# St. John's University Undergraduate Student Managed Investment Fund Presents:

# Citigroup Inc. (C)



# **Analysts**:

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**Recommendation: Buy 600 Shares (= \$18,882.00)** 

**Share Data:** 

Price 12/11/07: \$31.47

Shares Outstanding: 4,981.13 (mil)

Market Cap: \$156.76 Billion

Beta: 1.157

52 Week High: \$57.00 52 Week Low: \$29.50

**S&P** Credit Rating (preferred): A+

## **Fundamentals:**

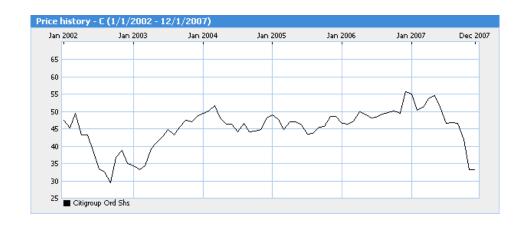
P/E: 8.9

Forward P/E: 11.7

Diluted EPS thru Q3 2007: \$2.69 Diluted EPS (Est.) 2008: \$3.30-\$3.73

Dividend Yield: 0.17%

Last Dividend: 11/21/07 \$0.54



#### **Executive Summary**

After our group's analysis of Citigroup Corporation we recommend a purchase of 600 shares of Citigroup at Market Price. We have come to this decision after analyzing Citigroup's financials, its industry, future outlooks, and current news regarding the company. Citigroup offers a plethora of financial services to a wide range of customers. The decision to purchase Citigroup stock was based on the following criteria:

- Recent stock price depreciation
- A positive outlook for future growth
- A financial allocation more in line with the S&P 500's

For these reasons, we believe adding additional shares of Citigroup Corporation will be a valuable addition to the Student Managed Investment Fund

#### **Company Overview**

Citigroup is comprised of various financial and insurance companies that the financial corporation has merged with over the years. Citigroup has over 200 million customer accounts in more than 100 countries. Citigroup currently has total assets in excess of \$2.3 trillion. The company originated with Citibank in 1812, which eventually evolved into Citicorp. In 1998, CitiCorp's biggest transformation occurred when CitiCorp and Travelers Group merged to form CitiGroup. Travelers Group's businesses covered credit services, consumer finance, brokerage and insurance.

Many feared that this merger would not last because of legislative restrictions on banks merging with insurance underwriters. These qualms were remedied in 1999, when the Gramm-Leach-Bliley Act was put into legislation and allowed banks to merge with insurance underwriters. Citigroup was now a financial conglomerate comprised of companies such as Primerica, Smith Barney, and Salomon Brothers. In 2005, Citigroup sold off its insurance underwriting business to MetLife, but still sells all forms of insurance.

In order to produce optimal earnings, Citigroup utilizes the "diversified financial services business model". This model was first invented by Prudential Financial. This model combines different types of finance companies, such as banks, stock brokers, insurance underwriters, etc. The primary goal is to diversify the overall company, due to the fluctuations in earnings of its subsidiary companies. Each business performs better or worse at different times of the business cycle, and so by combining all of them establishes less earnings volatility. With a plethora of financial services, clients can manage all their finances with the same company.

Citigroup is comprised of three business segments: Global Consumer, Global Wealth Management, and Citi Institutional Clients group.

#### Global Consumer

In 2006, Global Consumer generated 55% of Citigroup's revenues. Global Consumer Group is comprised of four sub-divisions: Credit cards, Consumer Lending Group, Consumer Finance, and Retail Banking. Citi Credit Cards generated 40% of the

profits for Global Consumer. Citi Credit Cards is the largest issuer of credit cards across the world. The Consumer Finance division generated 20% of Global Consumer's profits.

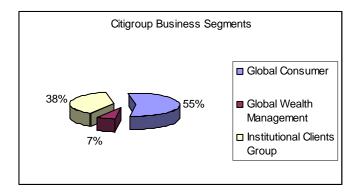
### Global Wealth Management

Global Wealth Management generated 7% of Citigroup's 2006 revenues. Global Wealth Management is divided into three sub sections: Citi Private Bank, Citi Smith Barney, and Citi Investment Research. Citi Private Bank offers banking and investment services to high net worth individuals, private institutions, etc. Citi Smith Barney is the global private wealth management division of Citi. Citi Smith Barney provides brokerage, investment banking and asset management services to corporations, governments and individuals on a global scale. Citi Smith Barney holds over 9 million domestic client accounts, with client assets totaling \$1.562 trillion worldwide.

#### Citi Institutional Clients Group

Citi Institutional Clients Group is divided into two sectors: Citi Markets & Banking and Citi Alternative Investments. Citi Markets & Banking generates 38% of Citigroup's 2006 revenues. Citi Alternative Investments sector focuses on alternate investment within five classes: private equity, hedge funds, structured products, managed futures, and real estate.

Citi Alternative Investments currently holds \$59.2 billion under capital management. Citi Alternate Investment generated 6% of Citigroup's 2006 revenues.



### **Citigroup Board of Directors**

- Vikram Pandit
  - o CEO, Citigroup Inc.
- Win Bischoff
  - o Chairman, Citigroup Inc.
- C. Michael Armstrong
  - Chairman Board of Trustees, Johns Hopkins Medicine, Health System Corporation and Hospital

- Alain J.P. Belda
  - o Chairman and Chief Executive Officer, Alcoa Inc.
- George David
  - o Chairman and Chief Executive Officer, United Technologies Corporation
- Kenneth T. Derr
  - o Chairman, Retired, Chevron Corporation
- John M. Deutch
  - o Institute Professor, Massachusetts Institute of Technology
- Roberto Hernández Ramírez
  - o Chairman, Banco Nacional de Mexico
- Andrew N. Liveris
  - o Chairman and Chief Executive Officer, The Dow Chemical Company
- Anne Mulcahy
  - o Chairman and Chief Executive Officer, Xerox Corporation
- Richard D. Parsons
  - o Chairman and Chief Executive Officer, Time Warner Inc.
- Judith Rodin
  - President, Rockefeller Foundation
- Robert E. Rubin
  - Director and Executive Chairman of the Executive Committee of the Board, Citi Inc.
- Robert L. Ryan
  - o Chief Financial Officer, Retired, Medtronic Inc.
- Franklin A. Thomas
  - o Consultant, TFF Study

### **Board of Directors Highlights**

Charles Prince resigned as CEO and Chairman of Citigroup on November 4<sup>th</sup> of this year. Prince resigned after Citigroup had to write-down \$11 billion due to the subprime mortgage crisis. He was later quoted as saying "I am responsible for the conduct of our businesses, the size of these charges makes stepping down the only honorable course for me to take as Chief Executive Officer." With no one to replace Prince, Sir

Win Bischoff, Chairman of the European Advisory Board of Citi, was named interim CEO, and Robert Rubin, Chairman of Citigroup's Executive Committee, was named as interim Chairman of Citigroup Inc.

Naming a successor after Charles Prince had been a difficult task. Citigroup was in talks with John Thain, chief executive of the NYSE EuroNext market, as a possible candidate for the position. However, Thain eventually took over as CEO for Merrill Lynch on November 14<sup>th</sup>. On December 11<sup>th</sup>, Vikram Pandit was named CEO of Citigroup. With Pandit's acceptance of the position, Sir Win Bischoff is the new Chairman of Citigroup Inc., and Robert Rubin returned to his position as Chairman of Citigroup's Executive Committee. A new CEO is not the only change in management. They will need to find a new COO at the end of the year. Citi's Chief Operating Officer Robert Druskin will retire at the end of this year after 16 years.

