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NOTES ON SENIOR SUPERVISORS' MEETINGS WITH FIRMS

CONFIDENTIAL SUPERVISORY INFORMATION

FIRM	Citigroup, Inc.
DATE LOCATION	November 19, 2007 Citigroup Global Headquarters 399 Park Avenue New York
PARTICIPANTS FROM HOME SUPERVISORY AGENCY	Federal Reserve Bank: *John Kambhu, Brian Peters, John Ruocco, and Wilma Sabado* Federal Reserve Board: *Jon D. Greenlee* Office of the Comptroller of the Currency: *John Fleming, Ron Frake, John Lyons, Patricia Vellas, and Scott Waterhouse*
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Supervisors are undertaking this effort with the goal of sharing their sense of practices and processes in use at firms involved in this review through bilateral and joint discussions among participating agencies. The information contained in this report and shared during interagency discussions and discussions with the firms must be treated as confidential supervisory information.

I. SUPERVISOR'S KEY OBSERVATIONS

In a few sentences per question, please provide your most significant observations on the following overarching questions.

1. *In senior management's opinion, what worked well, what did not work well in risk management during the recent period?*

What Worked Well

Management believed that it had taken effective actions to prevent exposures to 'exotic' sub-prime risks in its consumer bank. The bank essentially abstained from lending in this market and was able to avoid potentially substantial sub-prime exposures.

What Did Not Work Well

Poor communication across businesses: decentralized nature of the firm created silos. For example, despite perception of increased risk of sub-prime borrowers by consumer bank, credit packaging was designated a growth business and established sizeable unhedged positions. The firm's dialogue among senior business risk owners needs improvement.

Risk appetite increased in pursuit of earnings late in the credit cycle. Leverage loan limits doubled in early 2007 to accommodate then-increasing and expected volumes. Limits also increase in the CDO warehouse business.

Management felt Citi's market position required it to participate in all markets: it chose to follow the industry competition in underwriting standards to maintain deal volume. It knowingly gave the financial sponsor industry a free option and did not mitigate the risk.

Senior management, business line and risk management did not fully appreciate the market risk of the leverage loan pipeline or of the retained super-senior CDO positions.

Management found that balance sheet and risk limits were not adequately enforced, and traditional risk metrics for leverage loans and CDOs did not fully present risks.

Corporate-wide stress testing and scenario analysis was insufficient, and not compensated for by other controls. The firm did not have a comprehensive view across credit, market, liquidity and financial/accounting risks of its various businesses.

Management's processes for establishing target buffer capital and holding company excess liquidity positions can be enhanced. The firm's MAR system, while useful for day-to-day control, relied on built-in assumptions that resulted in excess reliance on asset liquidity over funding liquidity.

2. *What changes are firms making to their processes or practices as a result?*

Citigroup is assessing its activities and has hired an external consultant (and assembled an advisory team) to review risk management practices.

Numerous and significant personnel actions have occurred; see section A.5. below.

Bank management is developing new risk measures to provide a more complete, firm-wide assessment of risk. The bank is also considering changing its compensation program to provide a more definitive assessment of financial performance and balance sheet (economic capital) usage.

3. *How well did stress tests and limits perform as measures and mitigators of risk, respectively? Did internal processes estimate the nature and scale of any losses appropriately?*

The firm did not have an adequate, firm-wide consolidated understanding of its risk factor sensitivities.

Stress tests were not designed for this type of extreme market event. The magnitude of the spread widening was not contemplated by existing VaR measures or stress tests. Management had believed that CDOs and leveraged loans would be syndicated, and that the credit risk in super senior AAA CDOs was negligible.

Losses on the credit trading desk were caused by market volatility and breakdown of historic pricing relationships. The magnitude of the correlation breakdown was not anticipated by the risk measures.

4. *How effective were internal reporting mechanisms in identifying and highlighting key drivers of risk and losses?*

Key risk reports did not effectively communicate the magnitude and degree of the potential risk to the company for CDOs and structured credit trading. The nature, origin, and size of CDO exposure were surprising to many in senior management and the board. The liquidity put exposure was not well known. In particular, management did not consider or effectively manage the credit risk inherent in CDO positions. The risks contained in the correlation trading book were also larger than expected.

Credit risks in the leverage book were apparently known and communicated, although the price risks of distribution were not quantified.

The risk of triggering consolidation of the SIVs was not considered/known until after the Bank had started purchasing the SIVABCP and realized it might be considered supporting the equity holders.

The firm will reintroduce a "Windows on Risk"-type corporate-wide risk assessment process.

5. *How effective were hedging strategies in responding to rapidly changing conditions? To what extent did the firm's planning contemplate both the scale and speed at which liquidity conditions deteriorated?*

Management did not have meaningful hedges. Risk management believed that the leverage lending exposures would be syndicated and CDO exposures would be sold.

