

Consumer Finance

Capital One makes its move – plans to acquire Discover for \$35B

Industry Overview

COF plans to acquire DFS in an all-stock deal of \$35.3B

Credit card powerhouse Capital One (COF) announced plans to acquire Discover Financial (DFS) for \$35.3B in an all-stock transaction. The proposed deal would potentially create the largest US credit card issuer (~20% market share) by combining the current #4 and #6 largest issuers, by credit card loans outstanding. Capital One is scheduled to host a public call at 8am ET and also hold meetings at BofA's Financial Services conference today. We would also hear reactions from competitors at the conference this week. We think the potential transaction offers good strategic optionality for COF and maintain our Buy rating.

Key financial points: all-stock, 15% EPS accretive by '27

The proposed all-stock deal is at a 27% premium to DFS' Friday stock price. At close, COF shareholders would own 60% of the proposed combined entity, and DFS' shareholders 40%. COF expects to deliver 15% non-GAAP EPS accretion by 2027, including \$2.7B in synergies (details inside). COF also highlighted that the combined company's CET1 would be 14%, and 84% of year-end '23 deposits were fully insured. COF expects the deal to close in late '24/early 25, subject to closing conditions, regulatory approvals and approval by each company's shareholders.

All about network but also boosts prime segment

We believe COF would be most interested in DFS' network assets. Potentially owning a network would offer intriguing possibilities for a tech-savvy company like COF. Amex and DFS have long highlighted marketing, fraud, customization advantages from owning their own network and we suspect the prospect of adding more capabilities and customization could appeal to COF. In addition, our conversations with industry experts and the company itself suggest COF has historically specialized is in near-prime & super-prime underwriting, so DFS' prime-heavy card holder base could be a nice strategic fit (see Exhibit 1 inside).

Regulatory, anti-trust issues appear largely manageable

Given the highly competitive credit card industry with many large banks having a strong presence, we think anti-trust concerns appear largely manageable. COF and DFS are also well capitalized and should potentially earn high ROEs to build capital if needed. Though we acknowledge the prospect of lower near-term capital returns and book value dilution could disappoint some investors.

COF plans to move debit and selected credit vols to DFS

While DFS cards run on its proprietary network, COF issues cards on both the V and MA networks. About 42% of COF's credit cards run on V and 58% on MA, as of 2022. COF's card volumes are split ~90% credit/~10% debit (DFS is virtually all credit). If the deal closes, COF probably would not want to make immediate major changes that could cause cardholder disruption. While flipping DFS cards to COF would enable more international acceptance, the transaction announcement indicated that COF's debit purchase volumes and selected credit card volumes would be moving to DFS in pursuit of COF's targeted network synergies of \$1.2B in 2027. In 2023, COF's US credit card volumes were \$606B, with DFS at \$218B. In 2022, we estimate COF's debit volumes were \$58.5B, most of, if not all, we believe is with MA. We estimate COF represents roughly ~25% of MA's US credit volume and 5% of US debit volume. COF represents ~9% of V's US credit volume.

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Refer to important disclosures on page 6 to 10. Analyst Certification on page 5. Price
Objective Basis/Risk on page 4.

Timestamp: 20 February 2024 02:59AM EST

20 February 2024

Equity
United States
Consumer Finance

Mihir Bhatia

Research Analyst BofAS +1 415 436 3553 mihir.bhatia@bofa.com

Jason Kupferberg

Research Analyst BofAS jason.kupferberg@bofa.com

Nathaniel Richam-Odoi

Research Analyst BofAS +1 646 855 1607 nate.richam-odoi@bofa.com

Cassie Chan

Research Analyst BofAS cassie.chan@bofa.com

Caroline Latta

Research Analyst BofAS caroline.latta@bofa.com

CFPB: Consumer Financial Protection

Bureau

COF: Capital One

DFS: Discover Financial

MA: Mastercard

V: Visa

Transaction details

Capital One and Discover announced that they have entered into a definitive agreement under which Capital One will acquire Discover for \$35.3B in an all-stock deal which represents a 27% premium to Discover's last closing price, the deal is expected to close in late 2024 or early 2025, subject to customary closing conditions, including regulatory approvals and approval by shareholders of each company. Current Capital One shareholders will own ~60% of the proposed combined company and Discover shareholders would own the remaining ~40%. We see strategic merit for Capital One to acquire DFS now due to DFS' recent underperformance and compliance issues, to potentially create a credit card issuer with a potent network advantage.