### **Recent News**

In light of the sub-prime mortgage crisis, Citigroup initially had to write off \$6.8 billion for the third quarter. They now must write down an additional \$11 billion in the fourth quarter. Shares of Citigroup have plunged 42.5% over the last five months. As of early November, Prince Alwaleed bin Talal of Saudi Arabia was the largest share holder of Citigroup stock. Before Charles Prince's resignation the Prince Alwaleed announced that if Prince did not offer his resignation after the news of such high losses, he along with other Citigroup shareholders would call for his resignation. With its back against the ropes, Citigroup began to look for investors.

Citigroup sold 4.9% of its shares for \$7.5 billion to the Gulf Arab emirate Abu Dhabi. This surpasses the 3.6% ownership held by the Saudi Prince. With this sale, Abu Dhabi is now the largest share holder of Citigroup stock. This cash infusion will help to recover the losses sustained by Citigroup due to the sub-prime mortgage crisis. However, Citigroup must pay a high price for this cash infusion. Citigroup must sell mandatory convertible securities to Abu Dhabi that pays a fix coupon of 11%. To put these financial gains into perspective, Abu Dhabi would be receiving coupon payments higher than the average U.S. junk bond yield.

According to CIBC World Markets Analyst Meredith Whitney, acquisitions have taken up \$25 billion of Citi's capital over the last year. Whitney expects Citigroup to cut its dividend to replenish its capital. She estimates that Citi would need to raise \$30 billion in capital. Citi is taking steps to cut its costs by reducing its workforce by 5%. In early November, Citi shares closed at \$29.80. This was the first time the stock had sold below \$30.00 in over five years. Citi's market value has diminished by more than \$100 billion this year. On November 5<sup>th</sup>, Citigroup announced that it would be lowering its third quarter EPS from 47 cents to 44 cents. This lower than expected third quarter EPS reflected the correction on the valuation of \$43 billion in exposure to collateralized debt obligations backed by asset-backed securities. Citigroup announced on December 13<sup>th</sup> that it will bail out seven of its structured investment vehicles, bringing \$49 billion of assets onto its balance sheet. After Pandit made this announcement Moody's lowered Citigroup's long-term rating from Aa2 to Aa3. Citigroup said that it made the decision after Moody's and S&P's indicated they may cut the credit ratings of the Structured Investment Vehicles.

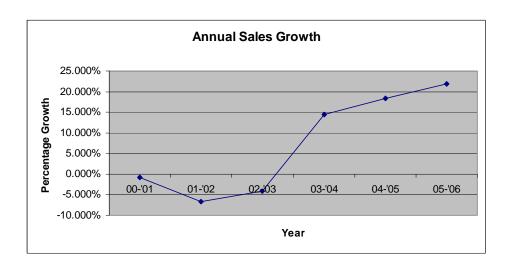
### **Industry Analysis**

## **Industry Overview**

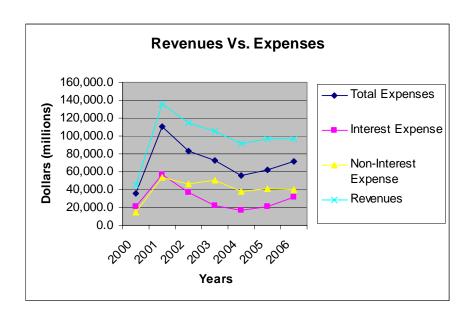
Citigroup is part of the Diversified Financial Industry. The Diversified Financial Industry is being heavily affected by the sub-prime mortgage crisis. The Sub-Prime Mortgage Crisis refers to the practice of making loans to borrowers who do not qualify for the best market interest rates because of their deficient credit history. The loans given to these borrowers were defaulted upon. An abrupt rise in sub-prime mortgage foreclosures has caused subprime mortgage lenders to fail or file for bankruptcy. The situation became worse in early November when Citigroup announced its subprime losses.

# **Fundamental Analysis:**

When comparing Citigroup to its main competitors, the diversified financials industry and the S&P 500 financials sector, for the most part, the ratios seem to be in line with these competitors from 2000-2005, but then from the years 2005-2007, the Citigroup key ratios seem to trend for the worse. We feel that there are two main reasons for this downward trend in Citigroup, the main being that CEO Charles Prince III was not as effective in managing the company as promised. His initial goal when he joined Citigroup was an aggressive growth campaign, and while the data below shows Mr. Prince succeeded in increasing annual sales growth, the next chart shows that



while growth occurred, expenses rose more quickly than revenues during the period 2004-2007. We believe that this management problem is the main reason for Citigroup's underperformance as shown by important indicating ratios. Another important factor that must be noted is that when reviewing these numbers, the data is through only three quarters of 2007, this combined with the huge write-offs from the sub-prime mortgage crises is an important factor for such drastic 2007 drop-offs.

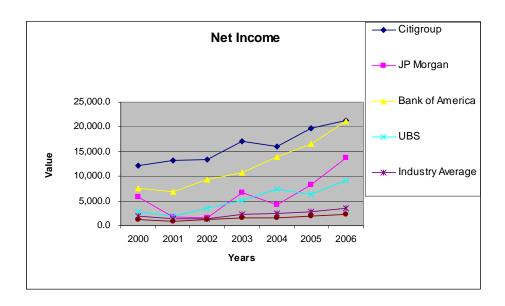


Expense and Revenue Growth Rates Year to Year

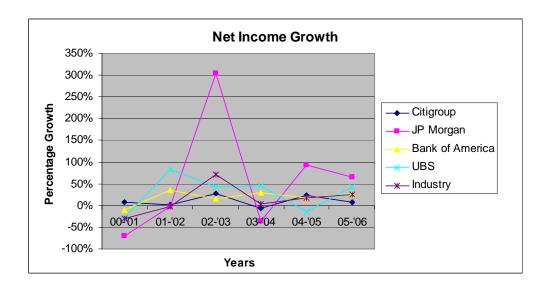
	00-'0	)1 01	-'02	02-'03	03-'04	04-'05	05-'06			
Total Expenses	20	09.05%	-24.71%	-12.40%	-23.54%	11.63%	15.8	83%		
Interest Expense	17	73.71%	-35.59%	-40.00%	-21.91%	23.65%	49.6	63%		
Non-Interest Exper	ise 25	58.58%	-13.07%	9.48%	-24.25%	6.25%	-1.	79%		
Revenues	20	01.25%	-15.28%	-8.61%	-12.73%	5.21%	. 0.	56%		
Dollar Changes Year to Year										
	2000	2001	2002	2003	2004	2005	2006	2007		
Total Expenses	35,651.0	110,181.0	82,956.0	72,670.0	55,562.0	62,024.0	71,841.0	75,395.0		
Interest Expense Non-Interest	20,804.0	56,943.0	36,676.0	22,004.0	17,184.0	21,248.0	31,793.0	36,459.0		
Expense	14,847.0	53,238.0	46,280.0	50,666.0	38,378.0	40,776.0	40,048.0	38,936.0		
Revenues	45,118.0	135,919.0	115,156.0	105,238.0	91,844.0	96,630.0	97,175.0	89,039.0		

## **Profitability:**

In comparing Citigroup's net income to the industry, 2007 is the first year that any of the competitors surpass Citigroup. It seems here that while Bank of America nearly catches Citigroup in 2006, 2007 has had more of a negative impact on Citigroup as the bank has had to write-off \$10 billion in loan losses versus Bank of America's \$3 billion. The decline of revenues relative to expenses will also have an impact on the net income.

