THE OHIO STATE UNIVERSITY
FISHER COLLEGE OF BUSINESS

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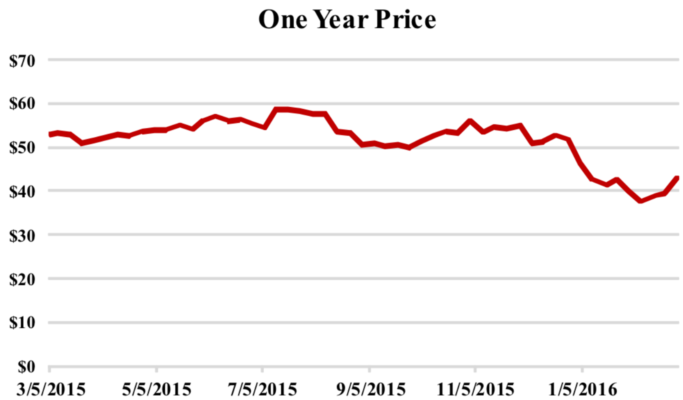

Investment Thesis

Citigroup is an undervalued, well-capitalized multinational financial conglomerate that is positioned to materially benefit from a number of domestic and international economic events. In particular, an increase in global loan demand, when combined with a steeping yield curve, will further leverage an income statement that is already benefiting from meaningful operating cost initiatives. In addition, increased operating profitability, via higher net interest income and lower loan loss provisions, will add to an already healthy tangible book value of approximately $60/share and augment capital levels that exceed international standards.

Company Description

Headquartered in New York City, Citigroup is a multinational financial services company. Through its main two segments, Citicorp and Citi Holdings, Citigroup provides commercial banking services, fixed income and equity research, advisory services, retail alternative investments, and private banking services. Citigroup is among the top 3 largest banks in the US with $1.8 trillion assets under management.

Risks

- **Emerging Markets Economic Slowdown**
- **Increased Total Loss-Absorbing Capacity (TLAC) Requirements**

Citigroup
NYSE: C

Recommendation: BUY

Current Price: $42.61

Target Price: $58.34

Upside: 37%

Market Cap: 125.83 Billion

Shares Outstanding: 2.95 B

Div. & Yield: 0.20 (0.47%)

52-Week Low-High: $34.52-$60.95

Trailing P/E: 7.89

Forward P/E: 7.43

Price/Book: 0.62

Price/Sales: 1.83

Tangible Book Value/Share: $60.91

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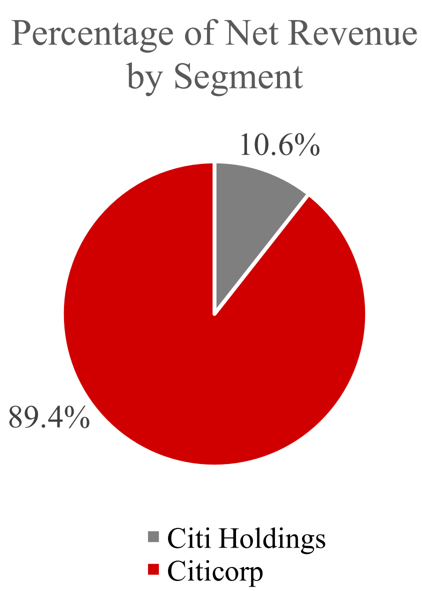
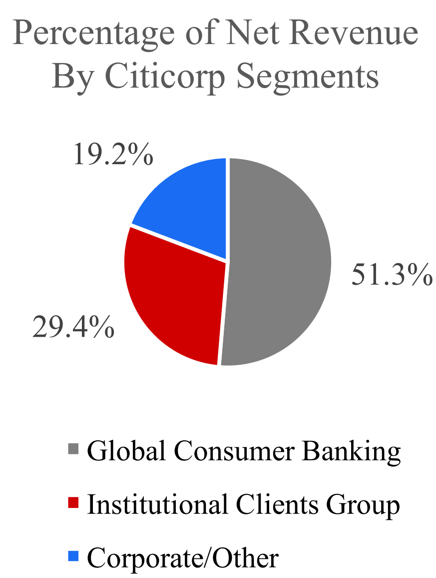
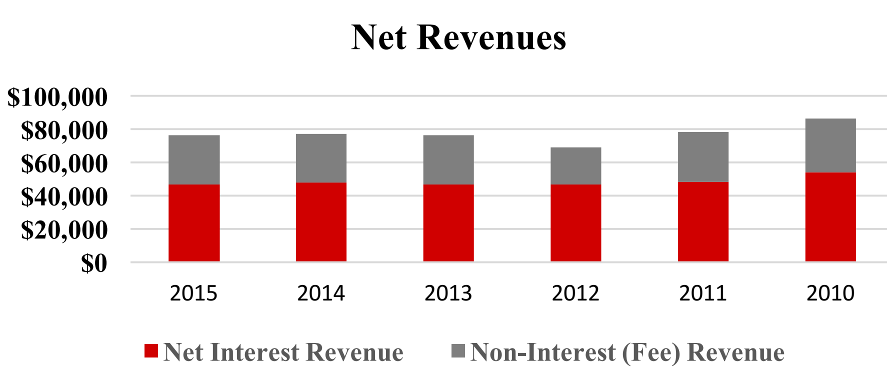
Company Overview

Citigroup Incorporated is a diversified, global financial services holding company that provides myriad financial products and services for consumers, governments, corporations, and institutions. Headquartered in Manhattan, New York City, Citigroup provides its commercial and investment banking and miscellaneous financial services both domestically and internationally. Operationally, Citigroup conducts business through two main segments: Citicorp and Citi Holdings. Citigroup Inc. was established from one of the world's largest financial mergers in history, uniting Citicorp and the insurance conglomerate Travelers Group. Currently, Citigroup has 231,000 full time employees across its eleven subsidiaries and over $1.8 trillion assets under management.