COF expects the deal to generate \$1.5B in expense and \$1.2B in network synergies. On the expense side, COF noted it can save 26% of DFS's operating expenses + 10% of marketing expenses via synergies from common functions. It also expects to generate \$1.2B in network synergies by adding COF debit purchase volume and selected credit card purchase volume to the Discover network. While COF did not clarify how it will achieve the synergies, we believe DFS' debit network, being a three-party network, is not subject to interchange cap rules and the combined company could earn higher interchange on transactions. In a scenario where we assume unregulated interchange of 150bps, and current regulated interchange of 50bps, on the \$58B in debit vols (2022 est.), COF could potentially earn an incremental \$580M in revenue and also save on network fees. This likely grows as deposits increase by 2027.

We also note that while the all-stock transaction appears to be dilutive in the near term, the combined entity plans to deliver +15% accretion to adj. EPS in 2027. Capital One also expects 16% ROIC in 2027 and an IRR of +20%. On a pro forma basis, Capital One would have a 14% CET1 ratio (12.9% as of 4Q23) and 84% of deposits would be insured.

Regulatory/anti-trust scrutiny likely, appear manageable

Combining two large card issuers may face some regulatory scrutiny and COF noted it could take 10-12 months to close (late '24 / early '25). In general, credit card lending is highly concentrated with the ten largest issuers currently accounting for over 80% of total credit card loans outstanding. The CFPB has also noted the highly concentrated nature of the industry in recent reports. We estimate the combined company would be the largest issuer by outstanding loans. That said, it would potentially have ~20% market share and would still be competing with many large banks and other providers of credit.

In addition, COF and DFS are highly regulated banking entities. We suspect regulators will want to ensure a smooth transition for cardholders and adequate capital. The combined company is expected to have a CET1 capital ratio of 14% at closing, which should alleviate capital concerns among regulators, in our view. We note that DFS has recently experienced some regulatory issues, though the proposed sale of the student loan portfolio may help address some of the concerns. Also, COF will become even more 'consumer dependent' as a result of the proposed merger, which will increase cyclicality and also potentially reduces near-term capital return potential.

Discover's recent issues likely created an opportunity

Discover has recently struggled with compliance issues and underwriting decisions that have led to pressure on its stock price and also driven some management turnover. In 2022, student loan servicing hiccups led to the company suspending share repurchases briefly while it did an internal investigation. In late 2023, compliance issues returned due to a card product misclassification which resulted in another share buyback suspension, that has yet to be restarted, and another internal investigation. Additionally, there was consent order from the FDIC for an unrelated consumer compliance matter. This, in addition to a weak 2024 guide, has resulted in the stock down 1.7% YTD, but up 21% since the end of 3Q, and trailing COF which is up 4.7% YTD and 44% since the end of 3Q. With new leadership just coming in (new CEO started less than 1 month back), and



no entrenched management, COF likely saw an opportunity to acquire network assets, in our view

Prime-revolver fills out Capital One's portfolio

Capital One targets a somewhat distinct blend of cardholders relative to its primary competitors. COF markets to the high end of subprime and superprime categories and this barbell approach is distinct to COF driven by its disciplined underwriting approach. In our conversations with the company, COF noted that it did not have specific insights in the prime revolver segment and as a result it was not a focus for the company initially. That said, prime revolver is Discover's focus within the sector and perfectly fills a gap within COF's portfolio, in terms of the cardholder base.

Exhibit 1: DFS's prime base fits nicely within COF's mini barbell strategy

Credit card industry competitive landscape by consumer segment

		Type of Consumer					
		Revolver (carries a balance)	Transactor (Pays off card in full each month)				
	Super-Prime (740+)	- Tend to be fewer consumers in this segment	- Tend to be reward focused which drives reward competition - American Express, Chase, Capital One - Other large banks have developed products to gain traction				
FICO Band	Prime (660-740)	- Discover's focus area - Most large banks active here given their large national deposit customer base (e.g. Wells Fargo)					
	Sub-prime (<660)	 Capital One targets the high-end of this category Fintechs often operate in this space Small, regional banks also compete here 	- Tend to be fewer consumers in this segment				

Source: BofA Global Research

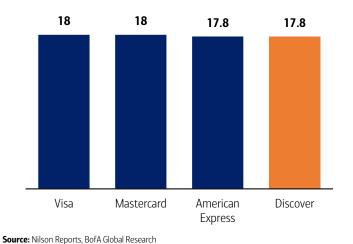
BofA GLOBAL RESEARCH

DFS network is a scarce asset

We believe the DFS network is a key piece of the transaction. There are only four widely accepted credit card networks in the United States and while DFS is the smallest, it does still enjoy parity in acceptance with Visa and Mastercard. Internationally, through its partnerships, the Discover network is accepted more broadly than American Express.

