

Basel II's New Standardized Approach: Possible Effects of Implementation

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Abstract

The New York State Banking Department surveyed 33 institutions in 2001 and 2002 for a study of the possible effects of the Standardized Approach of the proposed New Capital Accord. Previously, the BIS Quantitative Impact Studies have focused on internationally active banks; this study provides information on the possible impact of the New Accord on domestic banks with asset size between \$1 billion and \$31 billion. These institutions are often grouped with community banks.

The Department found that implementation of the most recent version of the Standardized Approach could lead to an average decrease of 7% in required capital for credit risk, but adding the proposed operational risk charge could bring the total capital charge on average to an increase of 12%. In addition, the estimated impact of the New Standardized Approach varies widely across institutions in the study: the change in minimum capital required for credit risk ranges from a decrease of 23% to an increase of 6%. The Basic Indicator charge for operational risk ranges from 5% of minimum regulatory capital for one savings bank to 83% of minimum required capital for a specialty bank.

In this paper, we present a breakdown of the effects of the various elements of the proposed Standardized Approach, and consider a modified approach. We also analyze Call Report data for the survey banks to determine their "complexity profile" and review possible changes to their capital ratios.

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Background

In the fall of 2001 and spring of 2002, the New York State Banking Department surveyed 33 of the institutions it supervises for a study of the possible effects of the Standardized Approach of the New Capital Accord.

The New Capital Accord was released by the Basel Committee in January 2001, and it has been the subject of discussion and study by banking institutions and their regulators around the world. Certain revisions to the New Accord were announced on July 10, 2002, and additional information was released in the Technical Guidance for QIS 3 in October 2002. A final consultative document is scheduled for release in May 2003, and implementation is slated for year-end 2006. The New Accord specifies application of its regulations to internationally active institutions, but includes a simple approach to calculating credit risk capital requirements, called the Standardized Approach, for domestic institutions.

The Basel Committee reported several aims when the New Basel Accord was released in January 2001:

- achieving greater risk sensitivity in capital requirements
- maintaining the overall level of capital in the banking system
- providing a modest incentive for banks to move to the internal ratings based approaches.

One motivation for the NYSBD survey was to consider how well the New Standardized Approach meets these goals.

The details of implementing the New Accord will be determined by each nation's regulators. As of yet, the U.S. federal banking agencies have focused on

¹ The opinions expressed in this paper are the author's and do not necessarily reflect the views of the New York State Banking Department. I would like to thank Jim Galizia for his invaluable assistance with fact-checking and John McEnerney and Regina Stone for helpful discussions and comments.

issues of applying the Accord's internal ratings based approach to credit risk at complex banking institutions, and have said that there should be little change in capital requirements for community banks².

Main Results

The New York State Banking Department study was undertaken to provide a starting point for a discussion of the possible impact of implementation of the Standardized Approach for domestic institutions. The Banking Department collected data from 33 state-chartered institutions, including six specialty banks. The Department estimated minimum capital requirements, first, as though the January 2001 proposed Standardized Approach had been implemented on 12/31/01, and, then incorporating the revisions published on July 10, 2002. The results of this study were:

- While the original Standardized Approach released in January 2001 could lead to a slight decrease (less than 1%) on average in minimum capital requirements for credit risk, the revisions announced on July 10, 2002, could produce an average decrease of more than 7% in minimum capital requirements at the surveyed institutions.
- Under both versions of the Standardized Approach – the January 2001 document and the July 2002 revisions – the effect on individual banks varied widely. Under the original Standardized Approach, the estimated change in minimum capital requirements for credit risk ranged from a decrease of 16% to an increase of 9%; when the Standardized Approach was estimated with the July 2002 revisions, the change in minimum capital requirements varied from a low of -23% to a high of 6%.
- An operational risk charge was calculated according to the Basic Indicator Approach, i.e., as 15% of annual gross income. The operational risk charge – targeted by the Basel Committee at 12% of minimum regulatory capital – ranged from 5% to 83% of 12/31/01 minimum required capital. The average operational risk charge was 19% of minimum regulatory capital across all institutions and 14% for depository institutions. As gross income varied widely from institution to institution the operational risk charge varied also.
- This Basic Indicator operational risk charge was added to the estimated charges for credit risk and the change for the total charge was estimated. The average change from an institution's reported minimum capital requirements was an increase of 12% when all survey institutions were included, and 6% when the average was taken across the 27 depository institutions.

² Remarks by Vice Chairman Roger W. Ferguson, Jr., at the 106th Annual Convention of the North Carolina Bankers Association, White Sulphur Springs, West Virginia, May 21, 2002

- Under the January 2001 version of the Standardized Approach, the estimated change in minimum required capital for credit risk from the current requirement was an increase for 19 institutions; when the July 2002 revisions were calculated, only six institutions' estimated minimum required capital increased.

Methodology

Thirty-three institutions participated in the Banking Department study. Six banks, with assets ranging from \$1 billion to under \$40 billion, were surveyed as of 6/30/01; all but one of the remaining institutions, which had assets between \$100 million and \$40 billion, were surveyed as of 12/31/01. The last institution, because of data collection difficulties, submitted information as of 3/31/02. Among the banks surveyed there were six specialty banks,³ 15 commercial banks, and 12 savings institutions. Of the 27 FDIC-insured institutions in the survey, 20 are public companies. Four of the specialty banks are subsidiaries of public companies.

The major change in the New Accord's Standardized Approach is that claims would be assigned to risk buckets according to their external ratings, rather than solely by type of counterparty (*i.e.*, sovereign, bank, residential real estate, and corporate). New charges are also proposed for unused commitments with an original maturity one year and under (unless they can be cancelled unconditionally by the bank without informing the borrower) and for collateralized repo transactions, both assets and liabilities.

The Call Report (Consolidated Report of Condition) filed by each institution was the starting point for the survey. The Banking Department determined which items on the Schedule RC-R could change under the proposed Standardized Approach and then approached the banks for information on the ratings breakdown for these items. Since banks do not report separately the unused commitments under one year that are not unconditionally cancelable, the Banking Department asked the survey banks for this information. Also, as repo liabilities were not reported separately on the 12/31/01 Call Report (Fed funds purchased and securities sold under repurchase agreements were reported as one item), information on the amount and type of repo liabilities was also requested. Once the Banking Department received the relevant information, it was able to estimate total risk-weighted assets under the new proposal. Certain simplifying assumptions were used in the survey; *e.g.*, that the definition of residential real estate would remain the same and that the "simple" collateral treatment would be used by banks in the survey.