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Business Segments

Citi Holdings (10.6% of Net Revenue)

The most volatile of the two segments, Citi Holdings accounts for approximately 10.6% of net revenue. Citi Holdings include miscellaneous consumer loans, international consumer portfolios and businesses, and retail alternative investments. Branded by management as non-strategic in nature, this segment generated approximately $2 million in operating income in 2015; importantly, the first positive operating return since 2005.

Citicorp (89.4% of Net Revenue)

Global Consumer Banking (GCB)

The largest business segment within Citicorp, the Global Consumer Bank (GCB) constituted approximately 45.9% of net revenue in 2015. GCB operates in four business lines – Branded Cards, Retail Services, Retail Banking and Commercial Banking within Citigroup's four global regions: Asia; Europe, the Middle East, Africa (EMEA); Latin America; and North America. Importantly, nearly half of its revenues are generated from outside of North America, thereby enabling Citigroup to be a true global banking franchise.

Institutional Clients Group (ICG)

The second largest segment within Citicorp, Institutional Clients Group (ICG) represented approximately 26.3% of net revenue in 2015. Citigroup's Capital Markets Origination segment is focused on capital-raising services for its clients and these produces range from initial public offerings (e.g., IPOs) to numerous treasury and trade solutions that include banker's acceptances, commercial paper, and cash management solutions. As with the Global Consumer Banking segment, this business segment is global in nature.

Corporate/Other

The smallest of the three segments within Citigroup, Corporate and Other Banking (COB) generated approximately 17.2% of net revenues in 2015. Corporate and Other Banking services include operations and technology global staff functions and miscellaneous corporate expenses, and discontinued operations.

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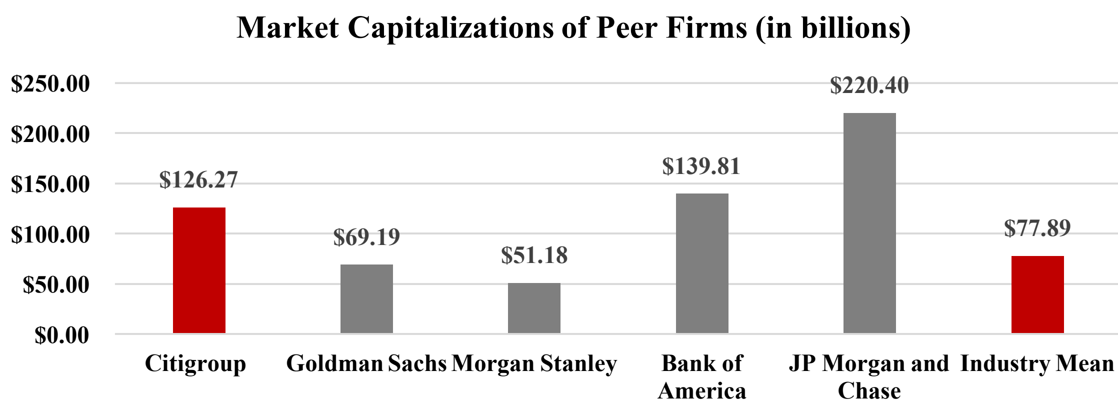
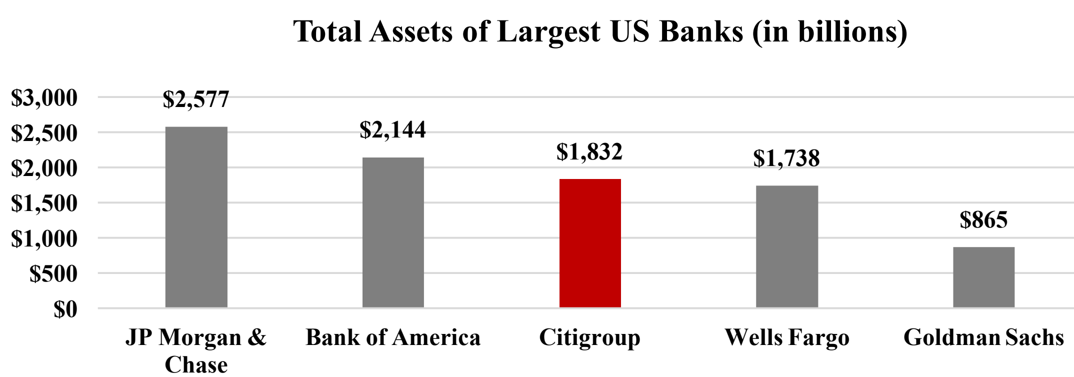
Banking and Financial Services Sector Overview

Market Share and Competition

The commercial banking, investment banking, and miscellaneous financial service sector is nearly perfectly competitive due to the myriad products and services being commodity-like in nature. Interestingly, per management, the only true differentiation is often time the level of capital availability and / or the extent of existing personal relationship. As such, no bank, regardless of size and scope, has a majority of the market share nor is dominant in any category of produce or service.