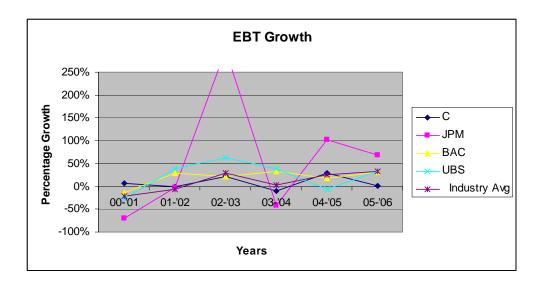


Net income growth has been somewhat volatile through the first part of the decade:

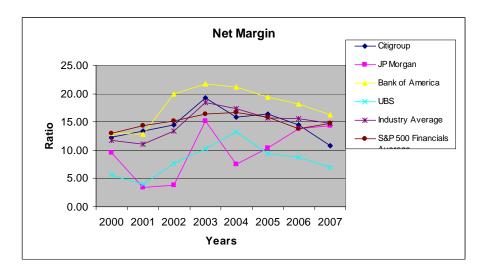


This shows again that the management of Charles Prince has not been effective in streamlining revenues and expenses that would result trending growth upwards over consecutive years. Also, growth has declined through three quarters for not only Citigroup, but for the entire group of competitors, the industry as well as the S&P500 financial sector.

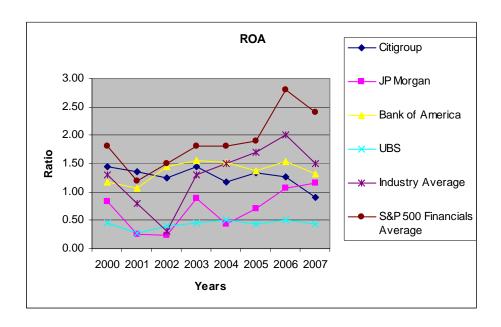
Earnings before taxes look very similar to net income growth above. While the numbers are similar, they are not the same and it seems that each of the main competing banks as well as the industry and sector remained in about the same position relative to each other.



The figures for net margin from 2000-2003 were among the best in the field, being in the top two versus the competitors and industry. But it seems that upon Prince's arrival, the margin only had one slight growth year from 2004-2005 and the industry caught up to Citigroup. The write-offs during 2007 again, had a major impact on nearly every company in the industry, but Citigroup by far shows the greatest loss of all.

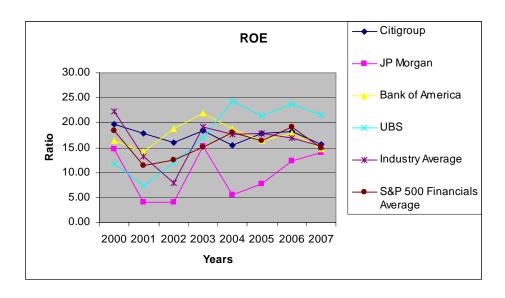


The return on assets for Citigroup used to be above most of the competitors as well as the industry, but again from 2003 to 2004, the industry and Bank of America take advantage of Citigroup's poor returns during the period 2003-2007 to catch up to Citigroup. A bad fiscal 2007 has hurt Citigroup relatively to the rest of the sector, industry and its largest competitors.



			ROA	<b>\</b>				
	2000	2001	2002	2003	2004	2005	2006	2007
С	1.44	1.35	1.25	1.44	1.17	1.33	1.26	0.91
JPM	0.83	0.24	0.23	0.88	0.44	0.70	1.07	1.16
BAC	1.18	1.07	1.44	1.56	1.52	1.37	1.54	1.32
UBS	0.45	0.28	0.40	0.46	0.51	0.44	0.50	0.44
Industry								
Avg	1.30	0.80	0.30	1.30	1.50	1.70	2.00	1.50
S&P 500	1.80	1.20	1.50	1.80	1.80	1.90	2.80	2.40

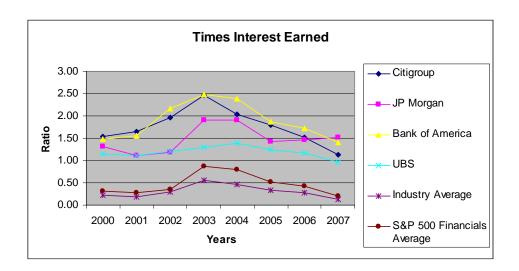
In terms of return on equity, Citigroup remains in line with the sector and major competitors, even through 2007; they remain very comparable to competitors despite significant write-downs.



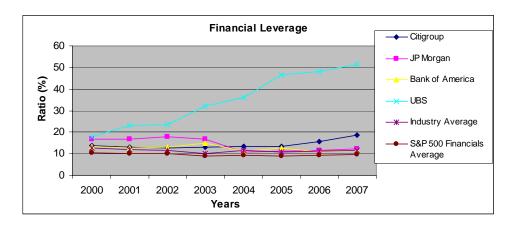
			ROE					
	2000	2001	2002	2003	2004	2005	2006	2007
С	19.65	17.94	16.01	18.47	15.49	17.86	18.29	15.17
JPM	14.80	4.12	3.99	15.19	5.61	7.76	12.24	13.96
BAC	16.33	14.13	18.72	21.90	18.82	16.32	17.85	14.68
UBS Industry	11.76	7.32	11.89	16.86	24.24	21.39	23.65	21.62
Avg.	26.80	15.90	11.50	19.90	29.50	25.30	30.10	17.50
S&P 500	18 40	11 40	12 50	15 10	18 10	16 40	19 20	14 90

## **Long Term Solvency:**

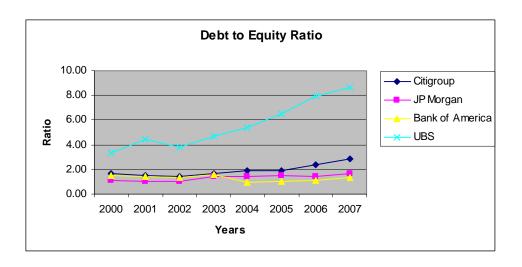
As expenses have risen during Charles Prince's reign as Citigroup, the TIE ratio has fallen as this ratio shows how many times over EBIT can pay the interest expense. Vikram Pandit, new CEO of Citigroup has made a statement that his initial goal is "Simplifying the company's organizational structure and aligning our businesses and resources with appropriate goals and economic realities will be among our initial priorities." We feel that this means there may be some sell-offs from within Citigroup or that there are going to be major structural changes. It seems to early to tell exactly with Mr. Pandit is going to do to solve the revenue vs. expense growth issues, but we feel that this ratio should become more competitive with the rest of the industry once he begins to make some changes within the company.



The financial leverage ratio for Citigroup has experienced significant growth in assets over the past three years, but the ratio will shrink in the next few years as the Abu Dhabi cash injection converts into shares. We also expect that as Vikram Pandit begins to settle into his new position as CEO, he will start to sell some of his assets to help streamline the company which will also help to cause this leverage ratio to shrink back to "normal" industry levels.

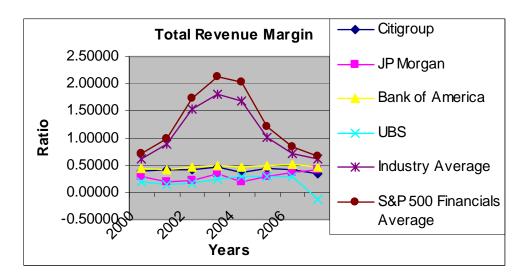


Citigroup's debt has risen in the past few years while their number of diluted shares has remained relatively stable, causing the Debt/Equity ratio to trend a little higher than most of the competition. As the Abu Dhabi cash injection is converted into shares, and their debt rises, we believe the ratio will not change too much and will remain relatively close to the rest of the competitors. Also, industry and sector averages have not been included in this chart because we are calculating Citigroup and its main competitors using long term debt to equity while most data sources that contain entire industry or sector information are using total debt.

