087                     | -1.10      | -5.95 | -8.11    | -14.90    | -21.30     | -24.35     | -20.40     |  |
|                               |                           |            |       |          |           |            |            |            |  |
| Rolling 6 Quarters 198        | 86 - 2009                 |            |       |          |           |            |            | 24.25      |  |
| Entire Sample                 | 25039                     | -1.38      | -7.33 | -10.31   | -18.33    | -25.18     | -28.59     | -34.35     |  |
|                               |                           |            |       |          |           |            |            |            |  |
| By Asset Size                 |                           |            |       |          |           |            | 11.00      | 11.22      |  |
| Top 20                        | 1711                      | -1.15      | -3.74 | -4.81    | -7.76     | -11.22     | -11.22     | -11.22     |  |
| Below Top 20                  | 23328                     | -1.42      | -7.51 | -10.59   | -19.67    | -25.73     | -30.04     | -34.35     |  |
| <b>^</b>                      |                           |            |       |          |           |            |            |            |  |
| <b>Rolling 8 Quarters 19</b>  | 86 - 2009                 |            |       |          |           |            |            | 20.10      |  |
| Entire Sample                 | 23335                     | -1.33      | -7.94 | -11.72   |           | -29.22     | -33.33     | -39.18     |  |
|                               |                           |            |       |          |           |            |            |            |  |
| By Asset Size                 |                           |            |       |          |           |            | 0.07       | 0.07       |  |
| Top 20                        | 1652                      | -0.62      | -3.96 | -5.64    | -7.99     | -8.8/      | -8.8/      | -0.0/      |  |
| Below Top 20                  | 21683                     | -1.42      | -8.37 | -11.99   | -21.88    | -29.96     | -34.89     | -39.10     |  |

\* Reproduction of table prepared by the Federal Reserve Bank of New York