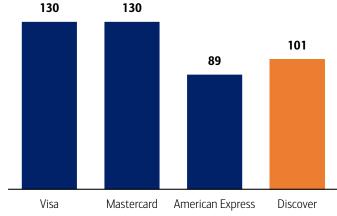
BofA GLOBAL RESEARCH

Exhibit 2: Discover has virtual parity with Visa, Mastercard in US US merchant acceptance locations (M)



Global merchant acceptance locations (M)

Exhibit 3: Discover has more acceptance locations than Amex globally



Source: Nilson Reports, BofA Global Research

BofA GLOBAL RESEARCH

Visa and Mastercard implications

Assuming the transaction closes as contemplated, we COF probably would not want to make immediate major changes that could cause cardholder disruption, such as flipping a significant number of DFS cards to V/MA or flipping many COF cards to the DFS network. While the former option would enable greater international acceptance, the latter would enable COF to capture more transaction economics, the transaction announcement indicated that COF's debit purchase volumes and selected credit card volumes will be moving to DFS in pursuit of COF's targeted network synergies of \$1.2B in 2027.

About 42% of COF's credit cards run on V and 58% on MA, as of 2022. In 2023, COF had credit card volumes of \$606B, representing ~14% of V and MA's combined US credit volumes (V had ~\$3T and MA had ~\$1.4T). If we assume COF's volumes are split between V and MA with same mix as the number of cards, that would imply V had \$255B of COF US credit card volume last year, and MA had \$351B. So, in a theoretical worst-case scenario where all COF credit cards flip to DFS, MA could lose approx. 25% of its US credit volume (and 5% of total global purchase volume), and V could lose approx. 9% of its US credit volume (and 2% of its global purchase volume). We also note that US credit volume generally carries yields above company average.

Per the Nilson report in 2022, COF had \$58.5B of US debit volumes, we believe most if not all of this runs on the MA network. COF represents about 5% of MA's total US debit.

Exhibit 4: Stocks mentioned

Rating and price summary

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
COF	COF US	Capital One	US\$ 137.23	B-1-7
DFS	DFS US	Discover Finl	US\$ 110.49	B-1-7

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk

Capital One Financial (COF)

Our \$146 PO is based on a 10.5x PE multiple to our 2024 EPS forecast. A 10.5x PE multiple is in the middle of the historical range (7-12x) which we think is appropriate given the more optimistic macro outlook and strong loan growth, partially offset by rising credit costs.

Downside risks are: slower than expected revolving credit growth, faltering economic recovery and rising loan losses, which could drive earnings below our estimates, and result in valuation compression. Cybersecurity and regulations are also risks.

Discover Financial (DFS)

We calculate a \$118 PO based on an 10.5x PE multiple to our 2024 EPS forecast. A 10.5x multiple is in the middle of DFS's recent historical range (7-12x) and reflects the more optimistic macro outlook, resilient consumer balance sheets, and strong business fundamentals.

Downside risks to our price objective are: if the economy falls into a recession, credit costs could rise rapidly and compress margins more than our current forecast.



Deteriorating economic conditions would likely hurt sentiment and drive DFS's valuation lower.

Analyst Certification

I, Mihir Bhatia, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.