Management had also felt that there was very little risk inherent in the super-senior CDOs. By the time the magnitude of the risks became known, hedging options were very limited and expensive.

Bank planning did not anticipate the scale and speed of the reduction in market liquidity.

6. *How effective were firms in identifying both direct and indirect exposures (whether or not involving contractual obligations) to other sources of risk and potential concentrations of risk, including exposures to structured investment vehicles, alternative investments, or mutual funds, among others?*

Bank reporting of leverage loans was generally adequate. Management was aware and accepted the level and trends in the leverage pipeline. Portfolio limits were doubled at the beginning of the year with the full support of management and risk management.

Indirect CDO exposures were not as readily visible. While exotic sub-prime exposure was limited on the retail side of the firm, the nature and extent of sub-prime exposure in the investment bank was not as transparent. The liquidity put exposure, in particular, was not well communicated throughout the bank.

Risk aggregation across the company did not effectively report the potential concentration of risks. Although the CDO conduit liquidity put exposure was said to be captured in concentration risk to real estate, it was not included in the structured credit AAA-limit bucket.

The potential liquidity implications of the SIV activity on Citi were not captured as CAI was only seen as a manager of the vehicles.

Citi, with the sale of Citi Asset Management to Legg Mason in 2005, had no exposure to mutual funds' purchases of sub-prime-back ABCP.

II. OBSERVATIONS FROM DISCUSSIONS

Please summarize what you learned from management during discussions on the following subjects. While you need not provide detailed answers to each of the specific questions provided in the list of issues that the agencies agreed to use, you should share *insight into your material observations on each of the subcategories of questions outlined in the document.*

A. Senior Management Oversight

1. Risk appetite

Citigroup establishes its risk appetite through the assessment and allocation of economic risk capital and translates that appetite into risk limits on businesses, activities, desks and products. Strategic initiatives were product/business segment driven. Citi doubled its leveraged lending limit and its CDO limit late in 2006. It also hired a new head trader and team in mid 2006 to build out a structured credit trading business. With hindsight, they admit that they did not properly consider the magnitude of the quarterly earnings volatility possible on the businesses.

Citigroup's Board of Directors approved the Management plan accepting Citigroup "needed to take on more risk." Management and Board believed that the issues that faced the firm in 2004-5 were adequately addressed and stronger controls were now in place. Management sought to increase risk taking in a measured way to improve earnings performance. However, management acknowledged that internal incentives focused too much on earnings growth and not enough on balance sheet usage.

Sub-prime exposures

Management noted in retrospect its strategic approach was silo-ed when it came to "sub-prime" exposures. While Citigroup consciously did not underwrite exotic sub-prime mortgages in its Global Consumer Group, it grew sub-prime exposures in its CMB business, specifically with mortgage securitizations (RMBS), structured credit trading, and CDO warehouse activities.

Consumer Business strategy was to originate to hold sub-prime in consumer CitiFinancial, which had $24 B retained sub-prime exposure. Citigroup own originated exposures were never in the CMB structured Residential Mortgage Backed Securities.

Structured Credit business consisted of a team (formerly of Deutsche Bank) tasked to grow that market share. These CMB businesses including structured credit (CDOs, derivatives, tailored solutions) received incremental investment dollars of approximately $1 B over 2005-6.

At the time Citigroup strategically did not identify all sub-prime exposure across business to limit overall sub-prime exposure. Given the most recent earnings volatility, management noted it had a larger risk appetite than initially wanted.

Management stated that the recent market dislocations, particularly in those risk factors where Citigroup saw extreme movements, have raised certain strategic risk appetite questions for the firm.

Super Senior AAA CDO tranches

An acknowledgement of the risk in its Super Senior AAA CDO exposure was perhaps Citigroup's "biggest miss." The original business model was to distribute all CDO risk. However, management found that it was unable to distribute the super-senior tranches at favorable prices. As management felt comfortable with the credit risk of these tranches, it began to retain large positions on balance sheet. The exposures were booked as traded assets rather than held-to-maturity assets. As the sub-prime market began to deteriorate, the risk perceived in these tranches increased, causing large write-downs. Management still notes that none of the CDOs have yet suffered a cash flow shortfall and that the write-downs are still an accounting and not an economic event.

Stress applied to Super Senior AAA tranches was not enough. Business strategy was to "buy and hold" these exposures (which implied a more appropriate HTM accrual based accounting); however, the incentive to hold in a trading/MTM account was to maximize RAP capital treatment. Citigroup "bought into the credit agency ratings" and noted that even if Citigroup tripled historical losses in its potential risk estimation procedures, it would not have approximated what was actually occurring in the market.

Business saw holding Super Senior AAA tranches as remote disaster insurance, and CMAC viewed the risk in this exposure as incredibly remote as well. Internal processes did not constrain this type of strategy.

Citigroup had stress tests and hold limits and doubled its limits in December 2006.

