



Bank of America Research

Description: Provides banking and financial products and services for individual consumers, small and middle-market businesses, institutional investors, large corporations, and governments worldwide through 4 segments:

1. Consumer Banking
2. Global Wealth & Investment Management (GWIM)
3. Global Banking
4. Global Markets

Ticker: BAC

Price: \$24.39

Market Cap: \$239.2B

Performance: -15.9% YTD

Before we even get into BAC itself, we have to talk about the economy a bit. Why? Banks are extremely dependent on a strong economy to thrive as their financial performance is heavily correlated to interest rates and not only the origination of new loans but the health of loans they currently have outstanding. In addition, BAC is a global bank with exposure to many different markets and to top it off they're a well diversified bank in which they also provide more than just loans to consumers, they also provide investment banking and management services.

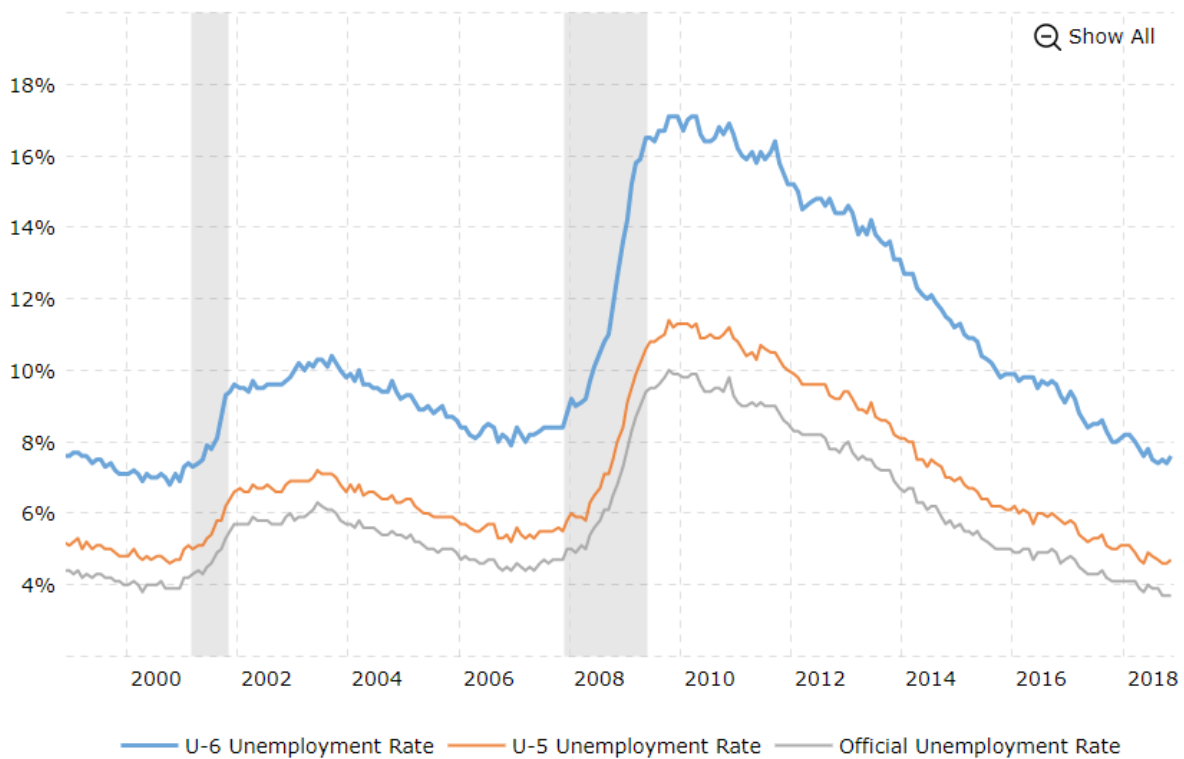
With this in mind, let's take a brief look at the health of the U.S. economy.