There were 11 banks among the 33 surveyed that reported private asset-backed securitizations that would have been assigned to risk buckets according to

³ The specialty banks are non-depository state-chartered institutions, and include trust companies and private and overseas banks.

external ratings, if the Call Report had been filed after January 1, 2002. [Revised rules for the capital treatment of asset securitizations, which assign risk buckets for asset-backed securities based on external ratings, became effective as of January 1, 2002.] Since these asset-backed securities were highly rated, recognition of their ratings under the new Standardized Approach led to decreases in risk-weighted assets. However, these decreases are no longer changes from “current” capital requirements.

The revisions announced by the Basel Committee in July 2002 assigned a risk weight of 40% to residential real estate instead of the current 50% risk weight. An additional revision calls for risk-weighting non-mortgage retail exposures at 75% instead of the current 100%. Small and medium enterprise non-mortgage exposures under Euro 1 million are also assigned a 75% risk weight. For the purposes of this study, loans and leases risk-weighted at 50% on the Call Report were weighted at 40%. Loans to individuals were risk-weighted at 75%, and the percentage of C&I loans that were reported in 6/30/01 as being under \$1 million were risk-weighted at 75%.⁴

The October 2002 QIS 3 Technical Guidance paper includes a description of a “granularity” criterion for the regulatory retail portfolio, which is eligible for the 75% risk weight.⁵ This criterion specifies that “No aggregate exposure to one counterpart can exceed 0.2% of the overall regulatory retail portfolio.” Interestingly, when the retail portfolios eligible for the 75% risk weight were estimated at the 27 FDIC-insured survey institutions, the granularity limit at 20 banks was less than \$1 million, and less than \$250,000 at 12 institutions. This implies that this criterion may curtail the eligibility of smaller banks’ retail exposures for the 75% risk weight.

Information on small and medium enterprise exposures was not available for the specialty banks. Only three of these institutions reported any C&I loans.

Changes in the Capital Requirement for Credit Risk

Nineteen institutions were estimated to have an increase in minimum capital requirements for credit risk under the January 2001 Standardized Approach; one institution had no change in minimum capital requirements for credit risk and 13 estimates were decreases. Of the institutions with estimated decreased charges, eight were savings banks, three were commercial banks, and two were specialty

⁴ Banks reported small business loans on the 6/30/01 Call Report. The author assumed that the same percentage of C&I loans was under \$1 million in face value as of 12/31/01 as on 6/30/01 for the institutions whose 12/31/01 capital requirements were estimated.

⁵ Basel Committee on Banking Supervision, “Quantitative Impact Study 3: Technical Guidance,” p. 11

banks. Of the 19 banks with estimated increased charges, four were savings banks, three were specialty banks, and 12 were commercial banks.

The situation was very different when the July 2002 revisions were incorporated in the estimates. Only six institutions – 3 commercial banks, 1 savings bank, and 2 specialty banks – had estimated minimum capital requirements under the July 2002 revisions that were increases. Chart 1 presents a comparison of the net change in minimum capital required for credit risk under both the January 2001 document and the July 2002 revisions. All 33 institutions are covered in this chart.

Drivers of Changed Capital Requirements

The net change in minimum required capital under the January 2001 proposal was most often the outcome of a trade-off: a decrease in risk-weighting requirements due to recognition of securities' ratings was netted against the increase in required capital from new charges for unused commitments with an original maturity one year and less and for collateralized repo transactions.

The effect of recognizing corporate ratings was greatest in the risk-weighting of available-for-sale and held-to-maturity securities. For all but five banks, the estimated risk-weighting for the securities portfolio was lower than currently because highly rated securities⁶ were in their portfolios. Only four institutions, three of which were specialty banks, had loans to rated counterparties, so risk weighting for most loans among the survey banks remained at 100%. Nine institutions had off-balance sheet transactions with corporate counterparties. For derivative transactions with unrated counterparties, risk-weighted assets increased because the 50% risk-weight ceiling has been removed in the new Standardized Approach. At the same time, risk-weighted assets decreased for off-balance sheet transactions with AA- or better rated counterparties.

Under the July 2002 revisions, however, the lower risk-weighting for residential real estate and non-mortgage retail lending led in most cases to decreases greater than the increases from the new charges for unused commitments of one year and less and collateralized repo transactions. Table 1 below describes the effects produced by the changes in risk-weighted assets at the 33 institutions surveyed.

When the change in risk-weighted assets was estimated for individual banks, the change due to the recognition of securities' ratings produced, on average, the greatest portion of the decrease. Chart 2 shows the breakdown of the average percent change for different categories. (The *average percent change* is the

⁶ Almost half of the decrease in risk-weighted assets for available for sale and held to maturity securities came from the recognition of ratings for asset-backed securities, including private mortgage-backed securities and CMOs.

average over 33 institutions of the change in risk-weighted assets at each bank expressed as a percent of the bank’s reported total risk-weighted assets.)

The Banking Department summed the decreases in risk-weighted assets due to the changes that produced decreases on average – recognition of securities’ ratings, recognition of corporate ratings, the change in risk-weighting for residential real estate, and the change in non-mortgage retail risk weights –

Table 1.

<i>Driver</i>	<i>Increase</i>	<i>Decrease</i>	<i>No Change</i>
Recognition of securities’ ratings	7	22	4
40% risk-weight for residential real estate	--	29	4
75% risk weight for non-mortgage retail & SMEs	--	30	3
Recognition of corporate counterparty ratings	4	6	23
150% risk weight for loans past due 90 days	24	--	9
Recognition of ratings for bank counterparties	16	1	16
Capital requirement for repurchase agreements	19	--	14
Capital requirement for short-term commitments	28	--	5

across institutions to determine which was the greatest driver of overall decrease. The change to a 40% risk weight for residential real estate seems to contribute the greatest decrease (38%) in overall risk-weighted assets for depository institutions (when specialty banks were excluded). Chart 3 shows the relative contribution of each of these changes to the total decrease resulting from the combined changes for the 27 depository institutions.

However, when the decreases in risk-weighted assets due to these changes were summed across all 33 institutions – including the six specialty banks – the contributions from the changes differed. Across all institutions, the contribution to overall decrease of the recognition of securities’ ratings was 17%, while that of the change to 40% risk-weighting for residential real estate was 24% and the change in risk-weighting for non-mortgage retail contributed 35% to the overall decrease. Recognition of corporate counterparty ratings contributed 23% to the combined decrease. The differences are due primarily to large consumer loan portfolios held

by the specialty banks and on- and off-balance sheet exposures to rated counterparties held by these banks. (However, information on the effects of the change for non-mortgage retail was incomplete for the specialty institutions since data on small business loans was unavailable.)