Citigroup, in terms of market capitalizations, is above the peer industry mean. As the chart indicates, Citigroup is larger than investment banking-orientated providers like Goldman Sachs and Morgan Stanley while on the other hand, smaller than Bank of America and JP Morgan Chase, institutions that provide a greater portfolio of commercial and investment banking services. While JP Morgan & Chase and Bank of America are larger – i.e., in both market capitalization and total assets – Citigroup is nonetheless among the top 3 largest of these multinational, money center financial institutions.





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Peer Firm Valuation

Company	P/E	P/S	P/B
JP Morgan & Chase	9.96	2.45	0.99
Bank of America	8.28	1.79	0.60
Wells Fargo	12.12	3.04	1.48
Goldman Sachs	12.81	2.05	0.92

Peer Firms			
Ratio	Low	Avg	High
P/E	8.28	10.79	12.81
P/S	1.79	2.33	3.04
P/B	0.60	1.00	1.48

Citigroup	
EPS	$ 5.40
Sales/Share	$ 25.86
Book Value/Share	$ 60.91

Citigroup			
Ratio	Low	Avg	High
P/E	$ 44.71	$ 58.28	$ 69.17
P/S	$ 46.28	$ 60.31	$ 78.60
P/B	$ 36.55	$ 60.76	$ 90.15

Value Based on Peer Firms

- **Range from $36.55 - $90.15.** Note that Price/Book is oftentimes the preferred price metric among financial industry analysts (e.g., valuing level of and return on tangible capital and not necessarily relative earnings growth or relative operating margins)
- **The averages offer a tighter range: $58.28 - $60.76** and also link well with the tangible book value per share of approximately $61 per share

Limitations to Peer Firm Valuation

- **Goldman Sachs might not be a good peer firm for the evaluation of Citigroup.** The reason is that Goldman Sachs is primarily an investment banking firm (i.e., no retail banking services such as auto or credit cards) whereas Citigroup is more diverse in its banking and financial services.
- **The undervaluation is so materially significant that any price metric becomes almost unimportant**

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Macroeconomic Factors Affecting the Banking Sector

Flat Yield Curve to Steepen; Loan growth to Accelerate

The eventual acceleration of global economic growth as well as the steepening of the yield curve will provide a powerful earnings combination for Citigroup. The yield curve will likely steepen due to the resumption of global economic growth as well as the Federal Reserve unwinding its almost seven-year policy of near zero interest rates. Higher longer-term interest rates – and the resulting steeper yield curve - will help foster a better net interest margin (NIM) environment for lending institutions. In addition, the strengthening global economic environment will naturally increase the amount of loans demanded by governments, corporations, and individuals for infrastructure projects, new plant and equipment (PPE), and auto & housing purchases, respectively.

Current Events Affecting Citigroup

There are three important potential events that could impact Citigroup in the foreseeable future. These three include the Dodd-Frank rewrite (e.g., political), the Total Loss-Absorbing Capacity reset (e.g., regulatory), and the Pimco/Prudential lawsuit (e.g., legal). While the former may be reconstituted favorable to C, the latter two are potential negatives.

Possible Dodd-Frank Rewrite Proposal in 2016

Financial service providers could expect to face less regulation under an expected rewrite of Dodd-Frank Act. Under the onerous 2010 law, economists estimated that Dodd-Frank resulted in approximately $22 billion in expenses and/or lost revenue to U.S. banks and other institutions. The rewrite of the Bill could potentially loosen regulation of banks and non-banks deemed "systemically important" and weaken the crippling grip of the Consumer Financial Protection Bureau. The implication for Citigroup specifically is the potential lower regulatory expenses, which has added hundreds of millions of costs alone to Citigroup. Currently the revision has support from the Republicans but not the Democrats, suggesting that an Executive Branch political change would likely be needed.

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Increased Total Loss-Absorbing Capacity (TLAC) Requirements

The Financial Stability Board will set TLAC standards at 16% of risk-weighted assets by 2019 and increase that rate to 18% by 2022. While the Financial Stability Board recommended 18% by 2022 (some three years later), due to the pressure from the Federal government – read Democrats - to increase overall banking regulations, the Fed might be inclined to adopt a higher percentage. If the TLAC is targeted at 20%, Citigroup and other large US banks will need to add more capital in the form of senior debt, thereby yielding an overall lower interest margin (NIM) and interest income returns.

Pimco and Prudential Financial Sues Citigroup

As a follow-up to the near collapse of the global financial system in 2008, a group of mortgage bond investors from Pimco and Prudential Financial are pursuing two lawsuits against Citigroup that total $2.3 billion. The plaintiffs, seeking the deep pockets and easy target of Citigroup, allege that the mortgage-bond underwriters failed in their fiduciary duties as well as misrepresented the risk of the packages. If Citigroup loses this case, it would be another sizeable hit to its income statement (in the year of payment) and to its capital position.

DuPont Analysis

Growth Driven by Operating Margin, not Leverage

- **Citigroup's performance is importantly linked to increasing its operating margin and decreasing its financial leverage.** Therefore, the DuPont Analysis shows Citigroup is not growing due to financial leverage (i.e., financial engineering) but is growing due to fundamental improvements in its operations.

DuPont Analysis	2011	2012	2013	2014	2015
Operating Margin	**14.26**	**8.72**	**21.06**	**16.17**	**28.12**
Asset Turnover	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**
Leverage Ratio	**11.12**	**10.27**	**9.75**	**9.37**	**8.83**

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Value Drivers for Citigroup

Net Interest Income

Net Interest Income (NII) is a function of loans and net interest margins, both of which will benefit Citigroup in the future.