US - Payments, Processors, Specialty Finance and IT services Coverage Cluster

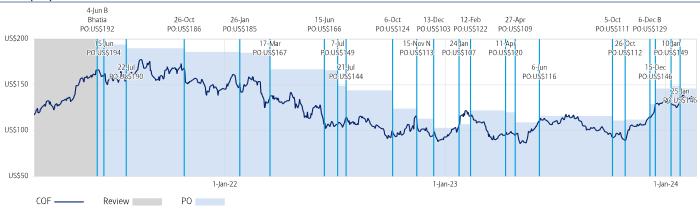
ACCENTURE PIC ACN ACN US Jason Kupferberg American Express Company AXP AXP US Milhir Bhatia Block Inc SQ SQ US Jason Kupferberg Capital One Financial COF COF US Milhir Bhatia Discover Financial DFS DFS US Milhir Bhatia Enact Holdings ACT ACT US Milhir Bhatia Essent Group ESNT ESNT US Milhir Bhatia Essent Group ESNT ESNT US Milhir Bhatia Fidelity National Information Services FIS FIS US Jason Kupferberg Fiserv Inc FI FI US Jason Kupferberg Fiserv Inc FI FI FI US Jason Kupferberg Fiserv Inc FLYW FLYW SJASON Kupferberg Global Payments Inc GPN GPN US Jason Kupferberg Jack Henry & Associates JKHY JKHY US Jason Kupferberg Marqeta MQ MQ US Cassie Chan Mastercard Inc MA MA US Jason Kupferberg MGIC Investment Corp. MTG MTG US Milhir Bhatia NMI Holdings NMIH NMIH US Milhir Bhatia NUVei NVEI NVEI US Jason Kupferberg Nuvei NVEI NVEI SJASON Kupferberg Nuvei NVEI NVEI Jason Kupferberg Nuvei NVEI NVEI SJASON Kupferberg Jason Kupferberg Nuvei NVEI NVEI SJASON Kupferberg Nuvei NVEI NVEI SJASON Kupferberg Nuvei Nuvei NVEI NVEI SJASON Kupferberg Nuvei Shift Payments, Inc	
Accenture Plc American Express Company AXP AXP AXP US Mihir Bhatia Block Inc SQ SQ US Jason Kupferberg Capital One Financial COF COF US Mihir Bhatia Discover Financial Discover Financial Discover Financial Discover Financial Discover Financial Discover Financial Enact Holdings ACT ACT US Mihir Bhatia Essent Group ESNT ESNT US Mihir Bhatia Fidelity National Information Services FIS FIS US Jason Kupferberg Fiserv Inc FI FI US Jason Kupferberg FleetCor Technologies Inc. FLT FLT US Mihir Bhatia Flywire FLYW FLYW US Jason Kupferberg Global Payments Inc GPN GPN GPN US Jason Kupferberg Jack Henry & Associates JKHY MATG MATG MAStercard Inc MA MA US Jason Kupferberg MGIC Investment Corp. MTG MIG MTG US Mihir Bhatia NUMel NUNEI NIFE Mihir Bhatia Nihir Bhatia Nihir Bhatia Nunei NUNEI NUNEI NUNEI NUNEI NIFE Mihir Bhatia Nihir Bhatia Nihir Bhatia Ninir Bhatia Ninir Bhatia Ninir Bhatia Ninir Bhatia Ninir Bhatia Nunei NIFE Mihir Bhatia Nihir Bhatia	
American Express Company Block Inc SQ SQ US Jason Kupferberg Capital One Financial COF COF US Mihir Bhatia Discover Financial Discover Financia Discover Financia Dis	
Block Inc Capital One Financial COF COF US Mihir Bhatia Discover Financial DFS DFS US Mihir Bhatia Discover Financial DFS DFS US Mihir Bhatia Enact Holdings ACT ACT US Mihir Bhatia Essent Group ESNT ESNT US Mihir Bhatia Fidelity National Information Services FIS FIS US Jason Kupferberg Fiserv Inc FI FI FI FI US Jason Kupferberg FleetCor Technologies Inc. FLT FLT US Mihir Bhatia Flywire FLYW FLYW US Jason Kupferberg Global Payments Inc GPN GPN US Jason Kupferberg Jack Henry & Associates JKHY JKHY US Jason Kupferberg Marqeta MQ MQ US Cassie Chan Mastercard Inc MA MA US Jason Kupferberg MTG MGC Investment Corp. MTG MTG US Mihir Bhatia NUMI Holdings NMIH NMIH US Mihir Bhatia Nuvei NVEI NVEI NVEI US Jason Kupferberg NVEI CN JASON Kupferberg	