United States - Monthly Data

Data Series	Back Data	June 2018	July 2018	Aug 2018	Sept 2018	Oct 2018	Nov 2018
Unemployment Rate⁽¹⁾		4.0	3.9	3.9	3.7	3.7	3.7
Change in Payroll Employment⁽²⁾		208	165	286	119	(P) 237	(P) 155
Average Hourly Earnings⁽³⁾		26.99	27.07	27.17	27.25	(P) 27.29	(P) 27.35
Consumer Price Index⁽⁴⁾		0.1	0.2	0.2	0.1	0.3	0.0
Producer Price Index⁽⁵⁾		0.3	0.1	(P) -0.2	(P) 0.2	(P) 0.6	(P) 0.1
U.S. Import Price Index⁽⁶⁾		0.0	-0.1	-0.4	(R) 0.0	(R) 0.5	(R) -1.6

As we can see above, the unemployment rate has been steadily decreasing. This is a solid sign for a healthy economy but we also have to take this number with a grain of salt as it does not include those who have “discouraged” workers who have dropped out of the labor force and are no longer part of the denominator in that equation. The unemployment rate we see on TV is the U3 and is the official unemployment rate. The U5 includes discouraged workers and all other marginally attached workers. The U6 adds on those workers who are part-time purely for economic reasons as well.

Below we will see what all three unemployment rates are at:



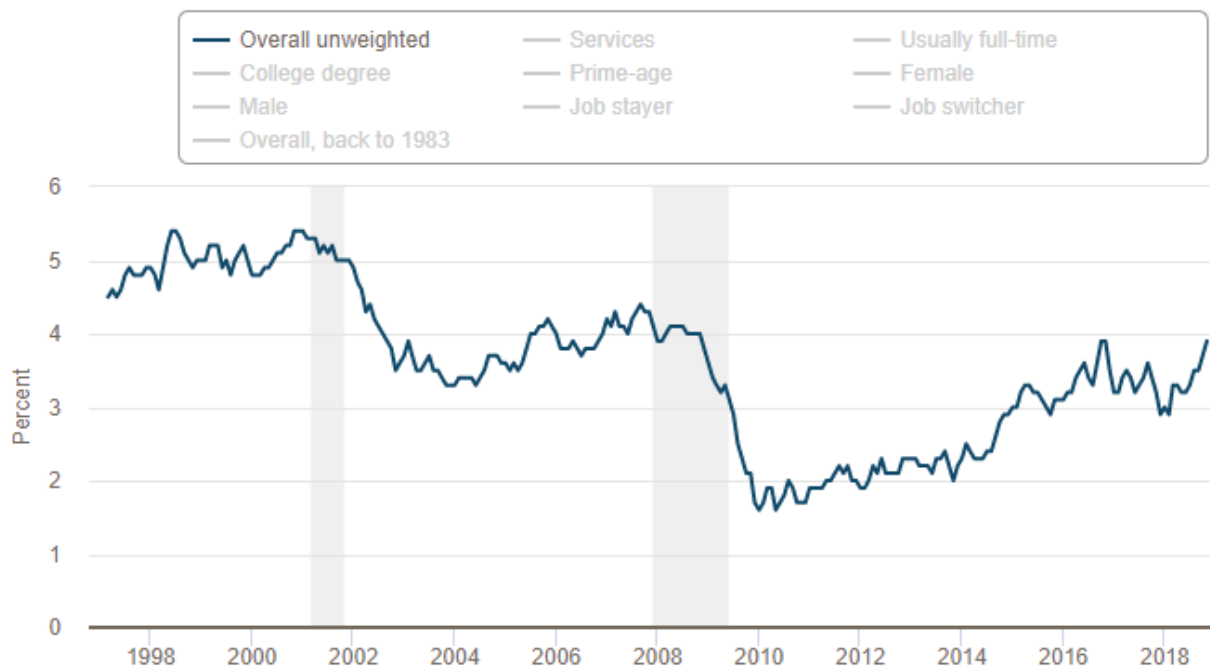
Right now the U6 is at 7.60% which actually isn't bad at all as it is roughly the lowest we've seen the last two decades.