A Modified Approach

For survey banks, the most controversial element of the new Standardized Approach was the capital requirement for repo liabilities. This falls under the general requirement for a capital charge for collateralized transactions, including repos and reverse repos. Several survey banks noted that the securities sold under agreements to repurchase were already risk-weighted for capital requirements. The survey banks usually sell Treasury or Agency securities under agreements to repurchase, so the risk weight for these transactions was 20% or less. This element of the new Standardized Approach had a sizeable impact, as 19 out of the 33 institutions surveyed had increased estimated capital requirements from repo liabilities.

If the January 2001 Standardized Approach is modified by dropping the capital charge for repo liabilities, the risk-sensitive changes remain and the level of capital for the survey banks is closer to the current level than under the July 2002 revisions. On average, estimated minimum capital requirements under this modified Standardized Approach decrease by 2%, as compared to an average reduction of 7% under the July 2002 revisions. Changes in minimum required capital range between a decrease of 22% to an increase of 6.5%. Banks with estimated increased charges are almost half of the total (15), while 17 banks had estimated decreased minimum capital requirements, and one bank had no change. Chart 4 shows estimated capital charges under the July 2002 revisions and under this modified approach, where the capital charge for repo liabilities has been excluded.

“Complex” Activities at Survey Banks

Although the main focus of the NYSBD survey was the possible impact of the new Standardized Approach, an earlier approach to capital requirements for domestic institutions is also relevant. The Federal banking agencies released an advance notice of proposed rule-making, “Simplified Capital Framework for Non-Complex Institutions,” in October 2000. This notice presented a range of options for a capital framework specifically for non-complex institutions, and asked for comments from community banks. Only a small number of comment letters were received⁷, and in January 2001 attention shifted to the New Basel Accord.

⁷ Remarks by Governor Laurence H. Meyer at the Ohio Bankers’ Day Conference, Columbus, Ohio, March 15, 2001.

However, the advance notice raised important questions about non-complex banks, and proposed a definition of a non-complex institution. A non-complex institution would be under \$5 billion in assets, have a relatively simple balance sheet, and a moderate level of off-balance sheet activity. The Agencies also presented a list of activities to be used as a possible “screen” for determining if an institution had a “complex” profile. No threshold level for these activities was stated, but the notice asked for comments on an appropriate level.

Most of the banks in the survey fall under the notice’s definition of non-complex. Of the 33 institutions, six have assets under \$1 billion, 19 have assets under \$5 billion, and 26 have assets under \$10 billion. The “screen” for complex activity proposed in the advance notice lists 12 activities: 20 institutions reported two or fewer of these activities. Three institutions reported none of the activities. Table 2 below lists the screened activities, and the number of banks that reported these activities. The Banking Department used 12/31/01 Call Report data to determine presence of activity.

The Agencies stated in the advance notice that they “believe that a strong relationship exists between the asset size of an institution and its relative complexity.” They also state that this effect is “generally more pronounced for institutions with less than \$1 billion in assets.” The survey banks did not demonstrate a clear relationship between size and complexity: asset size for institutions that reported only one complex activity ranged from \$769 million to \$20 billion and asset size for institutions with six to eight complex activities ranged from \$4 billion to \$31 billion. The complex activities reported by FDIC-insured banks that showed only one complex activity included other off-balance sheet liabilities, mortgage servicing rights, performance letters of credit, and interest rate derivatives. Chart 5 plots the survey institutions in terms of asset size and number of complex activities reported.

The Banking Department also considered whether an institution’s complexity profile had any relation to the amount or direction of change in minimum required capital. Chart 6 shows the estimated change in risk-weighted assets (under the July 2002 revisions) in relation to number of complex activities for the survey banks. Banks that reported one or two complex activities showed the greatest range in estimated changes: from a decrease of 23% to an increase of 6%.

Changes in capital ratios

U.S. banks must comply with a minimum leverage ratio requirement in addition to risk-based capital requirements. Institutions with a ratio of Tier 1 capital to average total consolidated on-balance sheet assets of at least 5% are considered “well-capitalized.” All of the FDIC-insured banks in the survey meet this leverage requirement. Since the proposed changes to the Standardized

Approach only affect the amount of risk-weighted assets, these changes would have no impact on the leverage ratio. One of the Agencies' proposals for a separate capital framework for non-complex institutions involved using a leverage ratio alone, either the ratio of Tier 1 capital to average on-balance sheet assets, or Tier 1 capital to both on-balance sheet and off-balance sheet assets.

Table 2.

Number of Institutions with Complex Activities			
Complex Activities	FDIC-Insured Banks (27)	Specialty Banks (6)	Maximum exposure at FDIC-Insured Banks (as % of total assets)
Trading assets and liabilities	5	3	<1%
Interest only strips	3	1	< 1%
Credit derivatives – bank is guarantor	1	0	1%
Credit derivatives – bank is benefactor	0	0	
Spot foreign exchange contracts	3	3	< 1%
Other off-balance sheet assets and liabilities	4	3	< 45% ^a
FX, equity, commodity and other derivatives	6	5	< 9% ^b
Mortgage servicing rights (purchased?) ^c	12	2	< 1%
Purchased credit card relationships	1	0	< 1%
Structured notes	3	0	< 2%
Performance stand-by letters of credit	13	3	<2%
Interest rate derivatives	12	4	< 20% ^b

^a These banks reported liabilities only.

^b Gross notional amounts of derivative contracts are reported on the Call Report

^c The Call Report does not report “purchased” mortgage servicing assets, so the servicing assets reported may be originated by the bank, instead of purchased as specified in the screen..

It is interesting in this context to examine the Tier 1 leverage ratios for the 27 non-specialty banks in the survey, particularly in relation to their Tier 1 risk-based capital ratio. The “well-capitalized” minimum for the Tier 1 risk-based ratio is 6%. It appears that, for the FDIC-insured survey institutions, at least, the leverage requirement is much more constraining than the risk-based requirement: nine of these banks had leverage ratios within two percentage points of the well-

capitalized minimum, while only one had a risk-based capital ratio within two percentage points of the well-capitalized minimum. Chart 7 compares the 12/31/01 Tier 1 leverage ratio for these institutions with the 12/31/01 Tier 1 risk-based capital ratio.