Capital One Financial Discover Financial Discover Financial DFS DFS DFS US Mihir Bhatia Enact Holdings ACT ACT US Mihir Bhatia Essent Group ESNT ESNT US Mihir Bhatia Fidelity National Information Services FIS FISUS Jason Kupferberg Fiserv Inc FILT FILT US Mihir Bhatia Flywire FLYW FLYW US Jason Kupferberg Global Payments Inc GPN GPN US Jason Kupferberg Jack Henry & Associates JKHY Marqeta Marqeta MQ MQ US Cassie Chan Mastercard Inc MA MA US Jason Kupferberg MGI Investment Corp. MTG MGI NVEI NMI Holdings NMIH NMIH US Mihir Bhatia NUrvei NVEI NVEI NVEI NVEI NVEI NVEI NVEI NVEI	
Discover Financial Enact Holdings ACT ACT US Mihir Bhatia Essent Group ESNT ESNT US Mihir Bhatia Essent Group ESNT Fidelity National Information Services FIS Fiserv Inc FieetCor Technologies Inc. FLT FLT US Mihir Bhatia Flywire FLYW FLYW US Jason Kupferberg Global Payments Inc Jack Henry & Associates JKHY Marqeta Marqeta Margeta Mastercard Inc Mastercard Inc MGIC Investment Corp. MIG MGIC Investment Corp. MIG	
Enact HoldingsACTACT USMihir BhatiaEssent GroupESNTESNT USMihir BhatiaFidelity National Information ServicesFISFIS USJason KupferbergFiserv IncFIFI USJason KupferbergFleetCor Technologies Inc.FLTFLT USMihir BhatiaFlywireFLYWFLYW USJason KupferbergGlobal Payments IncGPNGPN USJason KupferbergJack Henry & AssociatesJKHYJKHY USJason KupferbergMarqetaMQMQ USCassie ChanMastercard IncMAMA USJason KupferbergMGIC Investment Corp.MTGMTG USMihir BhatiaNMI HoldingsNMIHNMIH USMihir BhatiaNuveiNVEINVEI USJason KupferbergNuveiNVEINVEI USJason KupferbergNuveiNVEI USJason KupferbergNuveiNVEI USJason KupferbergOneMain Holdings, Inc.OMFOMF USMihir Bhatia	
Essent Group Fidelity National Information Services FIS Fiserv Inc FiletCor Technologies Inc. FILT FILT US Mihir Bhatia Flywire FLYW FLYW US Jason Kupferberg FLYW FLYW US Jason Kupferberg MARQ MQ US Cassie Chan Mastercard Inc MA MA US Jason Kupferberg MAGIC Investment Corp. MTG MTG MTG US Mihir Bhatia NMIH US Mihir Bhatia NUVEI NVEI NVEI NVEI US Jason Kupferberg	
Fidelity National Information Services Fiserv Inc Fiserv Inc Fil Fil Fil SIUS Jason Kupferberg FleetCor Technologies Inc. FLT FLT US Mihir Bhatia Flywire FLYW FLYW US Jason Kupferberg Global Payments Inc GPN GPN US Jason Kupferberg Jack Henry & Associates JKHY JKHY US Jason Kupferberg Marqeta MQ MQ US Cassie Chan Mastercard Inc MA MA US Jason Kupferberg MAGIC Investment Corp. MTG MTG MTG US Mihir Bhatia NMIH Oldings NMIH NMIH US Mihir Bhatia Nuvei NVEI NVEI NVEI NVEI OneMain Holdings, Inc. Mihir Bhatia	
Fiserv Inc Fiserv Inc FiletCor Technologies Inc. FLT FLT FLT US Mihir Bhatia Flywire Flywire Flyw FLYW FLYW US Jason Kupferberg Global Payments Inc Jack Henry & Associates JKHY Marqeta Marqeta Mastercard Inc Mastercard Inc MGIC Investment Corp. MTG MMI Holdings NMIH NMIH US Mihir Bhatia Nuvei NVEI NVEI NVEI OneMain Holdings, Inc. Mihir Bhatia Mihir Bhatia Mihir Bhatia NVEI NVEI NVEI NVEI ONF Mihir Bhatia Mihir Bhatia Mihir Bhatia Mihir Bhatia	
FleetCor Technologies Inc. FLT FLT FLT US Mihir Bhatia Flywire Flywire Flyw FLYW US Jason Kupferberg Global Payments Inc GPN GPN US Jason Kupferberg Jack Henry & Associates JKHY JKHY US Jason Kupferberg Marqeta MQ MQ US Cassie Chan Mastercard Inc MA MA US Jason Kupferberg MGIC Investment Corp. MTG MTG US Mihir Bhatia NMIH HOldings NMIH NMIH US Mihir Bhatia Nuvei NVEI NVEI NVEI US Jason Kupferberg NVEI US Jason Kupferberg NVEI US Mihir Bhatia	
