

# THE TALE OF THE CITIGROUP BUILDING

by Steve Brown

On this Friday, we depart from our normal bank performance story with more of a human interest story about a bank. The story involves Citigroup and is not only an interesting tale, but could be taken as an exercise in the purest form of risk management and corporate decision making. On 53rd and Lexington, in midtown Manhattan, stands the 59 story Citigroup Center with its distinctive building top. After it was built in 1977, a college engineering student out of NJ did a design paper on the many engineering innovations incorporated into the building. One such innovation was the two diagonal girders that formed a chevron and gave the building internal strength (but used fewer materials as a traditional design). As the student pointed out, however, this design was suspect, as a high velocity wind, such as a hurricane, could provide enough force on the corners of the building that it would cause twisting stress to bring down the building. The student called William LeMessurier, the buildings structural engineer, to let him know of his findings. LeMessurier scoffed at the boy and pointed out that the problem in his logic was that the diagonal floor joints were welded and able to stand the quartering forces. So impressed with the boy however, he offered a tour and when it came time to point out the joints, LeMessurier noticed that the joints were not welded, but bolted, a feature that gave less support as designed. Upon research, it turns out that the design had been modified by the contractor in order to speed up construction and the substitution was deemed minor enough that LeMessurier was never informed. After redoing the calculations, LeMessurier concluded that the boy was in fact right and that 75mph winds for 5 minutes resulted in a 50% probability of failure. After running a Monte Carlo model, it was determined that these winds could statistically occur once every 17Ys. Yikes! At this point, many would have buried the flaw, but LeMessurier reached out to John Reed, the CEO of Citi at the time. Reed had an engineering background and was deeply involved with the buildings signature design. Upon careful consideration, Citi and the building agreed to secretly weld the joints between 11pm and 4am, so as not to disrupt work or cause a panic (or reputational risk). As a backup plan, Citi hired the Red Cross to walk the neighborhoods and collect telephone numbers and household data under the guise of a "health survey" in case they had to guickly evacuate all 156 blocks that could be impacted if the building fell. The welding started on August 1st in 1978, and all was going fine except for the fact that a reporter from the WSJ noticed the nightly glow. Luckily, the reporter didn't conduct any follow up so the secret remained safe. That is until a couple weeks later when a NY Times reporter started asking questions. In a stroke of luck, the newspaper union went on strike that month and the story was dropped in the disruption. All was stable, except Hurricane Ella was moving up the coast for New York and Citi was ready to come clean and call for evacuation. The day before Citi was ready to call for an evacuation, the storm moved out to sea at the last minute. By mid-October, working around the clock, the retrofit was complete and the building was braced surpassing its original design specs. Ironically, no storm has yet generated the winds that would have theoretically toppled the building and called into action the evacuation plan that was known as "Plan 828." We will let you draw any conclusions on if John Reed and the building handled this situation correctly from a risk management and governance standpoint, but we do marvel at that fact that it took a phone call from a college student to save the lives of thousands of people.

#### **Related Links:**

Basel III

### **Capital Planning**

# **BANK NEWS**

#### **Fed Outlook**

Bernanke's testimony was dovish, but not to the extent many hoped. Expectations for a big policy change at the next FOMC meeting abated because of his wording choice, as it appears the Fed remains in "wait and see" mode.

#### Basel III

The Fed put out for comment 3 proposed rules that marry Basel III with Dodd-Frank required changes. In a surprise, the proposal covers minimum regulatory capital ratios for banks down to \$500mm in asset size. The new guidance raises the required capital and now applies the "buffer" concept to community banks. In addition, the guidance cleans up the framework to calculate the risk-weighting of assets (applies to all banks) and, provides more clarification on a risk-based capital approach to items such as securitizations, counterparty credit risk and capital disclosure requirements. Comments are due Sept. 7th and a summary of the guidance can be found by clicking on the "Basel III" link in the related links section below.

## **OCC Capital**

The OCC released guidance on capital planning that covers the regulatory process for evaluating if a bank's capital planning is adequate. While there is nothing new here, the guidance is an excellent summary for all banks of how a good capital plan should be dynamic, integrated to include all risks (not just credit) and risk-based with contingency planning built in. For more information, follow the "Capital Planning" link in the related links section below.

#### **FINCEN**

The agency put out a reminder that all banks subject to BSA are now required to file electronically by July 1.

#### **US Downgrade**

Fitch warned of another Treasury debt downgrade if the US doesn't get their fiscal "stuff" together.

#### **OD Fees**

US Bank raised their initial OD fees from \$33 to \$37, while 5/3rd raised their fees from \$25 to \$37.

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