It is not clear that changing the risk-weighted assets calculations will have much effect on the behavior of these banks since their risk-based capital ratios tend to be much higher than required already. (The average Tier 1 ratio at these survey banks was 13%, while the average leverage ratio was 8%.) One of the Agencies' concerns about using a leverage ratio was the fear that banks may hold riskier assets if they only have to satisfy a leverage ratio, which is, by definition, not risk-sensitive. However, the presence of high risk-based ratios in relation to leverage ratios seems to counter that fear.

Operational Risk Charge

An important addition to capital requirements in the New Basel Accord is a charge for operational risk. The inclusion of an operational risk charge in the Internal Ratings Based Approach for credit risk will, according to studies carried out by the Basel Committee, bring the total required capital close to the current requirements, while making the charge much more risk sensitive. Spokesmen for the U.S. regulatory agencies have indicated that they do not wish to impose an operational risk charge based on the simplest New Accord approach – the Basic Indicator Approach -- for domestic banks. However, since Canadian and European domestic banks will most likely be subject to this charge, it is interesting to see what its impact could be on New York State chartered institutions.

In the Basic Indicator Approach, the capital charge for operational risk is currently calculated as 17% to 20% of annual gross income⁸. The Basel Committee has suggested that this percentage of gross income is close to 12% of minimum regulatory capital. This suggestion is the rationale for the charge: in an earlier survey, some banks responded that they held about 12% of economic capital for operational risk. However, this figure is still being discussed, and a smaller percentage may eventually be selected as the multiplier for gross income.

The New York State Banking Department calculated 15% of annual gross income as reported on the 12/31/01 Call Reports for the banks in the capital survey. These amounts varied widely for the 33 institutions in the survey: 15% of annual gross income ranged from a low of 5% of minimum regulatory capital for one commercial bank to 83% of minimum required capital for a specialty bank. The operational risk charge represented on average 19% of current minimum regulatory capital, while the median percentage was 12%. For the 27 depository

⁸ Gross income was calculated as the sum of net interest income plus noninterest income minus insurance fees and commissions. Realized gains (losses) on held-to-maturity and available-for-sale securities were not included in the gross income calculation.

institutions, the operational risk charge ranged from 6% to 69% of current required capital; the average for the depository institutions was 14%. Three of the six specialty banks had operational risk charges that were more than 59% of minimum required capital. (These “outliers” have large fee-based businesses relative to their risk-weighted assets.) Clearly the effect of adding a charge based on gross income would be extremely disparate across institutions.

Adding this operational risk charge to the estimated charges for credit risk calculated according to the January 2001 document brings the total estimated charge to increases over reported minimum regulatory capital for all but four institutions. Among these estimates, the lowest total charge is a decrease of 6%; and the highest estimated charge is an increase of 71%. The change on average from the combined charges is 18%; the median change is 13%.

However, if this operational risk charge is added to the estimated minimum capital requirement for credit risk calculated according to the July 2002 revisions, then the total capital requirement ranges from a decrease of 13% to an increase of 71%. Here the change on average from the combined charges is a 12% increase over reported minimum capital requirements, while the median change is a 5% increase. Chart 8 shows the estimated changes in capital requirements for credit risk (including the July 2002 revisions), operational risk, and the two charges combined for the 27 depository institutions in the survey. For 11 of these banks, total minimum capital requirements could decrease even if the operational risk charge is included.

As noted earlier, survey depositories tended to have much higher Tier 1 risk-based capital ratios than required to be well-capitalized. Given this fact, it is not surprising that the increase from the combined credit and op risk charge had little impact on these ratios. Chart 9 shows the effect of the combined charge on Tier 1 risk-based capital ratios at the 27 FDIC-insured institutions.

Further, as shown in Chart 10, the estimated changes in minimum regulatory capital are not clearly related to asset size. Institutions under \$5 billion in assets show the greatest range – from -13% to 71% -- in estimated minimum regulatory capital.

Overall Level of Required Capital for Credit Risk

Among New York State headquartered depository institutions, 79% of the assets of the 233 institutions with insured deposits was held on 12/31/01 by five large complex banking organizations (LCBOs): Citibank, JPMorgan Chase, Bank of New York, HSBC USA, and Bankers Trust. These banks all had assets in excess of \$40 billion as of 12/31/01. The 27 depository institutions that took part in this capital survey, however, held 54% of the non-LCBO assets in New York State and 11% of the total assets in the state. The estimated net changes (including the

July 2002 revisions) among these 27 banks showed an average decrease of 7% in required capital for credit risk. The aggregate level of total required credit risk capital across the surveyed depository institutions decreased by 6%.

Changes in Aggregate Required Capital Across 27 Depositories in Survey

Estimated change per January 2001 document (without op risk charge)	1.1%
Estimated change per January 2001 document (with op risk charge)	11.7%
Estimated change per July 2002 revisions (without op risk charge)	-5.8%
Estimated change per July 2002 revisions (with op risk charge)	4.8%

According to a recent Basel Committee report on the QIS (Quantitative Impact Study) 2.5 exercise, G10 banks with Tier 1 capital over 3 billion euros showed an average decrease in required capital of 8% using the Foundation IRB Approach for minimum regulatory capital. Earlier, QIS 2 results showed a 5% decrease in required capital for large internationally active G10 banks under the Advanced IRB Approach. It is fair to assume that the final calibration of the Advanced IRB Approach will result in a greater decrease than that found for the Foundation Approach since it is the Basel Committee’s objective to provide an incentive for banks to move from the Foundation to Advanced Approach.

The New York State headquartered LCBOs would most likely use the IRB Approach and thus would probably have lower credit capital requirements under the New Capital Accord. Therefore, the estimates suggest that for the group of banks that represent 90% of the depository assets in New York State, there would be a decrease in required capital for credit risk. Of course, given the disproportionate asset size of the LCBOs, there would have to be a sizeable increase in the requirements for the surveyed banks and the other non-LCBOs to keep overall required capital flat.

An operational risk charge equal to 10% of minimum required capital was applied for the QIS 2.5 exercise; this brought the average change up to a 2% increase from an 8% decrease. Revisions to the Advanced Measurement Approach for operational risk have removed the floor that it previously included, and the Committee has “recognized the need for significant flexibility” in the development of this approach.⁹ It is not clear what the impact of the operational risk charge will be for complex institutions. However, without an operational risk charge, minimum capital requirements at 12 of the 33 institutions in the survey could fall below 90% of current minimum capital requirements. Ninety percent of current minimum

⁹ “Basel Committee reaches agreement on New Capital Accord issues,” press release, July 10, 2002, Bank for International Settlements, www.bis.org.

requirements is the floor proposed by the Basel Committee for capital requirements in the first year following implementation of the New Accord.