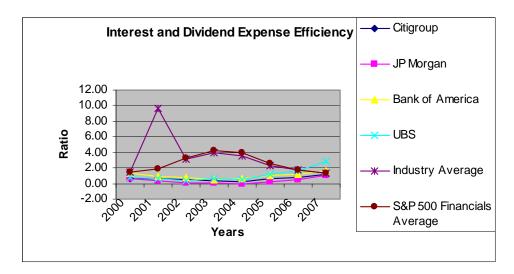


### **Bank Specific Statistics:**

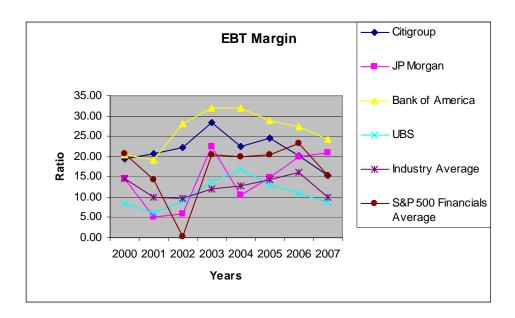
Citibank's total revenue margin has been in line with and slightly above most of them since 2000. This margin indicates essentially the revenues relative to the sales costs of the company, in other words, the revenue minus the bank's non-interest expenses over the entire revenue. When this indicator rises, it shows that growth is outpacing the company's expenses (in this case we calculated the non-interest expense for Citigroup), and when the indicator is falling, expenses are outpacing the total revenues for the company. For a while, the industry and sector during 2002-2004 were well above the competitors and the big banks, but they have started to come back down to rejoin the major banks. We feel that these industry and sector numbers are so high because there are some outlier banks in the sector and industry comparisons that are skewing the margins. Some of these diversified financials include Moody's, American Capital, Intercontinental Exchange and CME Group Inc. Many of these are smaller with much lower sales costs that help them achieve a well above normal ratio.



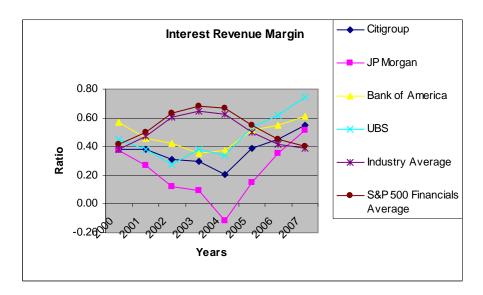
The interest and dividend expense efficiency ratio for Citigroup is essentially the same as the rest of the industry. This ratio is the yield on a firm's cost of raising funds, calculated by taking the difference between net income and non-interest expense and then dividing by non-interest expense. Since Citibank and the other major banks that are listed are very similar, their ratios should not be too different, but as you can see below, some of the smaller banks that have been listed in the industry and the sector for example, Moody's, American Capital, Intercontinental Exchange and CME Group Inc. have had outlandish numbers when compared to the bigger banks and have somewhat skewed the industry and sector numbers and we believe that is why the major banks are so far below these averages.



The EBT margin for Citigroup through 2005 was close to the leaders of all the banks in America, but from 2005-2007 their pre-tax dollars per revenue has fallen to a level that is mid-level in the industry. We believe this will improve with the hiring of new CEO Vikram Pandit if expenses can be streamlined more than the had been by Mr. Prince as well as when the company begins to rebound from the severe write-offs in the 3<sup>rd</sup> and most likely the 4<sup>th</sup> quarters this year.



Interest revenues have risen for Citigroup in the past three years. This is to be expected as annual sales have grown in the same time line. This ratio is calculated by taking the difference between interest income and interest expense and then dividing by interest income. Citigroup remains just above most of the industry and competitors. This is expected since the sales revenues have been steadily growing. This is because while expenses are growing for Citigroup, the non-interest expenses are have not been growing as fast as the interest expenses. The only problem with the revenues for Citigroup at this point in time is that they are being outpaced by total expenses.



Overall, some of Citigroup's most important financial ratios are in line with the industry or major competitors. When the bank is not, it is mostly due to either the subprime crises this year or because of the policies of Charles Prince III, who helped the company's sales revenue growth, but failed to curtail expenses enough to really make a

large positive difference for the company. We believe that a new CEO will help the company become more streamlined and control costs more effectively which will in turn improve the company from an operations stand point as well as a financial standpoint.

### **DuPont Analysis**

The DuPont Analysis is a method of decomposing Return on Equity (ROE) into its three component ratios (Net Profit Margin, Asset Turnover, and Financial Leverage) in order to investigate the drivers of ROE.

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
ROE	19.649	17.943	16.013	18.468	15.488	17.857	18.293	15.168
Asset Turnover	0.111	0.094	0.084	0.070	0.068	0.081	0.078	0.073
Net Profit Margin	12.227	13.341	14.530	19.214	15.795	16.461	14.499	10.798
Financial Leverage	13.627	12.941	12.657	12.896	13.579	13.276	15.731	18.553

Overall, since 2000, ROE has been decreasing, but with much volatility. A decrease in asset turnover for 2006 and YTD 2007, and a nearly 4% decrease in the net profit margin are the main drivers for the downturn in ROE up to the 3<sup>rd</sup> quarter of 2007. Financial leverage has been rising steadily since 2002, which is the only non-volatile increasing component of ROE through the time period. However, even this increase in the capacity of Citigroup to pay its debt is not enough to carry-up ROE with it over the period.

#### **Pro Forma Income Statement**

In order to complete the two upcoming valuation methods for Citigroup's stock, we had to create an income statement that forecasted Earnings per Share (EPS) into the 2008 Fiscal Year. We did this by first coming up with a revenue forecast. Second we forecasted various expenses, incomes, and any other income statement components to get a Diluted EPS number.

### Sales (Revenue) Forecast

In order to come up with a revenue forecast for Citigroup in 2008 we first found the sales numbers for Citigroup and the next five biggest competitors (JP Morgan Chase, Bank of America, United Bank of Switzerland, Deutsche Bank, and HSBC) for 2000-2006. This was followed by summing up all of the individual companies' sales in order to get an aggregate industry sales number. We then found the aggregate industry sales growth rate and Citigroup's sales growth rate throughout the time period. We followed the same steps for 2007 using YTD numbers (through the 3<sup>rd</sup> Quarter). The growth rate numbers are therefore not complete because the 4<sup>th</sup> Quarter is missing, but it is not a problem

for getting an in-year market share percentage, which we will be discussing shortly.