Leveraged Lending

Citigroup ramped up its syndicated lending and leveraged finance late in the cycle. For Leveraged Finance, the overall market itself was ramping up, and Citigroup made a decision to stay in the business and defend its existing market share.

Citigroup's risk appetite was to maintain its 15-20% market share and the business decision for each deal was not completely binary. As far as leveraged lending, Citigroup believed it had to be in all the roughly 6-7 mega deals that were put together in 2007.to maintain its market leadership.

Management was aware that by relinquishing Market MAC clauses, it was giving the financial sponsors a free option. This risk was discussed, but no action was taken to hedge or mitigate the risk.

Overlay Hedges

As a result of decentralized management structure, no effective macro overlay hedges were made at the time of the market dislocation.

2. Communication with Board/Senior Executives

The firm feels there was adequate communication with Board as market events developed throughout 2007 and increased from August 2007 onward. Citigroup provided tutorials to further educate its predominantly manufacturing-based board members. Management did not perceive any problems in communications between the business units, risk and CEO Prince. Managers discussed over six months in advance an awareness of business issues but had faith in the structures and the businesses. SRO Bushnell noted that he became acutely focused on these issues and their importance only in early May 2007.

Communication includes a mid-July offsite meeting with the Board in which developments in the leveraged loan market were discussed. While no Board meeting took place in August, CEO Prince issued a letter to the Board addressing CDO and sub-prime issues.

Citigroup, however, missed the "mortgage correlation." It historically ran its business on a decentralized basis. In retrospect, Citigroup realized other parts of the firm were seeing early signs of deterioration in mortgage sector earlier on during the market dislocation such as the consumer bank and the mortgage trading desk. This information was not effectively communicated to the CDO structuring business to take action.

3. Senior management reporting and analysis

In its decentralized/business unit structure, management acknowledged that the conversation/sharing within the bank in terms of overall risk could have been better.

Risk management did not adequately bring together total risk of firm by risk factor.

The primary measure of risk for the Board was capital adequacy/economic capital level and did not include a metric capturing quarterly earnings volatility. The primary focus of Citigroup was to allocate capital to maintain an overall AA rating and trading desks/businesses should not endanger the Citigroup AA rating. Citigroup focus had been on earnings growth and not balance sheet utilization. This focus on earnings growth was also not risk adjusted.

Market dislocation did not alter Citigroup's methodology, but management will add an earnings volatility component metric for reporting to the Board going forward.

A diversification benefit is already built into methodology.

4. Conflicts of interest

Citigroup management noted that the firewall between public and private information remained robust throughout market dislocation.

No material issues were noted as recent market events have played out almost exclusively on the public side.

5. Immediate responses

Management Changes

Citi made a number of significant management changes in the wake of the market turbulence. Significantly, the Chairman and CEO of the group, Charles Prince, resigned; the Co-Head of Citi Markets and Banking, Tom Maher's, left the company; and the heads of fixed income trading Randy Barker and Geoff Coley were removed. Senior Risk Officer Bushnell took a new position as Chief Administrative Officer, only to later announce his retirement at year end.

Robert E. Rubin, Chairman of the Executive Committee of Citi and a member of the Board of Directors, will serve as Chairman of the Board replacing Charles Prince. Sir Win Bischoff will act as interim CEO replacing Charles Prince. A search for a new CEO is currently underway. Vikram Pandit was appointed Chairman and CEO of a newly formed Institutional Clients Group. Jamie Forese was appointed the new co-head of the CMB. Jorge A. Bermudez has been named the new Senior Risk Officer.

Strengthening of Risk Management Process

Management acknowledges that it has to provide better risk management oversight to its business activities. When appointing Jorge Bermudez as SRO, the bank announced that he will report directly to the CEO. This is a higher stature than previously. In addition, an advisory committee of senior leaders was formed that will provide input on ways to strengthen Citi's risk management process.

Sub-prime Portfolio Group

A new unit, the sole focus of which will be on managing the assets related to sub-prime mortgage securities and their resultant exposures, has been established. This unit will be separate from the other parts of Citigroup's capital markets and banking business. This new group will draw on various experts within the bank, including the current head of special situations in securitizations. The new unit took charge of this portfolio that day after Citigroup announced on Nov 4 that it might have to recognize revenue losses on a pre-tax basis of between $8-$11 billion in sub-prime related assets.

Central Treasury

Citi began initiated an effort to reorganize its domestic treasury function earlier in 2007. A Central Treasury function was put in place (charged with implications of balance sheet, capital, and risk appetite). This unit will provide more direct and disciplined oversight of US domestic activities. Citigroup had enormous balance sheet growth in last few years in efforts to grow income and the balance sheet has been levered in the process. During that time Citigroup's stock price did not move as the market discounted its acquisition/growth of assets through acquisition. Investors looked to management to promote more efficient use of balance sheet.4th qtr.