Conclusions

Among the objectives of the Basel Committee in proposing changes to the 1988 Basel Accord were more risk-sensitive capital requirements, maintaining the current level of capital, and providing a modest incentive for banks to go to the internal ratings based approach.

While the new credit risk and operational risk requirements may be more risk sensitive, the NYSBD study shows that the current level of overall capital may not be maintained if the Standardized Approach is implemented. According to Banking Department estimates, the revised Standardized Approach to credit risk could lead to a decrease on average of 7% in minimum capital requirements, but including the Basic Indicator operational risk charge for these institutions could lead to a total increase of 12% on average.

In addition, the impact of the New Standardized Approach varies widely across institutions: the change in minimum capital required for credit risk ranges from a decrease of 23% to an increase of 6%. The Basic Indicator charge for operational risk ranges from 5% of 12/31/01 minimum regulatory capital for one savings bank to 83% of minimum required capital for a specialty bank. The largest operational risk charge for a depository institution was 69% of minimum regulatory capital.

Next, since the estimated average decrease in minimum required capital for credit risk is close to that found by the BIS under the IRB Foundation Approach, banks may not see a clear incentive to move to the IRB Approach, especially when the costs of such a move are tallied.

The Banking Department study also shows the relative impact of each of the proposed changes to risk-weighting. Recognition of ratings for available for sale and held to maturity securities, the 40% risk weight for residential real estate, and the 75% risk weight for non-mortgage retail had the greatest impact.

Finally, most of the institutions in the survey were shown to be non-complex according to a definition proposed by the federal banking Agencies in October 2000, and the capital ratios of the FDIC-insured banks in the survey were studied. Many of these banks seem to have leverage ratios closer to the minimum for well-capitalized institutions than their risk-based capital ratios are to the minimum. This suggests that changes in risk-weighting of assets for capital requirements may have little impact on these banks' capital ratios.

Bibliography

Basel Committee on Banking Supervision,
“Quantitative Impact Study 3, Technical Guidance,” October 2002;

press release, “Basel Committee Reaches Agreement on New Capital
Accord Issues,” 10 July 2002;

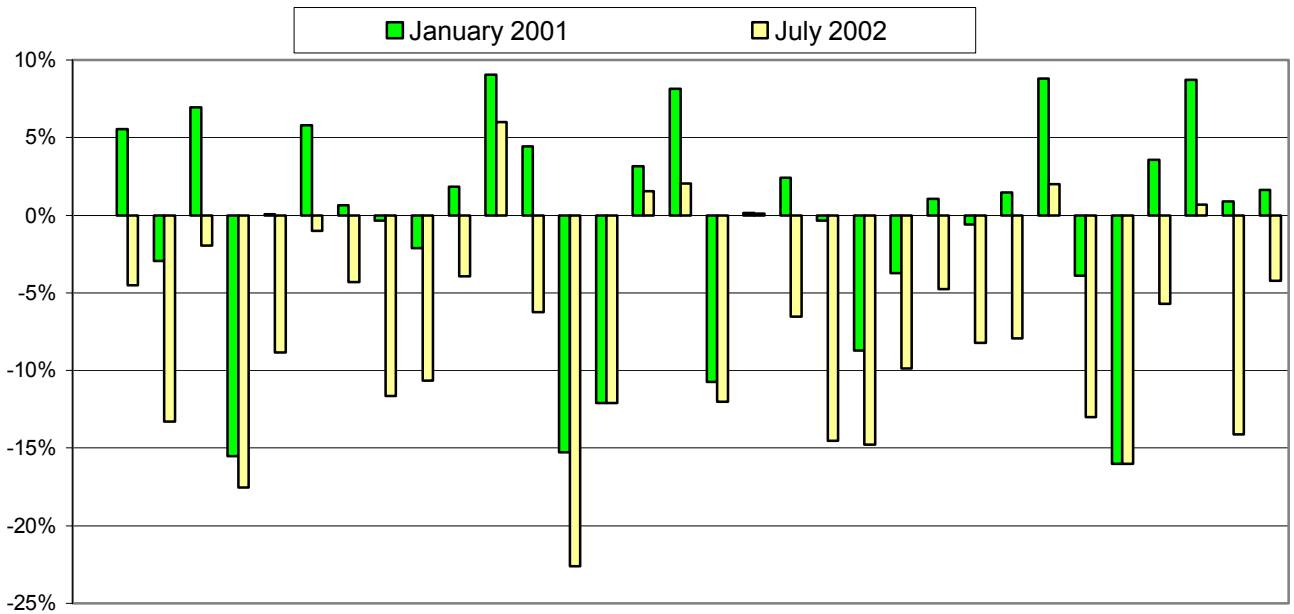
“Results of Quantitative Impact Study 2.5,” 25 June 2002; and
“The New Basel Capital Accord,” January 2001

Department of the Treasury, Federal Reserve System, and Federal Deposit
Insurance Corporation, Advance Notice of Proposed Rulemaking, “Simplified
Capital Framework for Non-Complex Institutions,” October 2000

State of New York Banking Department,
“NYSBD responds to the Basel Committee on Banking Supervision and the
Board of Governors of the Federal Reserve System on the Working Paper
on the Regulatory Treatment of Operational Risk,”
www.banking.state.ny.us/regs.htm;

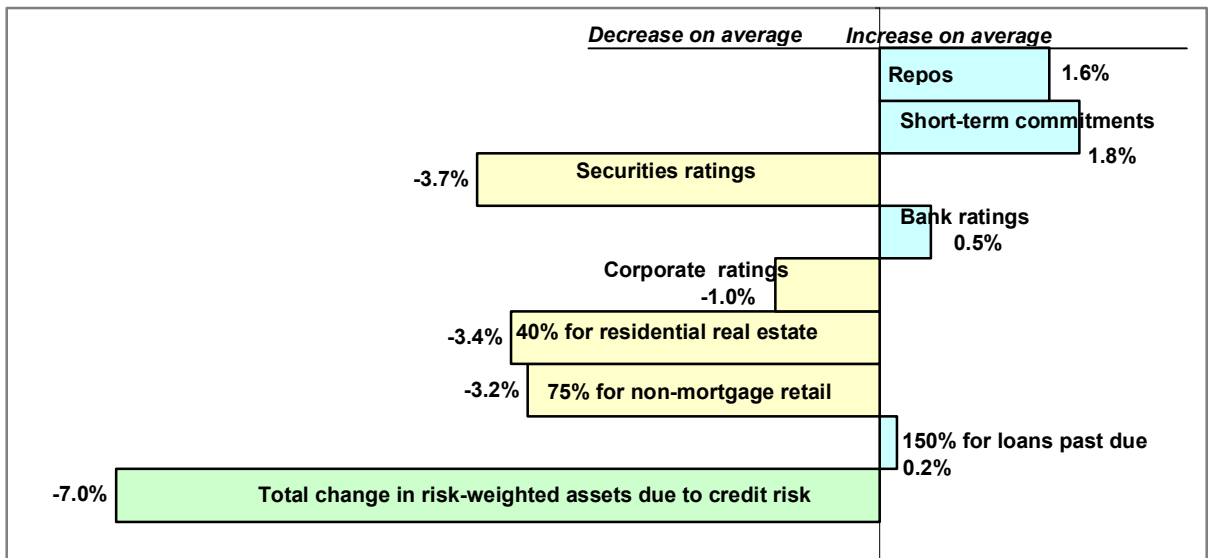
“NYSBD responds to the Basel Committee on Banking Supervision on its
consultative document entitled “The New Basel Capital Accord,”
www.banking.state.ny.us/regs.htm.