	2000	2001	2002	2003	2004	2005	2006	2007
Citigroup Corporation	\$ 100,031.00	\$ 99,160.00	\$ 92,556.00	\$ 88,778.00	\$ 101,639.00	\$ 120,318.00	\$ 146,558.00	\$ 132,020.00
JP Morgan Chase	\$ 60,317.00	\$ 50,723.00	\$ 43,372.00	\$ 44,463.00	\$ 56,305.00	\$ 79,268.00	\$ 99,302.00	\$ 87,573.00
Bank of America	\$ 57,772.00	\$ 53,116.00	\$ 46,264.00	\$ 49,442.00	\$ 65,682.00	\$ 85,064.00	\$ 116,574.00	\$ 92,203.00
UBS	\$ 48,367.10	\$ 49,154.40	\$ 46,240.00	\$ 49,107.70	\$ 55,737.40	\$ 66,759.70	\$ 104,490.00	\$ 95,833.50
Deutsche Bank	\$ 77,536.30	\$ 66,388.20	\$ 57,866.00	\$ 54,243.10	\$ 60,838.70	\$ 72,361.90	\$ 101,056.10	\$ 93,605.30
HSBC	\$ 50,189.00	\$ 47,271.00	\$ 40,345.00	\$ 55,961.00	\$ 73,985.00	\$ 90,071.00	\$ 111,503.00	\$ 62,588.00
Aggregate Industry Sales Total	\$ 394,212.40	\$ 365,812.60	\$ 326,643.00	\$ 341,994.80	\$ 414,187.10	\$ 513,842.60	\$ 679,483.10	\$ 563,822.80
Aggregate industry growth rate		-7.20%	-10.71%	4.70%	21.11%	24.06%	32.24%	-17.02%
Citigroup Growth Rate		-0.87%	-6.66%	-4.08%	14.49%	18.38%	21.81%	-9.92%

The next step was to calculate the various market shares of Citigroup and its competitors within the aggregate industry. We did this by dividing each company's sales numbers by the aggregate total. Then we found the year to year changes in each company's market share. Lastly, we came up with an average of this change for the time period.

Market Share	2000	2001	2002	2003	2004	2005	2006	2007
Citigroup Corporation	25.37%	27.11%	28.34%	25.96%	24.54%	23.42%	21.57%	23.42%
JP Morgan Chase	15.30%	13.87%	13.28%	13.00%	13.59%	15.43%	14.61%	15.53%
Bank of America	14.66%	14.52%	14.16%	14.46%	15.86%	16.55%	17.16%	16.35%
UBS	12.27%	13.44%	14.16%	14.36%	13.46%	12.99%	15.38%	17.00%
Deutsche Bank	19.67%	18.15%	17.72%	15.86%	14.69%	14.08%	14.87%	16.60%
HSBC	12.73%	12.92%	12.35%	16.36%	17.86%	17.53%	16.41%	11.10%
Market Share Growth								Average
	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2000-2007
Citigroup Corporation	1.73%	1.23%	-2.38%	-1.42%	-1.12%	-1.85%	1.85%	-0.28%
JP Morgan Chase	-1.43%	-0.59%	-0.28%	0.59%	1.83%	-0.81%	0.92%	0.03%
Bank of America	-0.14%	-0.36%	0.29%	1.40%	0.70%	0.60%	-0.80%	0.24%
UBS	1.17%	0.72%	0.20%	-0.90%	-0.46%	2.39%	1.62%	0.68%
Deutsche Bank	-1.52%	-0.43%	-1.85%	-1.17%	-0.61%	0.79%	1.73%	-0.44%
HSBC	0.19%	-0.57%	4.01%	1.50%	-0.33%	-1.12%	-5.31%	-0.23%

The next step taken was to find the average analysts' opinions on the sales forecasts for the five competitors in the 2008 FY. Then we applied the average market share growth rate we found for Citigroup, which was -0.28%, and applied it to the 2007 market share number of 23.42%, giving us an estimated 2008 market share of 23.14%. We then simply plugged in various sales forecast numbers for Citigroup using an automated formula in Microsoft Excel, until we came up with a number (\$95.925 Billion) that provided for a 23.14% Citigroup market share in 2008.

Citigroup Corporation	E[C sales] =	\$ 95,925.00
JP Morgan Chase	-[	\$ 76,427.00
Bank of America		\$ 78,143.00
UBS		\$ 44,654.00
Deutsche Bank		\$ 42,549.00
HSBC		\$ 76,862.00
Aggregate Industry Sales Total	E[industry sales] =	\$ 414,560.00
Aggregate industry growth rate	E[ind growth rate] =	-26.47%
Citigroup Growth Rate	E[C growth rate] =	-27.34%
	E[mkt share] =	23.14%

2008

#### **Income Statement** -- Income and Expense Forecasts

The Interest Income and Non Interest Income numbers were forecasted by taking the historical average of the relationship between the two, and total revenue. Interest Income through from 2000-2007 on average equaled to 64.22% of total revenue, and Non Interest Income equaled to 35.78% of total revenue. The dollar figures turned out to be \$61.603 billion and \$34.322 billion, respectively. Next, Interest Expense was forecasted by finding the average annual relationship to Interest Income over the same time period. This relationship was equal to 47.46%, which amounted to \$29.237 billion in Interest Expense, giving us a forecasted Net Interest Income in 2008 of \$32.366 billion. Lastly, Non Interest Expense was calculated by adding up forecast for its various components. We did this by finding the average of the historical relationship between Non Interest Income and Labor and Related Expenses, and Other Expenses. These percentages turned out to be 57.96% and 54.98%, respectively. They turned out dollar figures of \$19.893 billion and \$18.870 billion, respectively. For the Restructuring Charges we took a conservative estimate by taking the 2007 3Q number of \$35 million, and projecting that number through the four quarters of 2008, since we could find no indication proving anything otherwise. This gave us a Restructuring Charge of \$140 million. Therefore, the total Non Interest Expense came to \$38.903 billion.

Loan Loss Provision and Other Interest Expense

Since we could not come up with an accurate consensus of a Loan Loss Provision number, we decided to use two scenarios, best case and worst case. According to Citigroup's filings, they claim \$11.7 billion in subprime mortgage related assets. Under the conservative consumption that they will write-off the full amount of subprime assets, and Citigroup's claim of an \$11 billion write-off in 4Q of 2007, we can assume that they will write-off at least \$700.0 million in 2008. However, we decided to be overly cautious with that number and round it up to \$1.0 billion as our 'best case' scenario. Our 'worst case' scenario comes from other analysts' estimates that put the subprime related assets that Citigroup holds at \$15.0 billion. Therefore, they could have up to \$4.0 billion to write-off in 2008.

Due to a private placement of \$7.5 billion from the Abu Dhabi Investment Authority, and the rather "creative" structure of this deal, Citigroup will pay 6.6% annual

interest payment on the full amount until a conversion to common stock at various points from March 15, 2010 through September 15, 2011. This gives us an annual charge in 2008 of \$495.0 million.

#### Earnings before Taxes, Income Tax, and Minority Interests

With all of the incomes, expenses, and provisions added together, we came up with Earnings before Taxes (EBT) figures of \$26.290 billion (best case) and \$23,290 billion (worst case). Next, we applied the income tax rate of 27.25% to each scenario giving us income tax figures of \$7.164 billion (best case) and \$6.347 billion (worst case). We chose to use the 27.25% tax rate because there was no indication the rate would change. Also the 2006 and 2007 tax rate numbers (27.33% and 27.25%, respectively) aren't very different, so again, there is no historical trend showing a possible change. For minority interest we used a conservative estimate of \$217 million, which is the average over the time period of 2000-2007, and does not appear to be out of line with recent year's numbers.

#### Net Income before Extraordinaries, and Extraordinaries

By subtracting the tax numbers (best and worst case) and minority interest number from the best and worst case EBTs, we get Net Income before Extraordinaries figures of \$18.909 billion (best case) and \$16.726 billion (worst case). For extraordinaries we decided to go with a \$0 charge. This was in light of the fact that 2007 had no charge, Citigroup's filings made no mentions of them for the future, and it is impossible to forecast extraordinary charges.