Referring to the top chart, we also put a lot of emphasis on wage growth. As of November's numbers, wages grew to \$27.35 an hour, which is a solid a 3.9% Y/Y on an unweighted basis. Refer to the chart below:

Wage Growth Tracker

three-month moving average of median wage growth

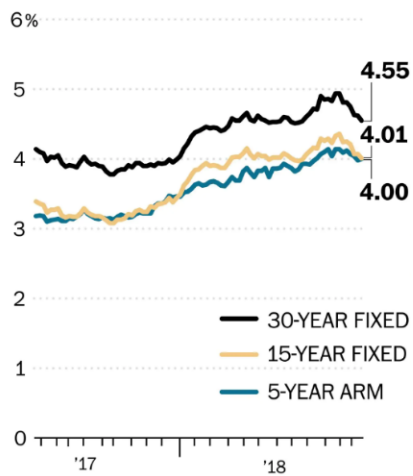
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Sources: Current Population Survey, Bureau of Labor Statistics and author's calculations

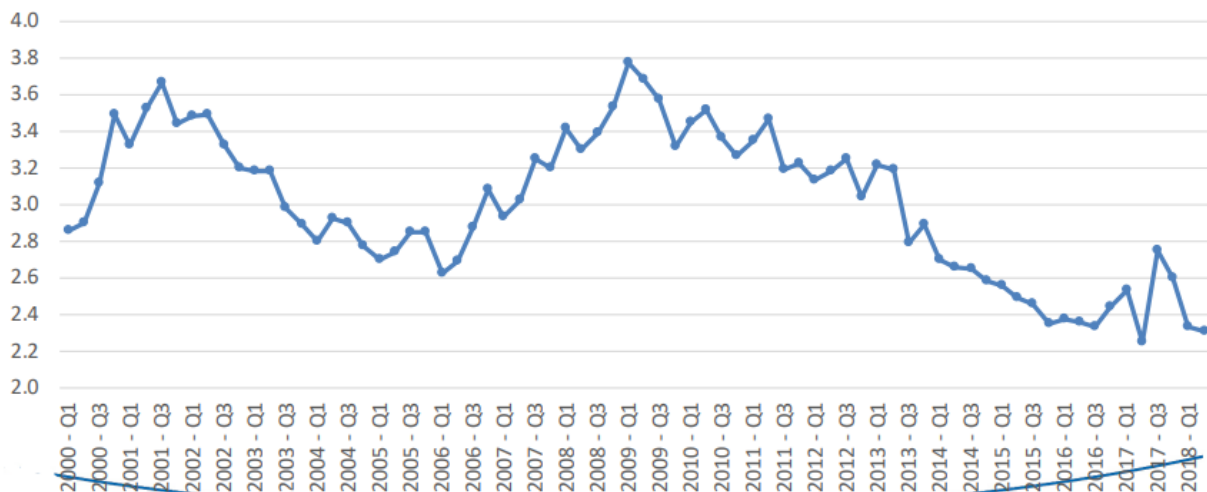
Looking at other areas, such as housing. We are seeing a bit of a slowdown which is normal given how much real estate has been ripping over the greater part of a decade. It's also normal in an increasing rate environment as mortgages are at 4.55%, coming down from 4.94% seen in November. View chart below:

Weekly averages for popular mortgage types



The number we are really focusing on is mortgage delinquencies, though. As important as new housing starts and existing home sales are we need to make sure the health of the economy is intact and people are paying their mortgages.

Early Stage of Delinquency: Late Mortgage Payment (30 to 59 days)



As of right now, we think it's safe to say people are paying their mortgages as late payments (30-59 days) are at their lowest periods in the last 20 years in this chart alone. The stats didn't go further back in this graph.

Ok so let's circle back to Bank of America and how this applies to the company. Banks in general are struggling this year and a lot of that has to do with the overall fear of a recession nearing and the fact that interest hikes will not happen at the same pace investors initially thought. This is important for banks, and especially BAC, because they are very dependent on their net interest income (what they pay you in interest vs. what they make on it).

Let's dive into BAC's latest earnings report and examine some of the numbers. On October 15th, they posted Q3 earnings of \$0.66 beating estimates by \$0.04 on revenue of \$22.78B beating estimates by \$150M. In addition:

- Compares with Q2 EPS of 63 cents and 46 cents in Q3 2017
- Q3 net interest income \$11.9B vs \$11.7B in Q2 and \$11.2B a year ago
- Net interest yield 2.42% vs. 2.38% in Q2 and 2.36% a year ago
- Q3 noninterest expense \$13.1B vs \$13.3B in Q2 and \$13.4B a year ago
- Q3 Provision for credit losses \$716M vs. \$827M in Q2 and \$834M a year ago
- Q3 average loan and lease balances in business segments rose 3% to 871B Y/Y, with consumer up 5% and commercial up 2%
- Q3 net income by segment:
 - Consumer banking \$3.11B vs. \$2.88B in Q2 and \$2.09B a year ago
 - Global wealth and investment management \$1.01B vs. \$970M in Q2 and \$770M a year ago
 - Global banking \$1.99B vs \$2.06B in Q2 and \$1.76B a year ago
 - Global markets \$912M vs. \$1.12B in Q2 and \$756M a year ago
- Return on average common shareholders' equity 10.99% vs. 10.75% in Q2 and 7.89% a year ago.
- Common equity tier 1 capital 11.4% at Sept. 30, 2018, unchanged from June 30, 2018. Income tax expense rose to \$1.8B in Q3 from \$1.7B in Q2, but fell from \$2.2B a year ago.

So if we look at all the stats above, it is extremely apparent that BAC's fundamentals are solid and getting better Y/Y. A very important measure of efficiency is the ROE which approx. 11% vs. 7.89% a year ago, a huge gain.

When we examine the loan quality, things are also looking very good. Allowance for Loan and Lease Losses, originally referred to as the reserve for bad debts, is a valuation reserve established and maintained by charges against a bank's operating income. It is an estimate of uncollectible amounts used to reduce the book value of loans and leases to the amount that a bank expects to collect. When looking at both the commercial and consumer side it is 0.99% and 1.62% allowances, respectively. These are both down Y/Y along with their nonperforming loans and leases and shows that their book is growing in quality. Specifically, with the consumer side, 30+ days past due came in at \$7.16B vs. \$9.24B last year.

Commercial Metrics (\$MM)	3Q18	2Q18	3Q17
Provision	\$6	\$70	\$104
Reservable criticized utilized exposure	11,597	12,357	14,824
Nonperforming loans and leases	848	1,258	1,318
% of loans and leases ¹	0.18 %	0.26 %	0.28 %
Allowance for loans and leases	\$4,754	\$4,910	\$5,111
% of loans and leases ¹	0.99 %	1.02 %	1.08 %

Consumer Metrics (\$MM)	3Q18	2Q18	3Q17
Provision	\$710	\$757	\$730
Nonperforming loans and leases	4,306	4,639	5,252
% of loans and leases ¹	0.97 %	1.03 %	1.17 %
Consumer 30+ days performing past due	\$7,158	\$7,233	\$9,244
Fully-insured ²	3,183	3,454	4,721
Non fully-insured	3,975	3,779	4,523
Allowance for loans and leases	4,980	5,140	5,582
% of loans and leases ¹	1.12 %	1.15 %	1.25 %
# times annualized NCOs	1.62 x	1.54 x	1.93 x

Let's analyze how BAC compares with JP Morgan (JPM), Citi (C), and Wells Fargo (WFC). The reason we won't include Morgan Stanley or Goldman Sachs is because they are more traditional investment banks and it won't serve as more direct comparison.

	BAC	JPM	C	WFC
P/E	11.6x	12.0x	14.8x	10.8x
F P/E	8.8x	9.8x	7.1x	9.2x
P/S	2.8x	3.2x	1.9x	2.5x
F P/S	2.6x	2.8x	1.7x	2.5x
P/B	1.0x	1.4x	0.7x	1.2x
PEG	0.9x	0.9x	1.0x	0.7x
Dividend Yield	2.46%	3.30%	3.47%	3.76%

As we examine this table it is pretty apparent the banks are trading at fairly attractive valuations. Historically, aside from the financial crisis, BAC doesn't generally trade below 8x forward earnings and right now they are at 8.8x after popping up from \$22 per share last week which put them around 8x. We would like to see them have a bit higher dividend yield but with shares down from highs around \$32.50, this is an attractive level to buy BAC.

Technically speaking, BAC hit oversold at \$22 and bounced hard off those levels as it was oversold on MSI, MFI, Williams % and some other major technicals. Right now shares are still close to oversold but not fully there.

Overall, we think BAC is a buy but we have them behind JPM on our best big bank list as seen by our holdings in JPM. There are some headwinds going forward that we covered with the slowdown in housing, less rate hikes on the way, a flattening yield curve, and nervousness around global growth but we believe shares have been pricing that in down here at these levels and feel banks in this day in age are much better liquidated and prepared for a slowdown in the economy when compared to history.