As noted, global loan growth should increase as a result of an improving global economic environment. The enhanced loan growth should be the ready result of improving infrastructure projects; productivity enhancing purchases of property, plant and equipment; increased net trade activity; greater consumer demand for revolving credit, automobiles, and housing; increased business formation; etc.

Net interest margin, defined simply as the difference between the interest rates on earning assets minus the interest rates on liabilities, is expected to widen from better economic growth and from generally higher interest rates that accompany the Federal Reserve unwinding its aggressively easy monetary stance. At present, the net interest margin is very low and when back to normal levels, could material serve as a multiplier on earning assets.

As the chart below shows, likely because of the abnormally slow pace of global economic growth coming out of the Great Recession of 2008, the market is not translating the stronger loan growth and the higher interest net margin to into net interest income growth properly. Expectations, in short, are too low given the benefit of financial economic history. Specifically, the markets expect a low single digit increase in loan demand – less than 4% - and a immaterial increase in net interest margin that when combined, translates into a relative subpar net interest income growth rate of approximately 1%. Intuitively, the expectation of net interest income growth of one percent in a nominal GDP growth environment of three or four percent, albeit low, seems unrealistic. The market, it appears, is clearly undervaluing Citigroup's loan generating and net margin dynamics.

Consensus Estimates	Low	High
Average Loans Growth	**1.10%**	**3.90%**
Interest Net Margin	**2.90%**	**3.10%**
Net Interest Income Growth	**0.50%**	**1.30%**

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Non-Interest Income

Non-interest income - defined as fees, commissions, charges, etc. - should be sustained at a steady, low single digit growth. Historically, non-interest income has not been very sensitive to the economic conditions, although a better global economic environment would suggest a bias to the upside. The major contributors to non-interest income are commissions and fees and per management's commentary, Citigroup is not planning to lower its fees (note: these non-interest income items tend to be GDP+ in nature in up cycles and very sticky in down cycles).

In addition, last year Citigroup received a one-time net gain in Citi Holdings, which was a major contributor to the increase in non-interest income. Management and analysts expect the continued sale of non-strategic Citi Holding assets to continue in 2016 but because of the unusual nature of the timing, are generally not forecasted. Nonetheless, Citi will continue to record these gains into the foreseeable future.

Provision for Credit Losses and Benefits & Claims

Citigroup is in the business of lending. Importantly, Provisions for Credit Losses and actual Loan Losses, a normal cost of doing financial business, tend to be counter-cyclical and given that 2015 ended on a weaker global economic note, the news was not particularly good. In addition, Wall Street analysts tend to extrapolate recent trends and with the disappointing 2015 releases and downbeat conference calls, 2016 was written-off as another bad year as expectations fell precipitously.

However, given the improving global economic indicators (for example, employment roles, unemployment rates, the all-important University of Michigan Consumer Confidence Index as well as green shoots in Japan, Europe, China, and South America), a stronger global economy should decrease the need to accounting for and or to record credit losses in 2016.

Of particular note is the fear of an emerging markets meltdown and/or a collapse in the energy complex. Based on early 2016 reads from the global data, neither the emerging nor the energy markets appear to be getting any weaker. In fact, China has shown a couple of improved economic numbers while energy prices have appeared to rebound from a trough in the mid $20s.

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The reason that this is important is that Citigroup currently has 50% of its revenues coming outside North America and as such, emerging market growth is important, both on the downside as well as on the upside.

In sum, 2016 may very easily surprise on the upside of downbeat analyst and market expectations. Credit losses and reserving expectations may be significantly overblown. This contention is supported by the recent global economic releases (US unemployment rate) as well as the simple fact that the global economic environment is slowing signs of improvement / support and not weakness.

Operating Expenses

Citigroup management is particularly conscious of operating expenses and the inherent leverage thereof. Operating expenses have been on a downward trend since 2011, and the trend should continue into 2016.

	2015	2014	2013	2012	2011
Total Operating Expenses	**$43,615**	**$55,051**	**$48,355**	**$49,974**	**$50,933**
% of Operating Revenue	**57%**	**71%**	**63%**	**72%**	**65%**

The reason that this is important is that Citigroup is very operationally leveraged to an improvement in revenues. If, for example, loan growth accelerates, net interest margins increase, or loan loss provisions decline, the bottom line impact of Citigroup operating expense control will be positively magnified. With revenue expectations very downbeat, the best bet for 2016 is that the surprise will be on the upside, that is, revenues will grow faster and magnify the impact of the cost cutting. The result will be higher levels of profitability and earnings growth that the market currently forecasts.

Building Capital

Capital is critical to any financial institution – and it is especially important to a systemically important global financial institution like Citi. The market, it appears, is discounting the capital strength of the Citi franchise. In fact, the stock is trading at a significant discount to tangible book capital. The ready explanation of this discount is that the market expects Citi to record a significant amount of losses on its income statement beginning in 2016.

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Citigroup's common equity Tier 1 ratio was 12.0% - an increase from 11.7% - and its Leverage Ratio was 8.6% in the 4Q of 2015. Perhaps most importantly, tangible book equity per share is roughly $60 per share, a significant premium to the current stock price. These capital ratios are very strong and compare very favorably to the Basel Accord numbers as well as to global competition in general. In addition, in the coming years, even without any increase in operating environment (e.g., loan growth, net interest margins, operating leverage, non-strategic asset sales, etc.), the market should expect Citigroup's capital to improve due to its continued work off of the large deferred tax asset.