#### Net Income after Extraordinaries, Preferred Dividends

Since there were no forecasted extraordinaries, the Net Income after Extraordinaries was equal to the Net Income before Extraordinaries of \$18.909 billion (best case) and \$16.726 billion (worst case). As for forecasting a Preferred Dividends number we had to take into account two factors. First it seems as if though Citigroup is trying to retire its Preferred Stock, as the number has done nothing but decrease over period of 2000-2007. To be conservative, we took the 2007 3Q preferred number of \$6.0 million, and carried that through the four quarters of 2008, giving us a subtotal of \$24.0 million. Secondly, due to the \$7.5 billion private placement, 0.4% will be paid annually on the full amount as preferred payment. This number is equal to \$30.0 million, giving us a total Preferred Dividends payment of \$54.0 million.

#### Diluted Net Income, Diluted Shares, EPS (Diluted)

By adjusting the Net Income after Extraordinaries for Preferred Dividends, we come up with a Diluted Net Income figure of \$18.855 billion (best case) and \$16.672 billion (worst case). For a Diluted Shares figure, we took the conservative approach once again and estimated the number of Diluted Shares for 2008 to be 5.050 billion shares, which is about 39.0 million shares above the 2007 number. There are no stock repurchase

plans in effect, and with the short-term poor performance of the company's stock, there will certainly not be too many employee stock options being exercised. By dividing the two Diluted Net Income scenarios by the number of Diluted Shares, we come up with 2008 Diluted EPS estimates of \$3.73 (best case) and \$3.30 (worst case).

\*\*\*Please see the full income statement for 2005 through 2008 on the next page\*\*\*

	2000	2001	2002	2003	2004	2005	2006	2007	Best Case 2008	Worst Case 2008
Interest income	62,749	64,484	58,939	54,514	63,621	75,916	96,431	91,691	61,603	61,603
Non interest Income	37,282	34,676	33,617	34,264	38,018	44,402	50,127	40,329	34,322	34,322
Total revenue	100,031	99,160	92,556	88,778	101,639	120,318	146,558	132,020	95,925	95,925
Interest Expense	36,459	31,793	21,248	17,184	22,004	36,676	56,943	57,538	29,237	29,237
Net Interest Income	26,290	32,691	37,691	37,330	41,617	39,240	<i>39,4</i> 88	34, 153	32,366	32,366
Loan Loss Provision	5,339	6,800	9,995	8,046	6,233	7,929	6,738	10,002	1,000	4,000
Interest Income as %Rev	62.73%	65.03%	63.68%	61.40%	62.60%	63.10%	65.80%	69.45%	64.22%	64.22%
Non Interest Income as % Rev	37.27%	34.97%	36.32%	38.60%	37.40%	36.90%	34.20%	30.55%	35.78%	35.78%
Interest Expense as %Interest Rev	58.10%	49.30%	36.05%	31.52%	34.59%	48.31%	59.05%	62.75%	47.46%	47.46%
Non Interest Expense	38,936	40,048	40,776	38,378	50,666	46,280	53,238	45,731	38,903	38,903
Labor and Related Expense	18,633	19,449	18,650	20,719	22,934	25,772	30,277	25,351	19,893	19,893
Restructuring Charge	716	454	(15)	-	-	-	-	1,475	140	140
Other Expense	19,587	20,145	22,141	17,659	27,732	20,508	22,961	18,905	18,870	18,870
Non Int Exp as a % of Rev	38.92%	40.39%	44.06%	43.23%	49.85%	38.46%	36.33%	34.64%	40.56%	40.73%
Non Int Exp as a % of Non Int Income	104.44%	115.49%	121.30%	112.01%	133.27%	104.23%	106.21%	113.39%	113.35%	113.85%
*Special Interest Expense*	-	-	-	-	-	-	-	-	495	495
Income before income tax (EBT)	19,297	20,519	20,537	25,170	22,736	29,433	29,639	18,749	26,290	23,290
EBT as %Rev	19.29%	20.69%	22.19%	28.35%	22.37%	24.46%	20.22%	14.20%	27.41%	24.28%
Income Tax	7,027	7,203	6,998	7,838	6,464	9,078	8,101	5,109	7,164	6,347
tax rate	36.41%	35.10%	34.08%	31.14%	28.43%	30.84%	27.33%	27.25%	27.25%	27.25%
Income Tax as % Rev	7.02%	7.26%	7.56%	8.83%	6.36%	7.55%	5.53%	3.87%	7.47%	6.62%
Minority Interest	39	87	91	274	218	549	289	190	217	217
NET INCOME Before Extraoridnaries	12,231	13,229	13,448	17,058	16,054	19,806	21,249	13,450	18,909	16,726
Extraordinaries	1,288	897	1,828	795	992	4,783	289	0	0	0
NET INCOME After Extraordinaries	13,519	14,126	15,276	17,853	17,046	24,589	21,538	13,450	18,909	16,726
Preferred Dividends	119	110	83	71	68	68	64	36	54	54
DILUTED NET INCOME	13,400	14,016	15,193	17,782	16,978	24,521	21,474	13,414	18,855	16,672
# Shares (Diluted)	5,122.2	5,147.0	5,166.2	5,193.6	5,207.4	5,160.4	4,986.1	5,010.9	5,050.0	5,050.0
Net Income(EPS DILUTED)	2.62	2.72	2.94	3.42	3.26	4.75	4.31	2.68	3.73	3.30

# **Valuation**

There are two methods of valuation for determining the fairness of Citigroup's stock price. The first is Relative Valuation, and the second is Absolute Valuation. Each method has their own merits, and likewise, each has its flaws. In the Relative Valuation we used P/E ratios and our EPS numbers to value Citigroup relative to three competitors, our comprised industry, and the Financial Sector of the S&P 500. This allowed us to come up with 5 different price estimates. In the Absolute Valuation we calculated the

Present Values of future cash flows using the Dividend Discount Model. Using this method we were able to determine the intrinsic value of Citigroup's stock at various dividend annual growth rates.

#### Relative Valuation

This is where we determined Citigroup's value relative to other benchmarks. The three main competitors used were JP Morgan Chase (JPM), Bank of America (BAC), and the United Bank of Switzerland (UBS). Our comprised industry consisted of 30 well-diversified financial firms, and the other benchmark used was the components of the Financial Sector of the Standard & Poor's 500 (S&P). The following chart contains the P/E ratios of each through the time period from 2000-2007 and estimated numbers for 2008, along with the arithmetic average and median of each from 2000-2007.

										Arithmetic	
										Average	Median
<u>P/E</u>	<u>2000</u>	<u>2001</u>	2002	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	2000-2007	2000-2007
С	19.1	23.3	126	16.3	16.9	127	13.3	8.9	-	15.39	14.80
JPM	12.5	27.7	28.8	17.0	20.4	19.7	13.9	9.2	9.3	18.65	18.35
BAC	9.6	16.8	12.7	11.5	13.1	11.3	12.3	10.0	9.2	12.16	11.90
UBS	25.3	71.5	27.0	16.8	13.5	13.8	15.8	9.9	9.5	24.20	16.30
Industry Avg	26.4	27.1	20.7	22.0	20.4	26.6	37.7	26.3	14.0	25.90	26.35
S&P 500	99.7	38.9	12.6	20.7	32.0	27.9	32.6	21.0	16.7	35.68	29.95

Citigroup's P/E is lower than the industry average and the S&P; however it is right in line with its two largest American competitors. These relatively low P/E ratios *may* show a stable company, in maturity. However, as we have seen throughout 2007, Citigroup is certainly anything but stable. They are though in a cash-generating stage overall which will be good for constant dividend growth over the long-term. One thing that this low P/E ratio *may* be indicative of is an undervalued company, but we need further evaluation to get a more conclusive result. On the next page, you will see a chart containing Citigroup's P/E relative to its three competitors, the industry, and the S&P.

