

Quantitative Analysis (Annual) - SHORT

Shares Outstanding = 455,310,083

COF US	2017	2018	2019	2020	2021
Stock Price \$	85.66	94.98	89.00	87.95 (PT1)	
Market Cap \$M	48,346	35,353	46,989	40,124 (E)	
EPS	3.49	11.82	11.05	-2.04 (E)	7.74
Earnings Growth %	-49	239	-6.5	-100	
Price/Earnings	24.54	8.03	8.05	-33.37 (E)	8.98
PEG	-0.50	0.03	-1.24	-3.71 (E)	
Sales \$M	27,237	28,076	28,593	27,449 (E)	28,400
Sales Growth %	6.80	3.08	1.84	-4	
Sales Multiple	1.77	1.26	1.64	1.46	
Net Income (GAAP) \$	1,982	6,015	5,546	N/A	

Price to Book 2020 = 0.56

Comments on Annual Quantitative Analysis

End 2020 Price Target using option prices of puts and calls with Dec 2020 expiration date of a strike price close to the current stock price, indicating \$ movement of \$19.95 (PT1)

Year-end 2019 COF reported net income of \$5.5 billion (\$11.05 per diluted common share) on total net revenue of \$28.6 billion for 2019.

Quantitative Analysis (Sector Comps)

COF US	PE1	EG1(2019)	EG2(2020)	PEG1	Market Cap'
ALLY	37.58	-85.8%	381.1%	-0.44	7,433.26
AXP	35.42	-65.0%	157.9%	-0.55	81,253.77
CACC	50.55	-75.7%	125.7%	-0.67	7,589.27
DFS	32.26	-81.5%	246.7%	-0.40	16,488.17
ECPG	5.19	19.6%	38.0%	0.27	1,140.06
FCFS	20.54	-15.5%	19.9%	-1.32	2,772.78
OMF	16	-74.9%	184.0%	-0.21	3,498.97
SLM	6.12	2.4%	8.7%	2.51	2,884.49
Averages	25.4575	-47.1%	145.3%	-0.10	15,382.60
COF	-33.37	-119.7%	-413.6%	-3.71	31,862.60

Comments on Quantitative Analysis Sector Comparison

COF has an estimated 1-year forward-looking P/E of -33X compared to the selected peer group average of 25X. Other earnings measures such as EPS1 growth is expected to be 2.5X more negative.

Sector headwinds: The U.S. consumer represents the vital part to the commercial loans market where COF operates, therefore any prolonged periods of slow economic growth combined with the worsening financial condition of commercial customer, reduction in disposable income and high unemployment may lead to unwillingness or inability of customers to repay debt causing a rise in delinquencies and charge-offs. In addition, as of January 1, 2020, there is a requirement to use the CECL model based on expected rather than incurred losses. **The result in an increase in reserves for credit losses on financial instruments with a resulting negative adjustment to retained earnings. The application of the CECL model may require an increase of**

reserves faster and to a higher level in an economic downturn, resulting in greater impact on company's results and capital ratios.

%ATR (Weekly Realised Volatility)

COVID -19

COF	Average for the Peer Group	ALLY	AXP	CACC	DFS	ECPG	FCFS	OMF	SLM
15.70%	16.06%	19.40%	11.19%	17.50%	19.90%	17.50%	10.40%	21.10%	11.50%

Pre-COVID-19

COF	Average for the Peer Group	ALLY	AXP	CACC	DFS	ECPG	FCFS	OMF	SLM
2.80%	4.20%	3.80%	2.80%	4.40%	3.00%	5.20%	4.10%	4.50%	5.80%

Implied annualized volatility of COF (calculated using the Call option of \$70 strike with 17th July 2020 expiry) is 48.43%. Monthly standard deviation of COF stock or monthly implied volatility is 13.98%

It is therefore expected that in case of 1std dev move or 68.2% of the time, COF is expected to move 13.98% either side. Consequently, 2std deviation move in the Market would move the COF stock move by 27.96% either side of its average return in the next month.

Trade Time horizon: 1-3 Months

Entry Price Target: roughly at around previous resistance level of between \$70-\$73.

Stop Loss: between 10% at \$77. **Soft Target:** \$58

	Dec 31 st 2019	Q1 2020
Current Ratio	1.33	1.01
Interest Coverage Ratio	0.18	-0.03

Comments on Business

COF is financial holding company whose subsidiaries include Capital One, N.A., and Capital One Bank (USA), N.A. The company offers a range of financial products and services to consumers, small businesses and commercial clients. Around 27% of the commercial loan portfolio is concentrated in the tri-state area of New York, New Jersey and Connecticut. Commercial Loans by Industry as a Percentage of portfolio are as follows: Real Estate 39%, Finance 16%, Healthcare 12%, Business Services 6%, Oil and Gas 5%, Public Administration 4%, Educational Services 4%, Retail Trade 4%, Construction and land 2% and Other 8%.

<https://ir-capitalone.gcs-web.com/>

KPI's driving Revenue and Earnings

Credit quality metrics:

- Allowance as a percentage of loans held for investment (“allowance coverage ratio”): 2019 vs. 2018: -23bps; 2018 vs. 2017: -1bps. Average loans held for investment increased by \$5.3bln to \$247.5bln in 2019 compared to 2018 driven by growth in commercial domestic credit card including the acquired Walmart portfolio, and auto loan portfolios, partially offset by the impact of lower loan balances from the sale of consumer home loan portfolio.
- 30+ day performing delinquency rate: 2019 vs. 2018: -11; 2018 vs. 2017: +39
- 30+ day delinquency rate: decreased by 10bps points to 3.74% as of Dec 31, 2019 from Dec 31, 2018 driven by the strong economy and stable underlying credit performance in US domestic credit card loan portfolio, partially offset by the impact of the acquired Walmart portfolio.