Capital Infusion of $7.5 B

As announced after the meeting, on November 26, Citigroup announced that it will sell $7.5 billion of equity units to Abu Dhabi Investment Authority in a private placement. The equity units will be mandatory convertible into shares of Citigroup at prices ranging from $31.83 to $37.24 per share on dates ranging from March 15, 2010, to September 15, 2011, subject to adjustment. The equity units will also pay a fixed annual payment rate of 11%, payable quarterly. The payment rate consists of a payment on each series of the trust preferred securities and a contract payment on the purchase contracts.

The Abu Dhabi's Investment Authority's stake in Citigroup will not exceed 4.9%.

Strategic Expense Initiative

A continued focus will be on cost.

6. Lessons learned/changes as a result

In addition to senior management changes (see A.5. below), management stated that a recasting of its Risk Management Committee is underway. Citigroup has also recently created a market and credit convergence risk team.

Changes in process and practices include:

- Aggregating risk more effectively across Citi (matrix) – risk factors liquidity, credit and market risk together
- Reducing individual businesses' balance sheet dependency (Central Treasury Function)
- Enforcing balance sheet limits (Central Treasury Function)
- Aggregating more effectively across Citigroup (exposure matrix)
- Strengthening checks and balances in place in integrated businesses
- Enhancing risk management practices in light of increasingly complex structures
- Re-establishing balance between management judgment and methodology in credit loss reserve process (3Q 2007)

Management noted in its Syndication activity that it had under priced its option to financial sponsors very late in cycle.

Discussions between business and risk were held on hedging exposures but businesses did not choose to hedge. Given the liquidity situation, consideration for hedging in a macro sense to protect against key risks was a useful control tool under normal conditions; however, simpler metrics with central control are more useful during stressful times. Moreover, the MAR did not capture the risk to all off balance sheet exposures adequately.

Virtually all risk factor and exposure aggregation mechanisms associated with sub-prime, most notably the super senior tranches of structured credit, understated the underlying risk.

Treasury MAR was useful control tool under normal conditions; however, simpler metrics with central control are more useful during stressful times.

Citigroup noted that it needed to keep liquidity levels up as the market changed with respect to leverage lending, ABCP, and Super Senior Triple A tranches. The liquidity plan going forward should address any new innovation in structured finance that would be the next challenge. The recent market dislocation highlighted the importance of the Liquidity team being aware of the risk, stressing the exposure appropriately, and capturing the risk explicitly in the contingency liquidity plan.

The capital process going forward will size excess capital/capital buffer. When an adequate cushion does not exist, risk appetite must be lowered, the business activity curtailed, and/or more capital charges for balance sheet usage are levied on the business. Contingency charges for assets coming on balance sheet will be charged to business unit by the Central Treasury Unit.

B. LIQUIDITY RISK MANAGEMENT

1. Liquidity Planning / Stress-testing

Citi has long had a strong liquidity position. However, asset and business growth has been substantial over the past three years. Liquidity was managed within existing, somewhat simplistic, parameters. At the time, management had no expectation that exposures could come back on balance sheet nor was this captured in its funding or liquidity plans. Excess liquidity existed within the bank chain.

Individual business limits were "soft" from central treasury. The Business had free ability to exceed limits. If a business line breached a limit, it was required to document the breach and notify corporate treasury. This did not serve as an effective constraint on the businesses when faced with a goal of earnings growth.

Management of the contingency funding plan is centralized. They review three chains: bank, broker/dealer and parent. The primary focus historically has been a hard-limit of requiring sources of liquidity to exceed uses over a one year horizon. Citi's primary liquidity management tool, MAR, relies on built in behavioral assumptions. The "developed world" assumptions did not hold. This approach presumed access to secured funding markets and did not assume an increase in assets. As a result, their CFP was over-reliant on asset liquidity, as opposed to funding liquidity sources. The CFP was also focused on "short-term stress."

Funding (excluding leveraged lending) was diversified by investor, currency, security type, geography. Citigroup saw and realized benefit from diversified funding as excess liquidity in Asia and Europe offset declines elsewhere.

For SIV exposures, Citigroup saw no overlap in its investor base and was "not crowded out" for funding purposes.

2. Securitization and syndication financing

While management noted timing mismatches are anticipated between the time of origination and the sale of the assets in both business as usual activity and stress testing, the CFP did not envision the extended underwriting period.

Incremental liquidity needs included:

- o Warehouse activity totaled $73B on the books which was not BAU
- o Liquidity puts totaled $25 B

The planning process would operate better if Leveraged lending large segment and securitization activity assets are treated as if completely illiquid.

CP conduits were determined to be "pledgeable" based on its underlying assets. That assumption was proven wrong in the market dislocation and more liquidity was needed.

Citi's stress testing incorporated contingency liquidity requirements from contractual obligations. Citi performs quarterly stress testing encompassing its multi-sponsor ABCP programs and which assumes a disruption in credit card securitization.

Securitization warehouse of credit cards performed well in the extreme environment. Securitized warehouse of sub-prime auto was more sensitive to the environment.