										Arithmetic	
										Average	Median
	2000	2001	2002	2003	<u>2004</u>	2005	<u>2006</u>	<u>2007</u>	<b>2008</b>	2000-2007	2000-2007
C/JPM	1.528	0.841	0.438	0.959	0.828	0.645	0.957	0.967	XXXXXX	0.90	0.90
C/BAC	1.990	1.387	0.992	1.417	1.290	1.124	1.081	0.890	XXXXXX	1.27	1.21
C/UBS	0.755	0.326	0.467	0.970	1.252	0.920	0.842	0.899	XXXXXX	0.80	0.87
C/Ind Avg	0.723	0.860	0.608	0.741	0.828	0.477	0.353	0.338	XXXXXX	0.62	0.67
C/SP500	0.192	0.599	1.000	0.787	0.528	0.455	0.408	0.424	XXXXXX	0.55	0.49

These numbers simply represent a multiple which we took the arithmetic average and median of in order to use in our Relative Valuation formula. They are key to coming up with a price estimate.

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E[EPS2007]	\$2.58
E[EPS2008] Best Case	\$3.73
E[EPS2008] Worst Case	\$3.30

Price Estimates	using	using	Price Estimates	using	using
Best Case (2008)	Average	Median	Worst Case (2008)	Average	Median
C-JPM	27.714	31.185	C-JPM	24.520	27.590
C-BAC	38.862	41.419	C-BAC	34.382	36.644
C-UBS	31.595	30.842	C-UBS	27.953	27.286
C-Ind Avg	29.120	34.760	C-Ind Avg	25.763	30.753
C-SP500	37.401	30.626	C-SP500	33.089	27.095
	\$32.94	\$33.77		\$29.14	\$29.87

**Stock Price (12/06/07)** 

\$34.35

The above tables show the price estimates of Citigroup relative to the three competitors, the industry, and the S&P for 2007, and best and worst case scenarios for 2008 (depending on EPS). The prices were determined by taking the estimated P/E's of the benchmarks, multiplying them by their respective multiples (from the previous page), and then multiplying that number by Citigroup's expected EPS (best case and worst case) in 2008. \*Please note that these EPS numbers are right in line with almost all other analysts' expectations.\* We then took both the average and median of these numbers for 2008 under the two scenarios to get four different relative prices. At the December 6, 2007 stock price of \$34.35/share, Citigroup's stock seems a little overvalued compared to the worst case scenario in 2008 (average and median), although the best case scenario for 2008 does not show definitive overvaluation given the fact that all inputs are estimates that have associated error around them. Overall, relative valuation under the worst case, most conservative assumption shows Citigroup to be slightly overvalued. Otherwise, the stock can be considered fairly priced.

## **Absolute Valuation**

In this method of valuation we determined the intrinsic value of Citigroup's stock by discounting the Cash Flows (CF's) with the use of the Dividend Discount Model (DDM). We did this by finding various possible costs of equity, estimating future Dividends per Share (DPS), terminal value numbers (for post-2012 intrinsic values), intrinsic values for all years between 2008 and 2012 at different dividend growth rates, adding them up, and taking an average between two cost of capital that we found most appropriate to use.

### Cost of Equity

The first step was to determine three different costs of equity for Citigroup. The first cost of equity  $(k_1)$  used a geometric historical average of the market risk premium which was 6.5%. The second cost of equity  $(k_2)$  used an arithmetic historical average of the market risk premium which was 8.4%. The third cost of equity  $(k_3)$  tacked on a 3.0% 'equity premium' onto a 10-year bond rate. The risk-free rate used to calculate the first

two costs of equity was that of a 10-year Treasury STRIP yielding 4.169%. The beta used came from Bloomberg and was calculated by taking the market and company price variances and covariances over a five year period, calculated once monthly. This raw beta came out to be 1.157. By combining all of these numbers in the Capital Asset Pricing Model (CAPM), we came up with a  $k_1$  of 11.69% and a  $k_2$  of 13.888%.  $k_3$  was found by adding the 3.0% to a 10-year bond yielding 5.979% to get 8.878%.

Cost of Capital (k <sub>1</sub> ) 10yr STRIP Beta Mkt risk Premium CAPM (k <sub>1</sub> ) =	4.169 1.157 6.500 <b>11.690%</b>
Cost of Capital (k2) 10yr STRIP Beta Mkt risk Premium CAPM (k2) =	4.169 1.157 8.400 <b>13.888</b> %
C 6.000% 8/15/2017	5.979%
Cost of Capital (k3) C 6.000% 8/15/2007 Equity risk premium Utendahl (k3) =	5.979 3.000 <b>8.979</b> %

#### **Dividend Forecasts**

The next step taken was to forecast Citigroup's dividend payouts through 2012. Instead of using the payout ratio to find some sort of historical trend, average, or median to apply to our best and worst case scenario EPS estimates in order to get an estimated 2008 DPS, we carried over the 2007 DPS of \$2.16/share. The reasons for this are simple. First, with the housing market troubles and sub-prime related asset troubles expected by most analysts to not begin to ease until the fourth quarter of 2008, we think that it is not financially possible for Citigroup to pay out a larger dividend in 2008. On the flipside, they brokered the \$7.5 billion private placement deal with the Abu Dhabi Investment Authority mainly to be able to maintain their current dividend, as lowering their dividend would surely prove to be catastrophic to the stock price. With that said, there is no reason to believe the DPS in 2008 will be different from the DPS in 2007. Next, we found the average annual growth in DPS over three different time periods: 10 year, 5 year, and 4 year. We took the most conservative growth rate of 18.376% which came from 2003-

2007, and applied it to the DPS starting in 2008 in order to get the 2009 DPS. We continued this process out into 2012 for a final DPS of \$4.241.

	1996	1997	1998	1999	2000	2001	2002	200B	2004	2005	2006	2007
Historical DPS	\$0.150	\$0,200	\$0.280	\$0.410	\$0.520	\$0.600	\$0.700	\$1.100	\$1.600	\$1.760	\$1.960	\$2160

### **Avg Ann Growth DPS**

1997-2007	2002-2007	2003-2007	2008-2012	2007-2012 (est.)
26.865%	25.277%	18.376%	18.376%	14.449%

#### Forecasted DPS

2008	2009	2010	2011	2012
\$2.160	\$2.557	\$3.027	\$3.583	\$4.241

### Terminal Values

Next we forecasted the 2013 DPS using growth rates ranging from 1% - 9%. We then applied those numbers to a formula, along with each of the three costs of equity that we found, and the nine growth rates in order to find the Present Value (PV) of the cash flows in 2013 and beyond.

Growth rate (g)	2013 DPS Estimate	PV 2012 DPS (k <sub>1</sub> )	PV 2012 DPS (k2)	PV 2012 DPS (k3)
1.00%	4.284	40.075	33.240	53.689
2.00%	4.326	44.649	36.393	61.990
3.00%	4.369	50.276	40.125	73.067
4.00%	4.411	57.365	44.612	88.594
5.00%	4.454	66.575	50.108	111.926
6.00%	4.496	79.022	56.999	150.921
7.00%	4.538	96.777	65.890	229.326
8.00%	4.581	124.157	77.801	467.903
9.00%	4.623	171.898	94.586	(22,015.169)

### Other Present Values of Cash Flows

Next in the process we found the PV of the future dividend payouts for 2008-2012 using the three different costs of equity. We did this by dividing the cash flows (DPS) by 1 + the required return (various costs of equity). For the 2012 formula we added in the terminal value to the DPS, and then divided by 1+ the required return. We then added together the PV of the cash flows to get an Intrinsic Value of Citigroup's stock in 2007 at the various growth rates for each cost of equity.