Capital ratios

- Tier 1 capital: 2019 vs. 2018: +100bps; 2018 vs. 2017: +90bps
- Total capital: 2019 vs. 2018: +100; 2018 vs. 2017: +70
- Tier 1 leverage: 2019 vs. 2018: +100; 2018 vs. 2017: +80

Purchase volume: 2019 vs. 2018 +10% ; 2018 vs. 2017 +15%

Efficiency ratio: 2019 vs. 2018 +107 ; 2018 vs. 2017 +97; | **Operating efficiency ratio:** 2019 vs. 2018: +87; 2018 vs. 2017: -65 | **Net charge-off rate:** 2019 vs. 2018 1bps; 2018 vs. 2017 -15bps

Net Interest Income and Net Interest Margin:

- Net interest margin decreased 17 basis points quarter-over-quarter driven by one less day to recognize income and changes in asset mix. And it decreased 8 basis points year-over-year driven by lower yields on interest-earning assets.

Q1 2020 Credit Card Key Metrics: Ending loans up \$8.0 billion, or 7%, Purchase volume up 7% YoY, Revenue up \$73 million, or 2%, YoY, Revenue margin of 15.03%. Non-interest expense up \$37 million. Provision for credit losses up \$2.3 billion, or 167%, Net charge-off rate of 4.68% or up 37% vs 2019.

Q1 2020 Domestic Card Metrics: Ending loans up \$8.5 billion, or 8%, YoY, Purchase volume up 8%, Revenue up \$77 million, Revenue margin of 14.86%. Non-interest expense up \$35 million. Provision for credit losses up \$2.2 billion, or 168%. Net charge-off rate of 4.68%.

Q1 2020 Consumer Banking Metrics: Ending loans up \$4.8 billion, or 8%, YoY, Ending deposits up \$12.2 billion, or 6% YoY, Revenue down \$56 million, or 3%. Non-interest expense remained flat. Provision for credit losses up \$625 million. Net charge-off rate of 1.54%, -39%.

Q1 2020 Commercial Banking Metrics: Ending loans up \$10.0 billion, or 14%, Ending deposits up \$1.6 billion, or 5%, Revenue up \$53 million, or 8%, Provision for credit losses up \$787 million, Net charge-off rate of 0.57%, “Criticized performing loan rate of 3.6% and criticized nonperforming loan rate of 0.6%” .

Credit Score Distribution: Greater than 660 =67%, 660 or below = 33%.

Troubled Debt Restructurings

Business Segments & % of total revenue 2019: Credit Card 64%, Consumer Banking 26%, Commercial Banking 10%.

Geographic Composition: U.S 92.5%; Canada 5.1%; U.K. 2.4%

Earnings Announcements

Q1 2020 non-GAAP Diluted EPS reported as -3.02. Efficiency Ratio also dropped from 55.16% in Q4 2019 to 50.77% in Q1 2020, a drop of -7.95%.

non-GAAP Earnings consensus for the year 2020 of -2.04 loss, on a range of 2.16 to -5.59.

Q1 2020 Net loss of \$1.3 billion compared with net income of \$1.2 billion, or \$2.25 per diluted common share in the fourth quarter of 2019.

Any continuous decline in revenue that is expected to be seen for Q2, combined with decrease in Operating efficiency ratio; Q4 2019 45.60 compared to Q1 2020 43.99, %change: -3.53% is likely to see the stock lose in its value.

Catalysts excluding Earnings

Flat Yield Curve > Sustained periods of time with a flat yield curve reduce the spread between asset yields and funding costs, this coupled with low interest rates, or an inversion of the yield curve, could have a material adverse effect on COF's net interest margin and earnings.

An Increases in quarterly charge-off rates caused by bankruptcies and reduced ability to recover debt.

Decreased consumer spending, lower demand for credit and shifts in consumer payment behavior towards avoiding late fees, finance charges and other fees.

The transition from LIBOR to an alternative reference rate (but this is only after December 31, 2021)

Downgrade in credit rating could affect the ability to access the capital markets, increase borrowing costs and have a negative impact on results of operations.

Short Interest Ratio (Days To Cover)	1.2
Short Percent of Float	1.57 %
Short % Increase / Decrease	-4 %
Short Interest (Shares Short)	7,080,000
Short Interest (Shares Short) - Prior	7,400,000
% From 52-Wk High (\$ 107.59)	-36.52%
% From 50-Day MA (\$ 63.33)	7.84%
% From 200-Day MA (\$ 83.76)	-18.46%
% From 52-Wk Low (\$ 38.00)	79.74%
52-Week Performance	-23.02%
Trading Volume - Today vs Avg	62.47%
Trading Volume - Today	3,791,841
Trading Volume - Average	6,070,000
Shares Float	450,580,000

Trade structure:

1. Short the stock:

Assumed entry price: \$70; on \$10,000 gross exposure (142 shares), with 10% stop loss:
Risking \$994 to make $(\$70 - \$58) = \$12 \times 142 \text{ shares} = \$1,704$; R/R = 1.71

2. Long ATM \$70 Strike Put Option with 21st August 2020 expiry (Earnings announcement in July)
Are \$7.35 (not worth considering)

3. Bear Put Spread or Bear Put Ladder Spread