As yet another example of C and the regulators confidence in the level of capital – as well as the likely growth thereof - Citigroup is actually returning excess capital with repurchases. For instance, in 4Q 2015, it returned approximately $1.8 billion to common shareholder and as further confidence in its operations, Citigroup's Board of Directors has authorized repurchase up to $7.8 billion of additional common stock through 2Q 2016.

In sum, there is little but to conclude that the market expects Citigroup to record significant losses in 2016 and beyond. The preponderance of the evidence from the global economic environment as well as from Citigroup's management, regulators and balance sheet (i.e., repurchases and tangible capital levels) suggests that this is overly negative. Any positive earnings would constitute a further indication of Citi's relative value in the market and a positive surprise relative to expectations.

Selling Non- Strategic Assets

Citigroup has maintained a plan to restructure and monetize non-strategic assets. This represents a significant source of gains. These actions, in addition to adding to reserves and capital, allow Citigroup's management team to further "right size" the company and to increase profitability.

A notable highlight of this strategy was the sale of OneMain Financial in 2015, leading to a sizeable gain. Downsizing, while generally described as an unusual item, is nonetheless expected to continue throughout 2016 and add positively to Citi's capital and profitability.

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Summary of Key Value Drivers

Key Value Drivers	My Projections	Consensus Avg
Net Interest Income Growth	**1.0%**	**0.9%**
Interest Expense Growth (Loss)	**2.0%**	**2.0%**
Non-Interest Income Growth (Loss)	**1.0%**	**-0.7%**
Provisions for Credit Losses and Benefits & Claims	**7.5%**	**8.5%**
Operating Expenses (% of Operating Revenue)	**57.7%**	**57.7%**
Tax Rate	**31.0%**	**30.5%**

As one can see, the market expects very little of Citigroup in the near future. Importantly, I believe that Net Interest Income will prove to be higher than the consensus estimates, owing to the combination of a better global economic environment and a steeper yield curve. With the shares trading at a significant discount to tangible book, any positive report will prove to be a material positive as it appears that the market has extrapolated a downbeat fourth quarter of 2015 well into the future. To that end, I also believe that Interest Expense Growth will be in line with estimates at 2.0% growth and likely will positively surprise on the downside if my assumption of top line growth (i.e., loans and net interest margins) materializes. As depicted above, Non-Interest Income growth will likely be greater than expected due to historical trends (investment banking fees, trading realizations, commissions, etc.) as well as from sales of non-strategic assets, a category of positive attributes that are normally viewed as "unusual." Further leveraging the positives, the Provisions for Credit Losses and Loan Losses will be likely be lower than expected due to improving global economic and energy indicators. As 2016 is unfolding, global economic indicators are slowing signs of recovery, albeit small, and energy prices have rebounded from capitulations lows in January. Also, Operating Expenses, a significant focus of management, should continue its trend down to approximately 57% of Net Revenue or lower if the top line revenue growth is realized. Citigroup management appears to have a lot of flexibility to manage expenses downward, especially if one notes the reserves that have been taken in the recent past. Finally, the tax rate is very predictable at 30-31%.