Chart 1. Comparison of Changes in Minimum Capital Requirements under the New Standardized Approach: January 2001 Document vs. July 2002 Revisions



Banks arranged by asset size

Chart 2. Average Percent Change in Risk-Weighted Assets



Average percent change is average over 33 institutions of change in risk-weighted assets expressed as percent of reported total risk weighted assets.

Chart 3. Drivers of Decrease in Aggregate Required Capital for 27 Depository Institutions

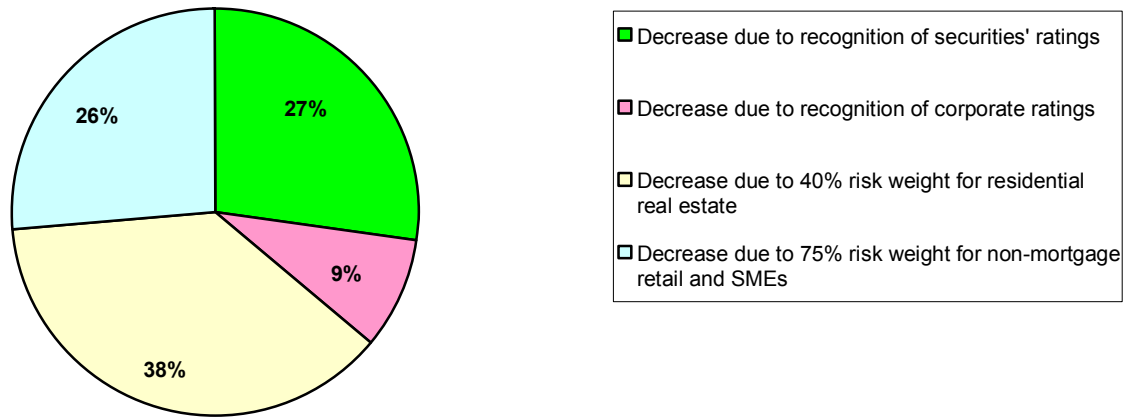


Chart 4. Comparison of Credit Risk Charge from July 2002 Revisions with Charge from Modified January 2001 Approach