Flywire Flywire Flywire Global Payments Inc GPN GPN GPN US Jason Kupferberg Jack Henry & Associates JKHY JKHY US Jason Kupferberg Marqeta MQ MQ US Cassie Chan Mastercard Inc MA MA US Jason Kupferberg MGIC Investment Corp. MTG MTG US Mihir Bhatia NMI Holdings NMIH NMIH US Mihir Bhatia Nuvei NVEI NVEI NVEI NVEI US Jason Kupferberg NVEI CN Jason Kupferberg NVEI CN Jason Kupferberg NVEI CN Jason Kupferberg NVEI CN Jason Kupferberg OneMain Holdings, Inc.	
Global Payments Inc Jack Henry & Associates JKHY JKHY US Jason Kupferberg Jack Henry & Associates Marqeta MQ MQ US Cassie Chan Mastercard Inc MA MA US Jason Kupferberg MGIC Investment Corp. MTG MTG US Mihir Bhatia NMIH Holdings NMIH NMIH US Mihir Bhatia Nuvei NVEI NVEI NVEI US Jason Kupferberg OneMain Holdings, Inc. OMF OMF US Mihir Bhatia	
Jack Henry & Associates Marqeta MQ MQ MQ MS Cassie Chan MA MS Jason Kupferberg MGIC Investment Corp. MTG MIGH NMIH NMIH NMIH NMIH NVEI NVEI NVEI NVEI NVEI OneMain Holdings, Inc. MEHY JKHY US JASON Kupferberg MR US MA US JASON Kupferberg MTG US Mihir Bhatia MIH NMIH US Mihir Bhatia NVEI US Jason Kupferberg NVEI CN Jason Kupferberg MIH NVEI CN Jason Kupferberg MIH NVEI CN Mihir Bhatia	
Marqeta MQ MQ US Cassie Chan Mastercard Inc MA MA US Jason Kupferberg MGIC Investment Corp. MTG MTG US Mihir Bhatia NMI Holdings NMIH NMIH US Mihir Bhatia Nuvei NVEI NVEI US Jason Kupferberg Nuvei YNVEI NVEI CN Jason Kupferberg OneMain Holdings, Inc. OMF OMF US Mihir Bhatia	
Mastercard IncMAMA USJason KupferbergMGIC Investment Corp.MTGMTG USMihir BhatiaNMI HoldingsNMIHNMIH USMihir BhatiaNuveiNVEINVEI USJason KupferbergNuveiYNVEINVEI CNJason KupferbergOneMain Holdings, Inc.OMFOMF USMihir Bhatia	
MGIC Investment Corp. MTG MTG US Mihir Bhatia NMI Holdings NMIH NMIH US Mihir Bhatia Nuvei NVEI NVEI NVEI US Jason Kupferberg Nuvei NVEI NVEI OMF OMF US Mihir Bhatia	
NMI HoldingsNMIHNMIH USMihir BhatiaNuveiNVEINVEI USJason KupferbergNuveiYNVEINVEI CNJason KupferbergOneMain Holdings, Inc.OMFOMF USMihir Bhatia	
NuveiNVEINVEI USJason KupferbergNuveiYNVEINVEI CNJason KupferbergOneMain Holdings, Inc.OMFOMF USMihir Bhatia	
Nuvei YNVEI NVEI CN Jason Kupferberg OneMain Holdings, Inc. OMF OMF US Mihir Bhatia	
OneMain Holdings, Inc. OMF OMF US Mihir Bhatia	
0 ,	
Shift4 Payments, Inc FOUR FOUR S lason Kupferberg	
, , , , , , , , , , , , , , , , , , ,	
Telus International TIXT TIXT US Cassie Chan	
Telus International YTIXT TIXT CN Cassie Chan	
Visa Inc. V V US Jason Kupferberg	
WEX Inc. WEX WEX US Mihir Bhatia	
NEUTRAL	
ADP ADP US Jason Kupferberg	
Affirm Holdings AFRM AFRM US Jason Kupferberg	
Bread Financial Holdings Inc BFH BFH US Mihir Bhatia	
DLO as on Kupferberg	
Globant SA GLOB GLOB US Jason Kupferberg	
PayPal Holdings Inc PYPL PYPL US Jason Kupferberg	
SoFi Technologies Inc SOFI SOFI US Mihir Bhatia	
Synchrony Financial SYF SYF US Mihir Bhatia	
Thoughtworks TWKS TWKS US Jason Kupferberg	
Toast TOST TOST US Jason Kupferberg	
TTEC Holdings TTEC TTEC US Cassie Chan	
UNDERPERFORM	
, 1 0	
, 1	
Cognizant Technology Solutions CTSH CTSH US Jason Kupferberg	
Coinbase COIN COIN US Jason Kupferberg	
DXC Technology DXC DXC US Jason Kupferberg	
EPAM Systems EPAM EPAM US Jason Kupferberg	
Paychex PAYX PAYX US Jason Kupferberg	
Radian Group Inc RDN RDN US Mihir Bhatia	
Rocket Companies, Inc. RKT RKT US Mihir Bhatia	
TaskUs TASK TASK US Cassie Chan	
Western Union WU WU US Jason Kupferberg	