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Income Statement

Key - Colors	
red	consensus
blue	my projections

	Projected			Historical					
	2018E	2017E	2016E	2015	2014	2013	2012	2011	2010
Consensus - Revenue	*$ 80,713*	*$ 77,145*	*$ 74,198*						
Consensus - Revenue Growth %	*4.4%*	*3.8%*	*-2.9%*						
% Revenue Growth (Loss)	*0.83%*	*0.84%*	*0.84%*	*-1.12%*	*1.12%*	*10.47%*	*-11.77%*	*-9.52%*	
Operating Revenue, Net of Interest Expense	**$ 78,299**	**$ 77,647**	**$ 76,998**	**$ 76,354**	**$ 77,219**	**$ 76,366**	**$ 69,128**	**$ 78,353**	**$ 86,601**
Interest Revenue	$ 60,325	$ 59,728	$ 59,137	$ 58,551	$ 61,683	$ 62,970	$ 67,298	$ 72,681	$ 79,282
% Growth (Loss)	*1.0%*	*1.0%*	*1.0%*	*-5.1%*	*-2.0%*	*-6.4%*	*-7.4%*	*-8.3%*	
Interest Expenses	$ 12,651	$ 12,403	$ 12,159	$ 11,921	$ 13,690	$ 16,177	$ 20,612	$ 24,234	$ 25,096
% of Operating Revenue	*16.2%*	*16.0%*	*15.8%*	*15.6%*	*17.7%*	*21.2%*	*29.8%*	*30.9%*	*29.0%*
% Growth (Loss)	*2.0%*	*2.0%*	*2.0%*	*-14.8%*	*-18.2%*	*-27.4%*	*-17.6%*	*-3.6%*	
Net Interest Revenue	**$ 47,674**	**$ 47,325**	**$ 46,977**	**$ 46,630**	**$ 47,993**	**$ 46,793**	**$ 46,686**	**$ 48,447**	**$ 54,186**
% Net Interest Growth	*0.7%*	*0.7%*	*0.7%*	*-2.8%*	*2.6%*	*0.2%*	*-3.6%*	*-10.6%*	
% of Operating Revenue	*60.9%*	*60.9%*	*61.0%*	*61.1%*	*62.2%*	*61.3%*	*67.5%*	*61.8%*	*62.6%*
Non-Interest (Fee) Revenue	**$ 30,625**	**$ 30,321**	**$ 30,021**	**$ 29,724**	**$ 29,226**	**$ 29,573**	**$ 22,442**	**$ 29,906**	**$ 32,415**
% Non-Interest Income Growth	*1.0%*	*1.0%*	*1.0%*	*1.7%*	*-1.2%*	*31.8%*	*-25.0%*	*-7.7%*	
% of Operating Revenue	*39.1%*	*39.1%*	*39.0%*	*38.9%*	*37.8%*	*38.7%*	*32.5%*	*38.2%*	*37.4%*
Total Provisions for Credit Losses and Benefits & Claims	**$ 7,377**	**$ 7,216**	**$ 7,048**	**$ 7,913**	**$ 7,467**	**$ 8,514**	**$ 11,329**	**$ 12,796**	**$ 26,042**
% of Operating Revenue	*7.5%*	*7.5%*	*7.5%*	*10.4%*	*9.7%*	*11.1%*	*16.4%*	*16.3%*	*30.1%*
Total Operating Expenses	**$ 46,721**	**$ 45,701**	**$ 44,636**	**$ 43,615**	**$ 55,051**	**$ 48,355**	**$ 49,974**	**$ 50,933**	**$ 47,375**
% of Operating Revenue	*57.0%*	*57.0%*	*57.0%*	*57.1%*	*71.3%*	*63.3%*	*72.3%*	*65.0%*	*54.7%*
Income from Continuing Operations (Before Tax)	**$ 27,869**	**$ 27,260**	**$ 26,625**	**$ 24,826**	**$ 14,701**	**$ 19,497**	**$ 7,825**	**$ 14,624**	**$ 13,184**
% of Operating Revenue	*35.6%*	*35.1%*	*34.6%*	*32.5%*	*19.0%*	*25.5%*	*11.3%*	*18.7%*	*15.2%*
Taxes	**$ 8,639**	**$ 8,451**	**$ 8,254**	**$ 7,440**	**$ 7,197**	**$ 5,867**	**$ 7**	**$ 3,521**	**$ 2,233**
Tax Rate %	*31.0%*	*31.0%*	*31.0%*	*30.0%*	*49.0%*	*30.1%*	*0.1%*	*24.1%*	*16.9%*
Income (loss) from Continuing Operations	**$ 19,229**	**$ 18,810**	**$ 18,371**	**$ 17,386**	**$ 7,504**	**$ 13,630**	**$ 7,818**	**$ 11,103**	**$ 10,951**
% of Operating Revenue	*24.6%*	*24.2%*	*23.9%*	*22.8%*	*9.7%*	*17.8%*	*11.3%*	*14.2%*	*12.6%*
Income (loss) from Discontinued Operations	**$ (81.97)**	**$ (80.18)**	**$ (78.31)**	**$ (54.00)**	**$ (2.00)**	**$ 270**	**$ (58)**	**$ 112**	**$ (68)**
% of Operating Revenue	*0.1%*	*0.1%*	*0.1%*	-0.1%	0.0%	0.4%	-0.1%	0.1%	-0.1%
Noncontrolling Interests	**$ 164**	**$ 160**	**$ 157**	**$ 90**	**$ 192**	**$ 227**	**$ 219**	**$ 148**	**$ 281**
% of Operating Revenue	*0.2%*	*0.2%*	*0.2%*	*0.1%*	*0.2%*	*0.3%*	*0.3%*	*0.2%*	*0.3%*
Net Income	**$ 18,983**	**$ 18,569**	**$ 18,137**	**$ 17,242**	**$ 7,310**	**$ 13,673**	**$ 7,541**	**$ 11,067**	**$ 10,602**
Consensus - Net Income	*$ 18,026*	*$ 16,779*	*$ 16,036*						
Shares Outstanding	**2953.0**	**2953.0**	**2953.0**	**2953.0**	**3023.2**	**3029.2**	**3028.9**	**2923.9**	**2905.8**
Earnings per Share	**$ 6.43**	**$ 6.29**	**$ 6.14**	**$ 5.84**	**$ 2.42**	**$ 4.51**	**$ 2.49**	**$ 3.79**	**$ 3.65**
Diluted Earnings per Share	**$ 6.23**	**$ 6.09**	**$ 5.94**	**$ 5.40**	**$ 2.20**	**$ 4.35**	**$ 2.44**	**$ 3.63**	**$ 3.54**
Consensus - EPS	*$ 6.64*	*$ 5.91*	*$ 5.35*	*$ 5.41*	*$ 4.55*	*$ 4.55*	*$ 4.08*	*$ 3.84*	*$ 3.92*