Leveraged lending was approved from a credit system and not reviewed in a market risk context. Management initially made no liquidity implication of all of it not happening and the bank being forced to hold the exposures on the balance sheet.

3. Support for Conduits/SIVs/SPEs

Citigroup does not intend to consolidate its SIVs. As management stated, the SIVs are the masters of their own destiny. Any support will be viewed from an economic interest perspective; Citigroup will offer the same as any other third party. Citigroup provides partial liquidity support.

SIVs Business historically provided minimal income to the firm. SIVs funded and sold assets. SIV exposure totaled $96 B as of July, $83 B at the end of 3Q, and 4-5 weeks into the 4Q totaled $75 B. Each week, management targets asset for sale based on the asset composition within SIV. To date, management has experience a reasonably good write down and should completely wind down the structure next year. The business has experience more recent success in its disposition of assets.

So far, Citi has committed $10 billion in liquidity to the seven structured investment vehicles it manages. If Citi were to put its SIVs on its balance sheet, it could be forced to take even bigger write-down than the $8 billion to $11 billion it projected for Q4.

Citigroup did not have amounts assigned to providing liquidity to its SIVs. Citi will evaluate its liquidity as well as its capital position before making any decision to provide further funds to these.

4. Support for other vehicles such as money market funds

Citigroup does not manage any money market funds, and as such, has not provided support to any such vehicle.

As stated earlier, in June 2005, Citigroup sold its Asset Management Unit (excluding Mexico, Latin American retirement services, and Citigroup's interest in the CitiStreet JV) to Legg Mason.

5. Pricing of liquidity commitments

Citigroup risk management states that the market convention for pricing customer liquidity facilities typically reflects the spread between medium/long versus short term liquidity.

Citigroup has been in the process of implementing an internal charge for contingent liquidity facilities. There was no charge back to the business for contingent liquidity. Contingent liquidity was a "free good."

Going forward, balance sheet management's focus will be on asset productivity.

6. Legal entities

Managed Liquidity at three entities – Parent, Bank, and broker/Dealer.

Liquidity considerations were of lesser importance than regulatory capital, anti-tying, tax and accounting treatment when determining what business to book in which entity.

Sizeable securities activities conducted through the broker\dealer raised funding challenges as access to secured funding declined. The primary ratio for broker/dealer is Cash capital ratio of 120%, implying 20% excess liquidity. Historically Citigroup had a sizeable cushion. However, it used the cushion in last 3-4 months. With hindsight, management would like to maintain greater levels of buffer liquidity at the holding company.

For commitments now not existing and/or not yet funded, if possible, will book all new loans in bank chain.

7. Risk measurement and limits Limits did not address extreme scenarios that hit the tails. Market triggers are in place to monitor internal and external economic factors which may imply a change to market liquidity, or Citigroup's access to markets. Liquidity metrics include liquidity gaps, stress testing, ratios and market triggers. These metrics provide management with a comprehensive view of Citigroup's liquidity position.
8. Management of liquidity events Citigroup utilizes a variety of firm-specific and market-related scenarios at the consolidated level and in individual countries. Based on these stress tests, Citigroup reassessed its limit structure. Citigroup now places a cap in BAU risk taking. Management contends the CFP was helpful as it provided a series of funding alternatives to avoid undue unsecured wholesale funding concentrations. Citigroup was able to keep its limits current through its frequent assessment of its contingent liquidity capacity derived from the CFP process. Global reporting of liquidity position is performed daily. Senior Treasury and Finance managers made decisions on funding types, tenors and pricing.
9. Lessons learned Going forward, Citigroup seeks a process to better size the liquidity buffer for the firm. Citigroup is working to improve the MIS liquidity reporting to Senior Management. With the Central Treasury Function, businesses will be under strict limits and must live within these balance sheet usage limits. Business line will be obligated to manage to limit. Central Treasury will allocate capital and control funding. This effort is a work in process. The management team had been identified. Staffing is in process and should be completed within 3-4 months. Management acknowledged that the central treasury is a domestic initiative, and that any global program will take years to implement. In this effort, management has been spending a significant amount of time putting strict limits in place and analyzing the growth rate in assets across the company. Central Treasury is then tasked to familiarize business unit management with its proposed exposure matrix process. This process will include the probability of OBS assets coming back on balance sheet such as municipal tender option bonds and will metric liquidity and exposures in P/L terms.

Going forward, refinements (including changes in assumptions and an extreme downside risk as illustrated by the market dislocation) will be made however the core market risk management infrastructure will not change. The CFP will include an increase liquidity requirement /cushion as the events in August proved one may be necessary as the market changes. The new centralized treasury unit is tasked to produce a CLP that reflects all the right assumptions including the sizing of the liquidity buffer suggested to keep. This effort is currently a work in process.

Overall basic structure for stress testing and contingency funding planning was sound. Existing process is dynamic with management reviewing its assumptions throughout the market dislocation.