Disclosures

Important Disclosures



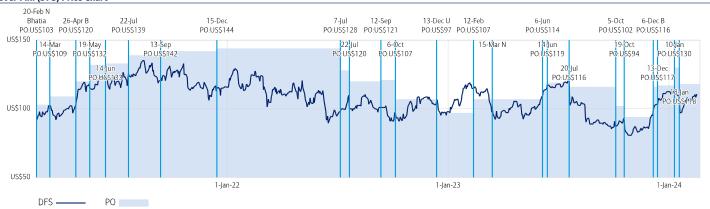
Capital One (COF) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Discover Finl (DFS) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Equity Investment Rating Distribution: Financial Services Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	156	53.79%	Buy	94	60.26%
Hold	72	24.83%	Hold	48	66.67%
Sell	62	21.38%	Sell	35	56.45%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

R1 Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating Total return expectation (within 12-month period of date of initial rating) Ratings dispersion guidelines for coverage cluster^{R2}

 Buy
 ≥ 10%
 ≤ 70%

 Neutral
 ≥ 0%
 ≤ 30%

 Underperform
 N/A
 ≥ 20%

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. Coverage Cluster is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the Price Charts website, or call 1-800-MERRILL to have them mailed.

BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: Capital One, Discover Finl.

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: Capital One, Discover Finl.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: Capital One, Discover Finl.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months. Capital One, Discover Finl.

The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: Capital One, Discover Finl.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: Capital One, Discover Finl.

BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: Capital One, Discover Finl.

BofAS together with its affiliates beneficially owns one percent or more of the common stock of this issuer. If this report was issued on or after the 9th day of the month, it reflects the ownership position on the last day of the previous month. Reports issued before the 9th day of a month reflect the ownership position at the end of the second month preceding the date of the report: Capital One.

BofAS or one of its affiliates is willing to sell to, or buy from, clients the common equity of the issuer on a principal basis: Capital One, Discover Finl.

The issuer is or was, within the last 12 months, a securities business client (non-investment banking) of BofAS and/or one or more of its affiliates: Capital One, Discover Finl.

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments. Refer to BofA Global Research policies relating to conflicts of interest.

"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.

Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudential et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code). BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofaml.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch (Hong Kong): Merrill (Hong Kong): Merr (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSFC); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.



R2 Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSFC; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securit

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities. This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information. In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

BofA ESGMeter Methodology:

ESGMeter is a proprietary metric based on quantitative analysis and fundamental analyst inputs that reflects our assessment of a company's Environmental, Social and Governance-related attributes. The ESGMeter is intended to indicate a company's likelihood of experiencing stronger financial stability (higher return on equity and lower earnings and price volatility) over the next three years relative to peer group. There are three ESGMeter levels - Low, Medium, and High - which indicate whether a company has attributes most likely to translate into superior financial stability (in the case of a High level) or weaker financial stability (in the case of a Low level) over the next three years relative to its peer group. A Medium level suggests that a company exhibits ESG characteristics that are likely associated with financial stability results in line with its peer group over the next three years. Full details of our methodology, financial stability definition and disclaimers are available at BofA ESGMeter methodology. ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of the BofA Global Research fundamental equity analyst's investment rating, volatility risk rating, income rating or price objective for that company.

Copyright and General Information:

Copyright 2024 Bank of America Corporation. All rights reserved. iQdatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses



any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and BofA Securities policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this