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Discounted Cash Flow Model

Terminal Rates	
Terminal Discount Rate =	*11.5%*
Terminal FCF Growth =	*1.0%*

	Historical	Projected									
Year	**2015A**	**2016E**	**2017E**	**2018E**	**2019E**	**2020E**	**2021E**	**2022E**	**2023E**	**2024E**	**2025E**
Consensus - Revenue (Bloomberg)		*$ 74,198*	*$ 77,145*	*$ 80,713*							
Consensus - Revenue (Morgan Stanley)		*$ 73,323*	*$ 76,610*								
Operating Revenue, Net of Interest Expense	**$ 76,354**	**$ 76,998**	**$ 77,647**	**$ 78,299**	**$ 78,956**	**$ 79,616**	**$ 80,281**	**$ 80,949**	**$ 81,622**	**$ 82,298**	**$ 82,979**
% Revenue Growth (Loss)		*0.84%*	*0.84%*	*0.84%*	*0.84%*	*0.84%*	*0.83%*	*0.83%*	*0.83%*	*0.83%*	*0.83%*
Interest Revenue	$ 58,551	$ 59,137	$ 59,728	$ 60,325	$ 60,928	$ 61,538	$ 62,153	$ 62,775	$ 63,402	$ 64,036	$ 64,677
% Growth (Loss)	*-5.3%*	***1.0%***	***1.0%***	***1.0%***	***1.0%***	***1.0%***	***1.0%***	***1.0%***	***1.0%***	***1.0%***	***1.0%***
Interest Expenses	$ 11,921	$ 12,159	$ 12,403	$ 12,651	$ 12,904	$ 13,162	$ 13,425	$ 13,693	$ 13,967	$ 14,247	$ 14,532
% of Operating Revenue	*15.6%*	*15.8%*	*16.0%*	*16.2%*	*16.3%*	*16.5%*	*16.7%*	*16.9%*	*17.1%*	*17.3%*	*17.5%*
% Growth (Loss)	*-14.8%*	***2.0%***	***2.0%***	***2.0%***	***2.0%***	***2.0%***	***2.0%***	***2.0%***	***2.0%***	***2.0%***	***2.0%***
Net Interest Revenue	**$ 46,630**	**$ 46,977**	**$ 47,325**	**$ 47,674**	**$ 48,025**	**$ 48,376**	**$ 48,728**	**$ 49,081**	**$ 49,435**	**$ 49,790**	**$ 50,145**
% Net Interest Growth	*-2.9%*	*0.7%*	*0.7%*	*0.7%*	*0.7%*	*0.7%*	*0.7%*	*0.7%*	*0.7%*	*0.7%*	*0.7%*
% of Operating Revenue	*61.1%*	*61.0%*	*60.9%*	*60.9%*	*60.8%*	*60.8%*	*60.7%*	*60.6%*	*60.6%*	*60.5%*	*60.4%*
Non-Interest (Fee) Revenue	**$ 29,724**	**$ 30,021**	**$ 30,321**	**$ 30,625**	**$ 30,931**	**$ 31,240**	**$ 31,553**	**$ 31,868**	**$ 32,187**	**$ 32,509**	**$ 32,834**
% Non-Interest Income Growth	*1.7%*	***1.0%***	***1.0%***	***1.0%***	***1.0%***	***1.0%***	***1.0%***	***1.0%***	***1.0%***	***1.0%***	***1.0%***
% of Operating Revenue	*38.9%*	*39.0%*	*39.1%*	*39.1%*	*39.2%*	*39.2%*	*39.3%*	*39.4%*	*39.4%*	*39.5%*	*39.6%*
Total Provisions for Credit Losses and Benefits & Claims	**$ 7,913**	**$ 5,775**	**$ 5,824**	**$ 5,872**	**$ 5,922**	**$ 5,971**	**$ 6,021**	**$ 6,071**	**$ 6,122**	**$ 6,172**	**$ 6,223**
% of Operating Revenue	*10.4%*	***7.5%***	***7.5%***	***7.5%***	***7.5%***	***7.5%***	***7.5%***	***7.5%***	***7.5%***	***7.5%***	***7.5%***
Total Operating Expenses	**$ 43,615**	**$ 44,428**	**$ 44,802**	**$ 45,179**	**$ 45,557**	**$ 45,939**	**$ 46,322**	**$ 46,708**	**$ 47,096**	**$ 47,486**	**$ 47,879**
% of Operating Revenue	*57.1%*	***57.7%***	***57.7%***	***57.7%***	***57.7%***	***57.7%***	***57.7%***	***57.7%***	***57.7%***	***57.7%***	***57.7%***
Income from Continuing Operations (Before Tax)	**$ 24,826**	**$ 26,795**	**$ 27,021**	**$ 27,248**	**$ 27,477**	**$ 27,706**	**$ 27,938**	**$ 28,170**	**$ 28,404**	**$ 28,640**	**$ 28,877**
% of Operating Revenue	*32.5%*	*34.8%*	*34.8%*	*34.8%*	*34.8%*	*34.8%*	*34.8%*	*34.8%*	*34.8%*	*34.8%*	*34.8%*
Taxes	**$ 7,440**	**$ 8,307**	**$ 8,377**	**$ 8,447**	**$ 8,518**	**$ 8,589**	**$ 8,661**	**$ 8,733**	**$ 8,805**	**$ 8,878**	**$ 8,952**
Tax Rate %	*30.0%*	***31.0%***	***31.0%***	***31.0%***	***31.0%***	***31.0%***	***31.0%***	***31.0%***	***31.0%***	***31.0%***	***31.0%***
Income (loss) from Continuing Operations	**$ 17,386**	**$ 18,489**	**$ 18,645**	**$ 18,801**	**$ 18,959**	**$ 19,117**	**$ 19,277**	**$ 19,438**	**$ 19,599**	**$ 19,761**	**$ 19,925**
% of Operating Revenue	*22.8%*	*24.0%*	*24.0%*	*24.0%*	*24.0%*	*24.0%*	*24.0%*	*24.0%*	*24.0%*	*24.0%*	*24.0%*
Income (loss) from Discontinued Operations	**$ (54.00)**	**$ (77.00)**	**$ (77.65)**	**$ (78.30)**	**$ (78.96)**	**$ (79.62)**	**$ (80.28)**	**$ (80.95)**	**$ (81.62)**	**$ (82.30)**	**$ (82.98)**
% of Operating Revenue	*-0.1%*	***0.1%***	***0.1%***	***0.1%***	***0.1%***	***0.1%***	***0.1%***	***0.1%***	***0.1%***	***0.1%***	***0.1%***
Noncontrolling Interests	**$ 90**	**$ 154**	**$ 155**	**$ 157**	**$ 158**	**$ 159**	**$ 161**	**$ 162**	**$ 163**	**$ 165**	**$ 166**
% of Operating Revenue	*0.1%*	***0.2%***	***0.2%***	***0.2%***	***0.2%***	***0.2%***	***0.2%***	***0.2%***	***0.2%***	***0.2%***	***0.2%***
Net Income	**$ 17,242**	**$ 18,258**	**$ 18,412**	**$ 18,566**	**$ 18,722**	**$ 18,879**	**$ 19,036**	**$ 19,195**	**$ 19,354**	**$ 19,515**	**$ 19,676**
% Growth (Loss)	*5.2%*	*5.9%*	*0.8%*	*0.8%*	*0.8%*	*0.8%*	*0.8%*	*0.8%*	*0.8%*	*0.8%*	*0.8%*
Consensus - Net Income (RBC Capital Markets)		*$ 15,715*	*$ 16,274*								
Consensus - Net Income (Bloomberg)		*$ 16,036*	*$ 16,779*	*$ 18,026*							
Free Cash Flow	**$ 17,242**	**$ 18,258**	**$ 18,412**	**$ 18,566**	**$ 18,722**	**$ 18,879**	**$ 19,036**	**$ 19,195**	**$ 19,354**	**$ 19,515**	**$ 19,676**
% Growth (Loss)	*5.2%*	*5.9%*	*0.8%*	*0.8%*	*0.8%*	*0.8%*	*0.8%*	*0.8%*	*0.8%*	*0.8%*	*0.8%*