Citigroup continually review its assumptions related to secured funding (haircuts, time to liquidity, and operational constraints) and availability of funding sources.

While larger liquidity portfolio exists at the parent company, a higher proportion of long term liabilities and capital exists at the broker/dealer.

C Market Risk Management

1. Value-at-Risk

Citigroup believes its VaR is calculated correctly and that it has a very good calculation method. Citigroup's methodology has been reviewed by external credit rating agencies and audited by external accountants. VaR is one of many tools for market risk, but not a tool that risk management emphasizes given its inherent weaknesses.

Limit usage was high in businesses most affected by market turmoil, possibly as a result of reduced liquidity leading to the disruption.

2. Scenario analysis / Stress testing

Overall, management asserts that its trading-desk stress regime worked fairly well. There are 175 trading desks, and fewer than a dozen experienced losses. Most of Citigroup's stress tests were over-estimates of risk but the handful weren't.

Citigroup did not perform comprehensive, firm-wide consolidated stress tests. Stress testing is performed at business unit level, as culturally the organization is decentralized, and these business level tests do not aggregate well across firm. The Markets & Banking stress test, aggregating across businesses with no correlation benefit, estimated a $14 B loss.

A work stream is underway analyzing single factor sensitivity (such as the MTOB impact) to create rapid fire stress tests that capture the biggest risk. This stress test will not be primarily statistically driven but more forward-looking.

In CDO and leveraged lending, Citigroup management acknowledged that it did not stress enough. In January/February 2007, risk management increased stresses on non-Super Senior tranches of CDOs, but did not change the stress assumptions on the AAA super-senior tranche.

Historically Citigroup's business line stress testing methodology is dependent on statistically- based estimates (worst 65 day period). Citigroup did not historically vary the 65-day period (one quarter) for exposures with potentially longer liquidation requirements, such as warehouses, syndicates, etc. Management noted the need to take a more macro economic view adjusting for assumptions.

Risk management's challenge is to identify the instances where the historical statistical approach likely doesn't hold up.

Risk management acknowledges the need for better understanding of tail events. The area of risk management that is weakest is the analysis of and tactics to deal with the tails, and as this market dislocation suggests the tails are fatter than most people think they are.

3. Risk reporting and aggregation

Citigroup acknowledges that better linkages need to be made across the group to identify and highlight any intersection/convergence of risk.

In looking back, risk management noted some weaknesses in consumer side 90 DPD+ asset quality indicators in its CF mortgage portfolio; however, it believed the structure of the CDO/security was intended to handle that type of stress.

The firm did not have CS01 limits on the syndicated loan pipeline.

4. Valuation practices

Citigroup management stated it has a formal process for valuation that is delineated in policy with regards to pricing, verification, and other areas of responsibility. If a model is used for a value in Citigroup's books/records, it is subject to the Model Validation Policy and must be validated. During the market dislocation, nothing fundamentally changed in the models Citigroup used.

Models did not drive the valuation methodology and instead assisted in determining marks. Trader judgment was used in valuation of super senior AAA CDO exposures. It was the judgment of the traders, with oversight by Financial Control, that resulted in marking these conduit positions at par. There had been little deterioration in market indices. At the end of September, began to have conversations on the valuation of super-senior AAA CDO tranches, and concluded that there had been no deterioration in value. For quarter-end 3Q07, the exposure was under consideration for impairment. (When there are disputes over valuation, traders were not required to sell a portion of the position to establish a market price.)

Significant disputes regarding inter-dealer CDO positions outstanding exist as market values differ for the same counterparty. Some dealer's valuations imply ABX index declines regardless of CDO collateral waterfalls. Citigroup's Broker/Dealer is managing the discrepancies. Management notes the differences are not cash flow-related but rather a fundamental difference in values where one side hasn't marked the same security the way the other did in respect to individual counterparties. These valuation disputes between parties is further evidence of the difference between valuation methodologies as the same security may be valued as much as 5x more than the other.

5. Hedging

Citigroup noted its primary strategy for reducing risk on the syndication and warehousing businesses of the CDO and ABS Correlation desks was direct distribution, even as market conditions deteriorated. Management believed that it could syndicate the risk. Hedging of risk was intended to be a secondary risk reductions strategy.

Management indicated that, over time, the CDO warehouse business had shifted from an agency business where the asset manager bore the risk, to one where there was a "sharing" of risk with the bank: the asset manager would take the equity and Baa tranche, with the bank retaining (and possibly distributing) the A through super-senior tranches.

The firm did have in place stale inventory reporting, but did not consider the super-senior tranches inventory despite the MTM accounting.

One conclusion the firm has reached is that too much of a determination on when to hedge was left with the business lines. No effective macro hedge was placed at the top of the house. In addition, the internal incentive structure did not provide incentives for businesses to hedge risks aggressively.

