

Integrated Telecommunication Services

3Q23 Canadian telecom preview – Price rationality and wireless growth persist

Earnings Preview

Cogeco kicks off 3Q reporting Nov 1, BMO

Reporting season begins 11/1 when Cogeco reports its fiscal 4Q23 and shares fiscal 2024 guidance. We believe the industry remains healthy with stable pricing, growing subscribers, falling capex, and rising free cash flow. Current valuations, however, suggest deep problems exist. We believe the Street is worried about 1) competitive intensity, 2) regulatory events (wireless MVNOs & wholesale broadband rates), and 3) rising interest rates. We expect 3Q results to generally soothe investor concerns and have a positive impact on sector stocks.

Competition remains, and is rational

Back-to-school season and the iPhone15 launch led to the typical elevated competitive intensity in late 3Q. While promotions increased and discounting occurred, it was not measurably greater than in prior years. Encouragingly, promotional pricing reverted to regular pricing as back-to-school ended. The iPhone15 launched in September and once again proved more evolutionary than revolutionary. Given the large price tag against an inflationary backdrop, its presence did not lead to new competitive pressures.

Regulatory concerns are a weight on the sector

The market awaits a CRTC decision on wholesale broadband rates. In an October 1, 2023 speech, CRTC Chair Vicky Eatrudes suggested we should see a decision soon. Mandated wholesale broadband rates are not new but there is concern that the CRTC's new rates may, again, be set too low for the market's comfort. Returns on invested capital have declined as the industry has invested heavily in wireless networks, spectrum, and fiber. We believe the regulator is aware of the math and understands that ROI informs future capital investment. Management teams will likely use their conference calls to comment on the regulatory environment. We expect the CRTC's ultimate decision will mirror its past decisions which have regularly balanced the twin interests of consumer affordability and carrier investment.

Rising stock yields are out of sync with rate history

Over the past year dividend yields and rates have moved meaningfully higher. There has been a strong positive correlation between the two in the past year. Over a longer timeframe, the data does not support the lockstep movement observed over the past 12 months. We take a closer look at this relationship here, and show that the recent increase in dividend yields of BCE and TELUS actually deviate materially from long term averages. Dividend payouts as a percent of free cash flow are currently above company target ranges. We expect coverage ratios to improve as capex moderates after a period of accelerated spending (eg. 5G, fiber). Organic growth within core connectivity businesses will also support improved coverage. Longer term, cost cutting should contribute to higher margins as fiber cost benefits are realized and copper is decommissioned. We expect the companies to field dividend coverage/comfort questions this quarter.

>> Employed by a non-US affiliate of BofAS and is not registered/qualified as a research analyst under the FINRA rules.

Refer to "Other Important Disclosures" for information on certain BofA Securities entities that take responsibility for the information herein in particular jurisdictions.

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 9 to 12. Analyst Certification on page 8. Price Objective Basis/Risk on page 7.

12612410

Timestamp: 17 October 2023 05:00AM EDT

17 October 2023

Equity
Canada
Telecommunications

David W. Barden, CFA
Research Analyst
BofAS
+1 646 855 1320
david.w.barden@bofa.com

Matthew Griffiths, CFA >>
Research Analyst
Merrill Lynch (Canada)
matthew.griffiths1@bofa.com

Exhibit 1: Reporting timings

CCA to report first (FY-4Q)

	Date	Release
Cogeco	1-Nov-23	AMC
BCE	2-Nov-23	BMO
TELUS	3-Nov-23	BMO
Rogers	9-Nov-23	BMO
Quebecor	TBA	TBA

Source: BofA Global Research

BofA GLOBAL RESEARCH

Summary of reporting times

Exhibit 2: 2Q23 Reporting times

Cogeco kicks off reporting Nov 1

	Date	Release	Call	Time	Dian-in
Cogeco	1-Nov-23	AMC	2-Nov-23	11:00AM	1-888-886-7786
BCE	2-Nov-23	BMO	2-Nov-23	8:00AM	1-800-806-5484
TELUS	3-Nov-23	BMO	3-Aug-23	TBA	TBA
Rogers	9-Nov-23	BMO	9-Nov-23	11:00AM	1-800-319-4610
Quebecor	TBA	TBA	TBA	TBA	TBA