Terminal Rates

The terminal discount rate and free cash flow growth rate was implied by Citigroup's P/E ratio. But, the terminal discount rate and terminal FCF growth from Citigroup's P/E (6.48) is 13% and 0% respectfully. Since I believe that 0% is too little of a terminal growth rate and 13% too high of a discount rate, I used – what I believe – the more realistic rates of 11.5% (discount rate) and 1% (FCF growth).

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Value Based on DCF

Terminal Value	$ 189,264
Free Cash Yield	10.40%
Terminal P/E	9.62
Terminal EV/EBITDA	5.45

NPV of Cash Flows	$ 108,564	*63%*
NPV of Terminal Value	$ 63,726	*37%*
Projected Equity Value	$ 172,291	*100%*
Free Cash Flow Yield	*13.7%*	

Current P/E	7.30	6.89	6.83
Projected P/E	*9.99*	*9.44*	*9.36*
Current EV/EBITDA	3.79	3.51	3.48
Projected EV/EBITDA	*5.66*	*5.24*	*5.20*

Shares Outstanding	2,953
Tangible Book Value/Share	$ 60.91
Current Price	$ 42.61
Implied Equity Value/Share	$ 58.34
Upside/(Downside) to DCF	*37%*

Debt	***281***
Cash	***32,108***
Cash/Share	10.87

Terminal Growth Rate

Terminal Discount	0.00%	0.50%	1.00%	1.50%	2.00%
10.50%	$ 61.74	$ 63.03	$ 64.46	$ 66.05	$ 67.82
11.00%	$ 58.88	$ 60.01	$ 61.25	$ 62.62	$ 64.14
11.50%	$ 56.27	$ 57.26	$ 58.34	$ 59.54	$ 60.85
12.00%	$ 53.88	$ 54.75	$ 55.70	$ 56.74	$ 57.89
12.50%	$ 51.68	$ 52.45	$ 53.29	$ 54.20	$ 55.20

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Conclusion and Recommendation

A broadly downbeat fourth quarter of 2015 lowered expectations for any economically sensitive investment. The combination of China's economic woes, emerging markets' slowdown concerns, depressed energy and commodity markets, a stronger US dollar (hurting the export industries), and an increasingly reluctant Federal Reserve only proved to depress an already depressed market participant. As such, Citigroup, along with many other financial and economically sensitive names experienced a lot of price pressure in the markets.

Yet this price pressure may not be deserved, at least for Citigroup. Trading at $42 per share and boasting a tangible book value per share of approximately $60, the investment community obviously expects Citigroup to lose a significant amount of value into the near future. However, the most recent evidence suggests something different. Economic forecasts have improved, albeit admittedly only a little and energy market have rebounded. In addition, US releases such as the January employment report show a US marketplace that is continuing to gain traction and the Federal Reserve is seemingly poised to once again increase rates. Importantly, the combination of a firmer global economic environment and a steepening yield curve will have significant benefits to Citigroup's top line. This top line improvement, when combined with lower loan loss reserving and operating cost improvements, may prove to provide Citigroup with the needed backdrop to handily exceed downbeat income and profitability expectations. In all, 2016 may provide a marketplace that recognizes the inherent value and profitability of Citigroup.

Through my research, and subsequent projections, my discounted cash flow model warranted a price of $58.34.

Recommendation: BUY

Target Price (DCF Model): $58.34

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