Citigroup used various specific and "macro" hedge instruments:

- Short positions in sub-prime ABS, either through ABX indexes or single name credit default swaps; largely these have performed as expected.
- Purchased protection on CDO tranches, including super-senior; again these largely performed as expected.
- Purchased protection on CDO^2. Purchasing protect in this leveraged form was primarily aimed at hedging market risk associated with MTM losses on the underlying instruments rather than compensating for principal loss, i.e., hedging efficiency broke down in the context of extreme market moves.

Of the businesses unaffected by the sub-prime crisis, the most notable instance of a hedge not performing as expected has come in the US credit trading business. Unlike in previous dislocation, cash bonds have underperformed default swaps. This contributed approximately 10% of the desk's write-downs in the period.

D. CREDIT RISK MANAGEMENT ISSUES

1. Accuracy of potential exposure measures and stress testing

Potential Future Exposure (PFE) alone was inadequate. Citigroup found itself with large, concentrated exposures that could not be liquidated over the assumed horizon. In addition, because the counterparty weakness was public, the size of the market movement exceeded the firm's confidence interval estimate.

During events, they extended their PFE defeasance period from five to 35 days. This resulted in significant margin increases for new client transactions.

Counterparty credit models that directly referenced sub-prime understated risk given a "severe stress" event.

Citigroup noted the issue was more the extreme move in one particular asset class / risk factor than one of correlation across asset classes.

2. Risk reporting and aggregation

Counterparty credit exposures are regularly reported by counterparty type and product (i.e., derivatives, repos, forward trading).

During the stress period, Citigroup developed more granular reports which included notional (versus potential future exposure) and underlying product (i.e., sub-prime, leverage loan derivatives, repos on sub-prime and CDOs, CDS on sub-prime, Leveraged loans, etc.) and counterparty types (mortgage companies, financial institutions, mono-line insurers, SPVs).

During the stress period, reporting was also focused on those counterparties either actually or potentially impacted by market developments.

Frequent conversations (sometimes daily) regarding significant developments and exposures supplemented this more granular MIS reporting to Senior Management.

However, effective communication across businesses was lacking. Management acknowledged that, in looking back, it should have made the mortgage deterioration known earlier throughout firm. The Global Consumer Group saw signs of sub-prime issues and avoided losses, as did mortgage backed securities traders, but CDO structures business did so belatedly – no dialogue across businesses.

3. Hedging, provisioning, and reserving

As counterparties came under stress, Citigroup reduced exposures when possible (i.e., short term uncommitted facilities) and increased haircuts.

There are several names in the Financial Institutions portfolio that are either already classified or being closely monitored for potential classification for which Citigroup had purchased protection before the market stress.

Hedging strategies and risk mitigation techniques are continuously reviewed for improvement with particular emphasis on those exposures that cut across traditional credit and market risk frameworks.

The final determination when to hedge an exposure remained with the business unit.

4. Counterparty credit risk management

Citigroup marked down collateral pledged as a result of the downturn in the real estate market and spreads widening in the leveraged debt segment. This resulted in additional margin calls. In response to continued market volatility, Citigroup increased haircuts across all collateral types.

5. Syndicated Lending

Citi's objective to remain at or near the top of the league tables created a belief that it had to 'remain in the game' at virtually any cost. The overall benign credit environment and economic conditions and, more importantly, the huge increase in investor demand for loans caused the pricing and structure of all classes of loans to soften over time. As Citi underwrote to market, its underwriting standards deteriorated as well.

For a period of time, Citigroup had a "no market MAC" sub-limit, but when the entire market moved in that direction, the risk management discipline of caps such as this one fell away in early 2006. Management noted discussion on whether the option written to financial sponsors was under priced (option due to extended closing period). Underwriting practices noted industry wide reduction in the use of structural protections such as the material adverse change (MAC) clause and/or price flex.

A reappraisal of risk appetite in leveraged lending was performed in 1Q 2007 where Risk appraised size of business, pipelines, market share, and the large transactions announced.

In the 2Q for the first time, syndication amount became subject to MTM treatment and as a result existing accrual based risk management was misaligned with MTM accounting.

6. Sub-prime lending

E. ECONOMIC AND REGULATORY CAPITAL AND RELATED ISSUES

1. Internal capital assessments

Citi has provided specific targets for its two primary capital ratios: the Tier 1 capital ratio and the ratio of tangible common equity to risk-weighted managed assets (TCE/RWMA ratio). Currently Citigroup's capital ratios are below these targets and Citigroup is in the process of trying to achieve target by the end of 2Q08. Management intends to calculate a required "capital cushion/buffer" to achieve at a minimum a 6.5% TCE ratio and hold business in a steady state.

Citigroup monitors its capital ratios versus these targets regularly. For the current quarter, capital ratios are evaluated weekly, and the forecast for the year is updated quarterly.

Economic risk capital is run quarterly and compared to Citigroup's available financial resources.