Growth rate (g)	PV 2007 DPS (k <sub>1</sub> ) =	2008	2009	2010	2011	2012
1.00%	33.957	1.934	2.050	2.172	2.303	25.498
2.00%	36.588	1.934	2.050	2.172	2.303	28.130
3.00%	39.825	1.934	2.050	2.172	2.303	31.367
4.00%	43.905	1.934	2.050	2.172	2.303	35.446
5.00%	49.203	1.934	2.050	2.172	2.303	40.745
6.00%	56.365	1.934	2.050	2.172	2.303	47.906
7.00%	66.580	1.934	2.050	2.172	2.303	58.122
8.00%	82.334	1.934	2.050	2.172	2.303	73.875
9.00%	109.802	1.934	2.050	2.172	2.303	101.343
Growth rate (g)	PV 2007 DPS (k <sub>2</sub> ) =	2008	2009	2010	2011	2012
1.00%	27.609	1.897	1.971	2.049	2.130	19.563
2.00%	29.255	1.897	1.971	2.049	2.130	21.208
3.00%	31.203	1.897	1.971	2.049	2.130	23.156
4.00%	33.545	1.897	1.971	2.049	2.130	25.498
5.00%	36.414	1.897	1.971	2.049	2.130	28.367
6.00%	40.010	1.897	1.971	2.049	2.130	31.963
7.00%	44.651	1.897	1.971	2.049	2.130	36.604
8.00%	50.867	1.897	1.971	2.049	2.130	42.821
9.00%	59.628	1.897	1.971	2.049	2.130	51.581
Growth rate (g)	PV 2007 DPS (k3) =	2008	2009	2010	2011	2012
1.00%	46.701	1.982	2.153	2.339	2.540	37.687
2.00%	52.101	1.982	2.153	2.339	2.540	43.087
3.00%	59.308	1.982	2.153	2.339	2.540	50.294
4.00%	69.409	1.982	2.153	2.339	2.540	60.395
5.00%	84.587	1.982	2.153	2.339	2.540	75.574
6.00%	109.956	1.982	2.153	2.339	2.540	100.942
7.00%	160.963	1.982	2.153	2.339	2.540	151.949
8.00%	316.171	1.982	2.153	2.339	2.540	307.157
9.00%	(14,310.367)	1.982	2.153	2.339	2.540	(14,319.381)

Determining Correct Set of Intrinsic Values

Now the question came up of which of the three sets of data to use. We decided right away to do away with the values using  $k_3$  since the cost of equity (8.979%) just seemed too far off from the other two costs of equity. In the end we decided to average together  $k_1$  and  $k_2$  to get a set of Intrinsic Values we felt most adequately described the true cost of equity for Citigroup.

Growth rate (g)	PV 2007 DPS =
1.00%	30.783
2.00%	32.922
3.00%	35.514
4.00%	38.725
5.00%	42.809
6.00%	48.187
7.00%	55.615
8.00%	66.601
9.00%	84.715

Stock Price (12/06/2007): \$34.35

2002-2007	2003-2007	2008-2012	2007-2012 (est.)
25.277%	18.376%	18.376%	14.449%

#### Conclusion

What this information tells us is that according to the stock price on December 6, 2007 of \$34.35, Citigroup only needs to maintain an annual dividend growth rate of 2-3% in 2013 and beyond in order to be considered 'fairly' valued. Using the most conservative historical estimate of 18.376% average annual growth rate, we see the Citigroup's stock is much undervalued. Even if you want to be ultra conservative to account for the forecasted 0% growth from 2007-2008, you still get another average annual growth number of 14.449%. Either way, by Absolute Valuation, Citigroup's stock is highly undervalued.

#### Risk Factors

There are all types of risks facing any large financial institution from credit risk, to liquidity risks, to market risks, to reputation risks. Unfortunately, it seems as if Citigroup faces all of these and more. There are a few main risks that can play a prominent role in determining Citigroup's future:

- 1) Cyclical nature of financial markets: Since Citigroup is a financial institution, the company's performance and stock price will almost always follow the trends that the economy and the market as a whole are following.
- 2) Mortgage Backed Securities and other sub-prime assets: It is no secret that Citigroup is the worst offender when it comes to exposure to this sub-prime issue out of all the major financial institutions. We took into account both the worst case scenario for write-downs in the future and the best case scenario. However, we can not truly accurately estimate assets that are currently considered 'Super Senior' status that will eventually be written-down. One must remember that almost *all* of these securities were considered 'Super

- Senior' at one point. We must wait until the majority of Adjustable Rate Mortgages are readjusted to their new rates to get a more accurate picture.
- 3) Operational/Managerial Risks: This problem comes in two major forms in our view. The first is the fact that Citigroup is such a large company that it is extremely challenging to efficiently manage all aspects of the company. From loss of sight of the overall holding company's goals to closely monitoring expenses, it will be interesting to see how management tries to get a hold on these problems and turn them into a positive return for Citigroup. The second issue is related to problems finding a CEO to manage this enormous company. When they do finally find one, that person will have a huge responsibility placed on his/her shoulders. The direction taken by that person will probably be the number one motivator in the future direction of Citigroup.

#### The Recommendation:

We propose purchasing 600 common shares of Citigroup to add to the 300 shares already in the fund at or around the current price of \$34.35 for a total cost of \$20,610.00. This will raise the Market Value of Citigroup in our portfolio to around 2.21% which is certainly not overbearing, with at least 10 other stocks having higher percentages. Also, assuming the Apple (AAPL) buy is approved, it will raise our exposure to the financial sector to around 15.595%, which will bring us more in line with the Standard and Poor's 500 Financial Sector allocation of around 18.46%, which is indicative of a well diversified portfolio position.

We propose paying for this with the cashed received from the Hilton Hotels private equity buyout. At a buyout price of \$47.50/share, we received a cash inflow of \$47,500.00 that puts our cash and fixed income levels well above the required 20% ratio. At the current 22.38% level, we can pay for this stock with the cash received, and still wind up above the required ratio.

From a purely qualitative stand point, let us state a couple of facts that are motivators in our recommendation:

- 1) Citigroup is the largest bank in the world and is a staple of the United States economic machine. The bank is not going anywhere. It will almost certainly not go bankrupt or be forced to complete a drastic operational/structural change that will lower the stock price substantially.
- 2) With most of the future write-downs related to sub-prime assets already built into Citigroup's stock price, adverse stock shifts should be kept to a minimum, but *not* completely alleviated from this point forward. Citigroup's stock has been hovering in the low to mid thirties range for the past couple of weeks, since bottoming out on November 27, 2007 at \$29.60/share; assuming no big surprises as far as write-downs in the fourth quarter of 2007 and in FY 2008, the stock shouldn't go much lower.

3) On Tuesday December 12, 2007 Citigroup named its former chairman and CEO of the Institutional Clients Group Vikram Pandit as the new CEO of Citigroup, finally finding a permanent replacement for Charles Prince. It is a new page in the book for Citigroup, a fresh start. This is the perfect time to get in while prices are still low and future outlooks are looking better and fresher than ever. It will be interesting to see what tactics Pandit uses to get Citigroup back on track.

\*\*\*To reiterate, considering all of the quantitative and qualitative factors previously stated in this analysis, our recommendation is to **BUY 600 shares** of Citigroup at the current market price\*\*\*

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