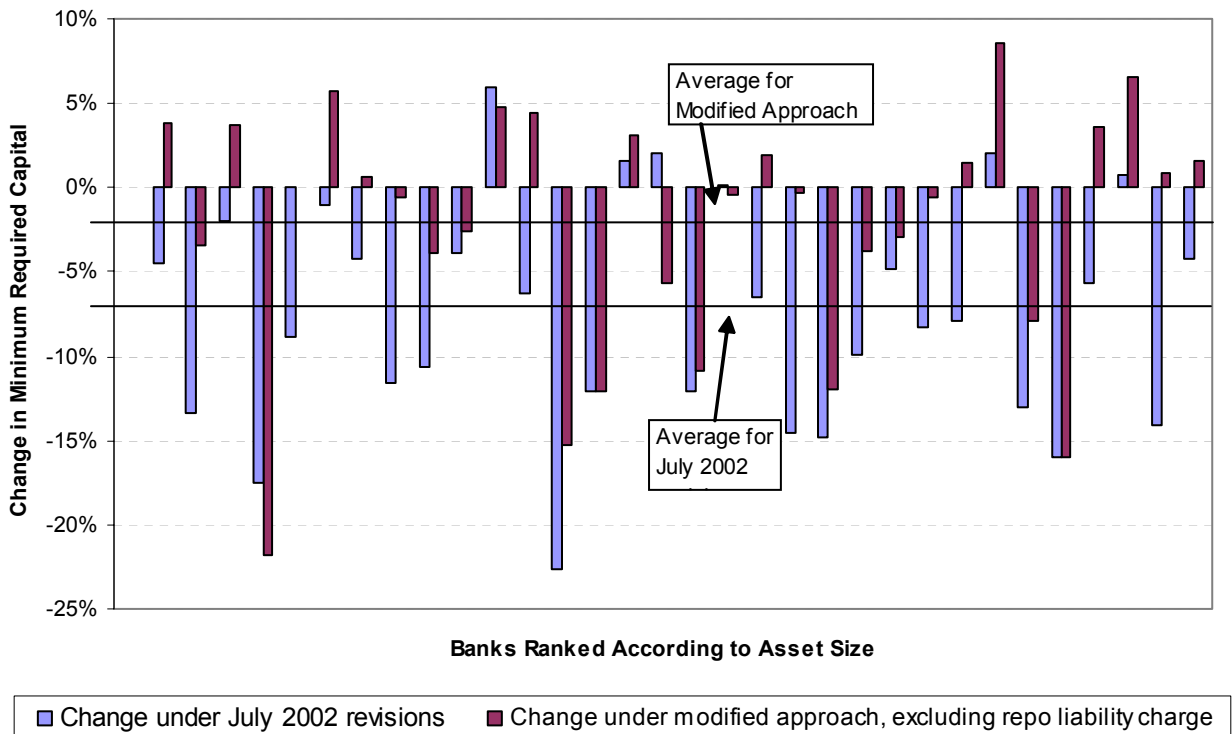


Chart 5. Complexity Profile of 33 Survey Institutions

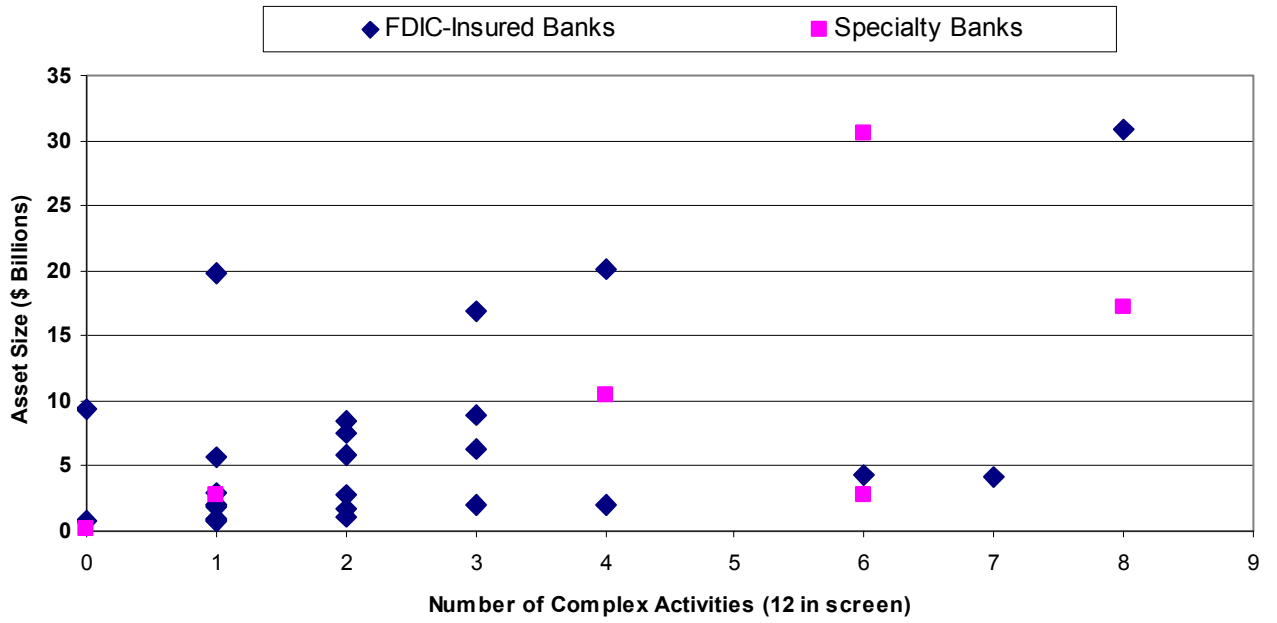


Chart 6. Complex Activities and Changes in Risk-Weighted Assets

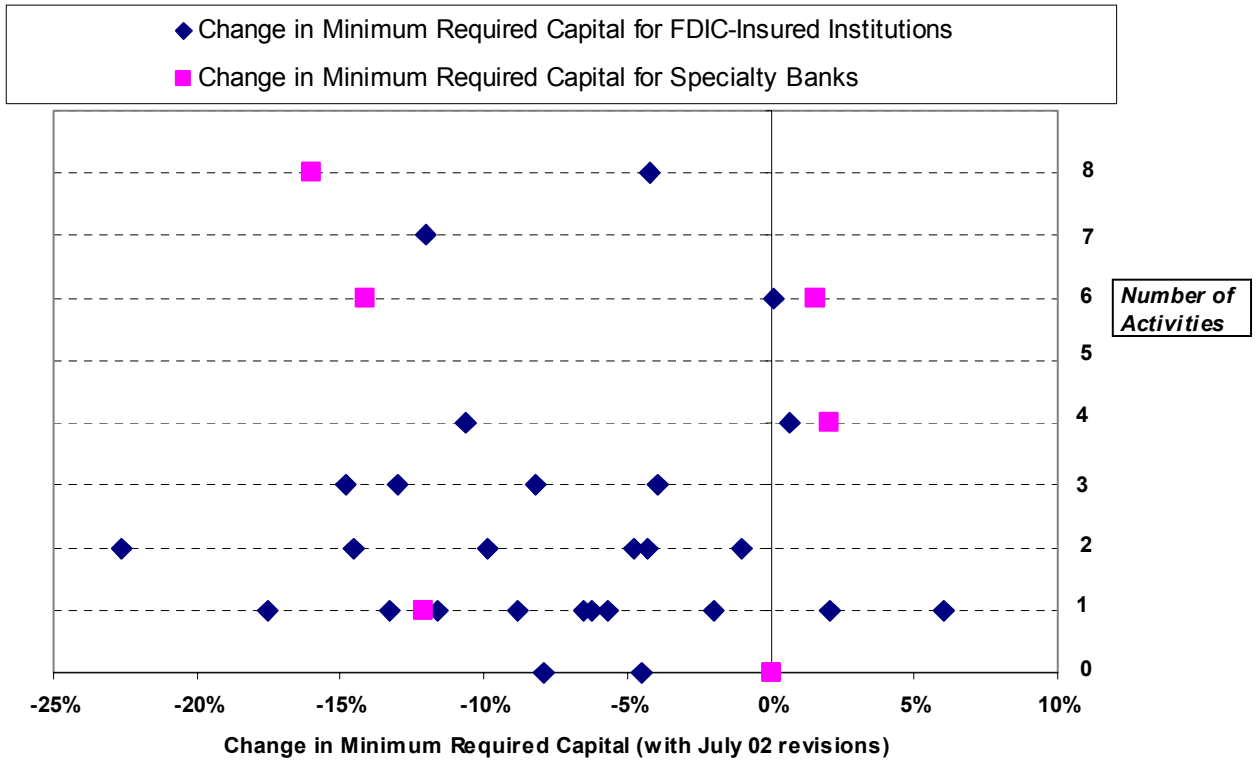


Chart 7. 12/31/01 Capital Ratios for FDIC-Insured institutions in Survey

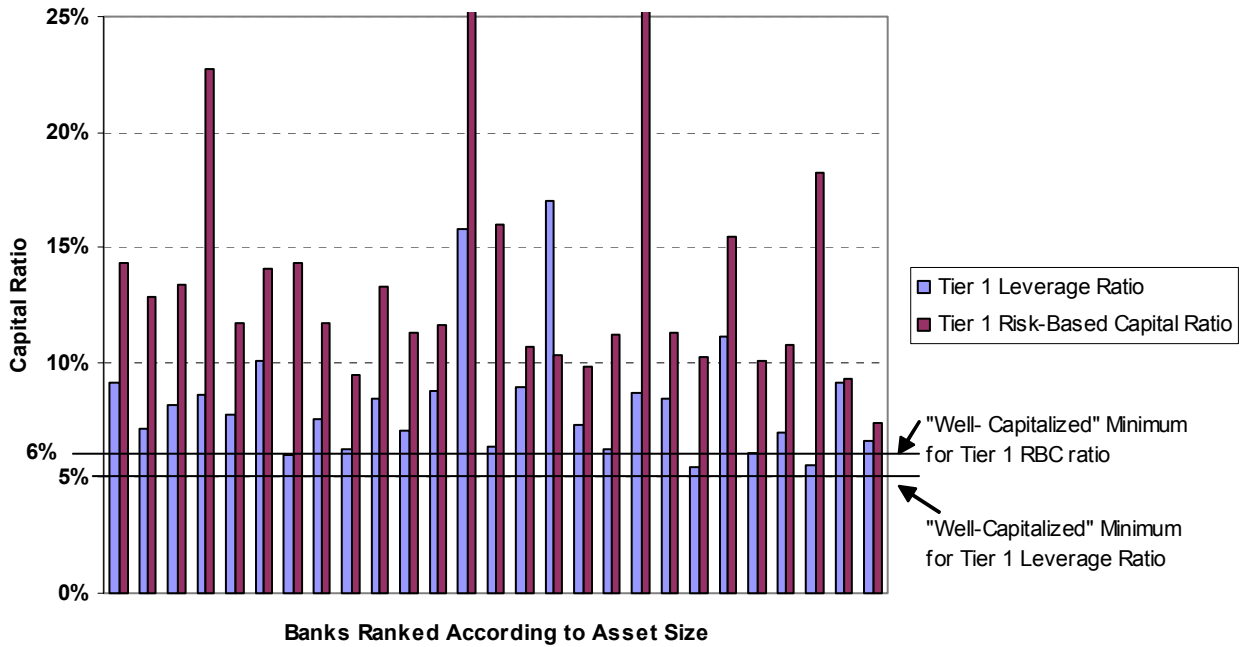


Chart 8. Total Change in Minimum Capital Requirements:
Credit Risk Charge Plus Operational Risk Charge