Change in Focus

Historically, Citigroup sought to grow net income with no asset or funding constraints. Historical tolerance for risk to downgrade to AA standard: Citigroup can withstand up to a $12 B loss and remain rated AA. Now Citigroup will use the metric net income after capital charge (NIACC). Central treasury will charge businesses for risk capital.

Citigroup will place more importance and awareness on economic capital process. They hope the new exposure risk matrix will bring greater "longitudinal" thinking and position Citigroup well for the "next battle of the war."

Going forward, Citigroup will review its capital management process surrounding large acquisitions. Its recent acquisition of Nikko Cordial Corporation lowered its TCE/RWA ratio. Management acknowledged that the capital cushion was also being used for this acquisition and having a larger cushion at the time may have mitigated more risk.

2. Capital & CDO/CLO businesses

Citigroup allocated trading (VaR) and operational risk capital to its CDO and CLO businesses based on its internal models. No credit risk capital, however, was allocated to the CDO assets.

3. Capital & earnings volatility

Citigroup conducts stress tests, some of which assume very severe conditions.

Citigroup plans to stress test going forward with particular market conditions experienced in recent months.

4. Capital planning Citigroup considers its capital planning process to be dynamic, with frequent updates to business and capital forecasts. In 3Q and 4Q 2007, Citigroup ran alternative scenarios that consider valuation and the potential on-boarding of additional exposures. Citigroup, as noted, needs to think more clearly about adequacy/size of capital buffer.
5. MIS Citigroup captures and aggregates exposures at times of stress both through systematic and manual reporting. In the case of sub-prime mortgage exposure, management noted it took about a day to get an accurate direct exposure. Citigroup needed to aggregate this information in several organizations. Going forward, Citigroup hopes to improve the granularity and drill down further in its MIS. Citigroup has historically managed to a single notch downgrade parameter, which in retrospect may have been too broad "get to AA rating," and now is moving towards a balance sheet driven/capital adequacy perspective. Citigroup acknowledges a need to combine capital adequacy with earning volatility. It will also include scenarios where that address interest rates convergence or scenarios where stock price declines, and other dynamics into its stress testing. Management acknowledged the need for different/enhanced MIS to determine where capital is needed across business lines and compare to its budgeted capital charge. CFO Gary Critteden described a matrix with each business line and risk (market, credit, Liquidity, fiduciary, operations) on the axes that will arrive at a sum of risk capital for the firm. A new process is being developed to drive capital allocation and regulatory capital needed to address downside scenarios and highlight necessary capital generation.
6. Accounting & Disclosure Management provided investors and creditors with highly granular disclosure. Noted no limitation on its disclosure / transparency. Management stated that its disclosure did not help its securitization pools. In essence, the disclosure had no effect as investors shunned structure itself. To combat what management perceived as misinformation about SIVs portrayed in media, Citigroup disclosed salient facts on 11/4/2007. In its quarterly disclosures it discussed transparency of structures by asset/type/rating. This did not help allay investor skepticism. Management believes that investors equated CDO with SIV and had no appetite for the structure.

Another challenge for Risk is achieving the proper amount of disclosure as deemed from a credit staff/investors point of view (how much credit work an investor is expected to do on a structured credit). Summarized information may be ideal to enable the user's binary constraints (Y/N).
7. *Regulatory incentives (not shared with the firms in advance)* ***Arbitrage creation of the CDO*** Citigroup as a firm is complex from both a legal entity and a funding perspective. Businesses sought to capitalize regulatory capital treatment, tax effectiveness, P/L accounting, and then liquidity as opposed to the inverted focus on liquidity, P/L accounting, tax and regulatory capital treatment that would be necessary in market dislocation. Realistically, the business equated low RAP capital cost with a remote probability for disaster, and therefore the business did not try very hard to sell Super Senior Triple An exposures/risk.

III. OTHER OBSERVATIONS

Please share any other significant insights you gained from your discussions with the firm that may not fit into the categories and subcategories above.

For example, in light of recent events, what insight or guidance do firms seek from supervisors?

Remarks by Chairman of the Board Robert Rubin

As Financial Engineering became more complex, it exacerbated rather than reduced volatility. The recent market dislocation became a question of tails / unusual circumstances and how the industry should deal with it. Firms need to achieve balance -- not under-react/not over-react. For the Long-term, supervisors must address consumer protection and systemic risk in the tails.

Government must fund and support the Federal Housing Administration and provide the mortgage area with funding for counseling debt renegotiation. Firms are tasked to provide the Community development world with adequate resources. This is where private sector efforts should be brought together with the Federal Government's.

Citigroup is conscious of lawsuits forthcoming and sees a public policy statement necessary, as the disintermediary nature of the mortgage market is not captured. Litigants are inclined to sue warehouses / securitizers, as they are the only parties left standing with deep pockets and are targets for potential law suits. Citigroup has proactively estimated contingent losses; however, the outcome of loss remains unclear.