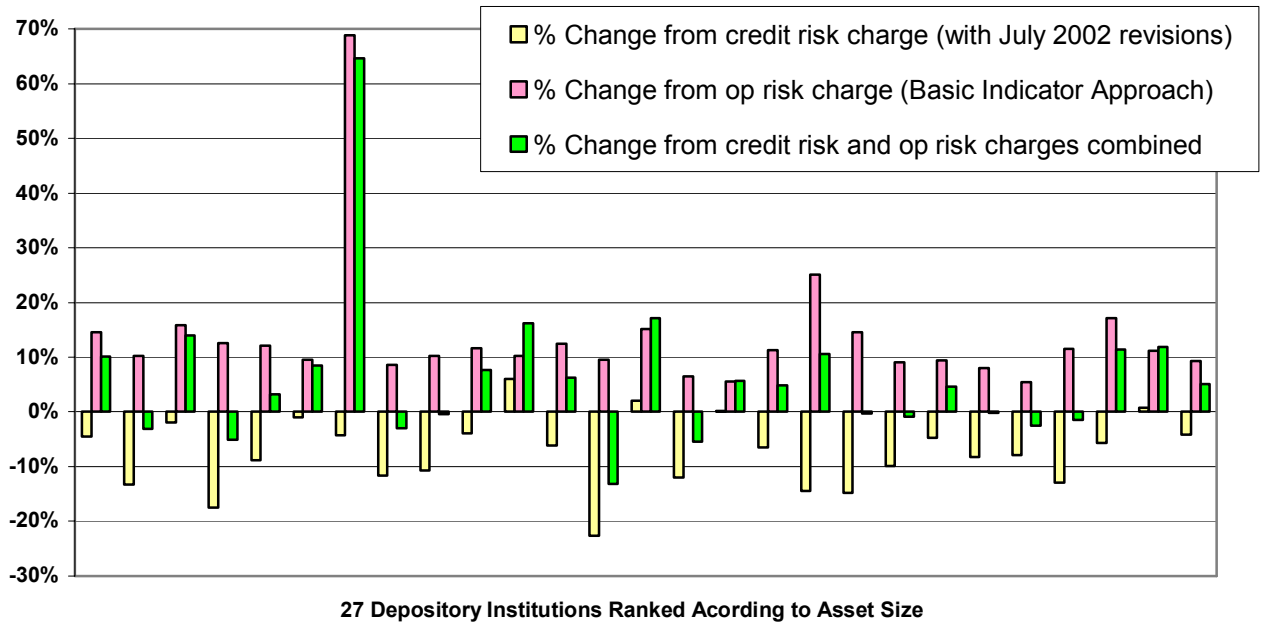
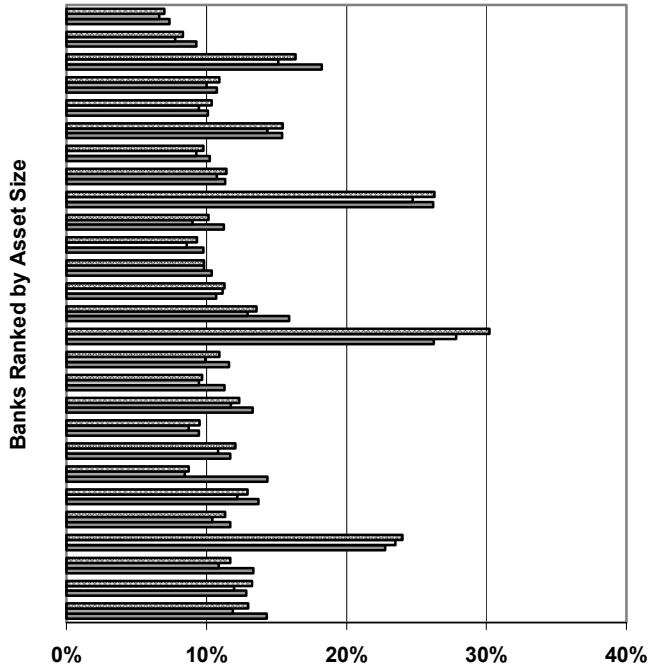


Chart 9. Tier 1 Capital Ratios at FDIC-Insured Survey Banks, after Combined Credit Risk and Op Risk Charge Is Applied



■ Tier 1 Ratio after op risk charge and July 02 credit risk charge
 ■ Tier 1 Ratio after op risk charge and Jan. 01 credit risk charge
 ■ 12/31/01 Tier I Ratio

Chart 10. Estimated Changes in Minimum Regulatory Capital: Credit + Op Risk Charges