Source: Company report

BofA GLOBAL RESEARCH

Key Metrics

Exhibit 3: Consolidated Estimates summary

Revenue, EBITDA and EPS for the group

	BofA estimates			Consensus estimates		
Consolidated	BCE	Rogers	TELUS	BCE	Rogers	TELUS
Revenue	6,085	5,015	5,035	6,168	5,058	5,116
Growth (% y/y)	1.0%	34.0%	7.8%	2.4%	35.1%	9.5%
EBITDA	2,658	2,355	1,811	2,680	2,364	1,831
Growth (% y/y)	2.7%	48.8%	5.0%	3.6%	49.3%	6.2%
EPS	0.78	1.09	0.31	0.82	1.10	0.26
Growth (% y/y)	-11.4%	29.7%	-8.9%	-6.6%	30.4%	-23.8%

Source: BofA Global Research estimates, Visible Alpha

BofA GLOBAL RESEARCH

Exhibit 4: Wireless estimate summary

Subscriber additions will drive industry service revenue growth

	BofA estimates			Consensus estimates		
	BCE	Rogers	TELUS	BCE	Rogers	TELUS
Wireless						
Wireless service revenue (\$mn)	1,839	1,970	1,761	1,836	1,973	1,777
growth (% y/y)	4.5%	11.9%	3.8%	4.4%	12.0%	4.8%
Wireless ARPU (\$/mth)	60.51	57.30	59.48	60.35	57.47	59.98
growth (% y/y)	-0.4%	0.8%	0.0%	-0.7%	1.1%	0.8%
Wireless net additions (k)	160	187	143	168	181	146
growth (% y/y)	-4.6%	13.9%	-5.0%	-0.1%	10.4%	-2.5%
Postpaid churn (%)	1.05	1.10	1.00	1.02	1.07	1.03
growth (% y/y)	16.7%	13.4%	5.3%	12.9%	10.2%	8.7%

Source: BofA Global Research estimates, Visible Alpha

BofA GLOBAL RESEARCH

Exhibit 5: Telecom segment estimate summary

Wireless business will drive telecom growth

	BofA estimates			Consensus estimates		
	BCE	Rogers	TELUS	BCE	Rogers	TELUS
Telecom						
Telecom revenue (\$mn)	5,475	4,539	4,328	5,552	4,556	4,374
growth (% y/y)	1.4%	40.0%	8.0%	0.7%	40.5%	9.1%
Telecom EBITDA (\$mn)	2,469	2,323	1,632	2,498	2,328	1,643
growth (% y/y)	2.6%	49.1%	7.1%	3.8%	49.4%	7.8%
Telecom EBITDA margin (%)	45.1%	51.2%	37.7%	45.0%	51.1%	37.6%
Broadband net additions (k)	83	15	34	82	20	33
growth (% y/y)	-7.4%	150.0%	-5.0%	-8.1%	232.6%	-7.0%

Source: BofA Global Research estimates, Visible Alpha

BofA GLOBAL RESEARCH

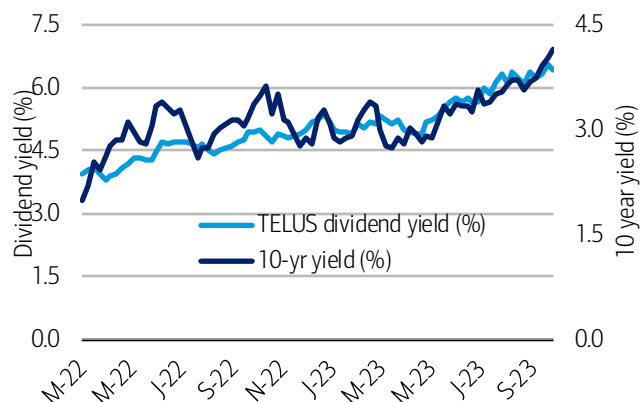
Rates are driving yields up, but shouldn't

Telecom stock dividend yields are at historical highs. This is happening as rates rise to multi-year highs as central banks move to fight inflation and credit spreads widen. Looking at the data from this past year, the relationship between rates and dividend

yields is very strong. As rates have increased, so to have dividend yields. The historical relationship, however, has not always been so in lockstep.

Exhibit 6: TELUS dividend yield and 10-year rate (March '22 - present)

Both rates and dividend yields moved higher this past year

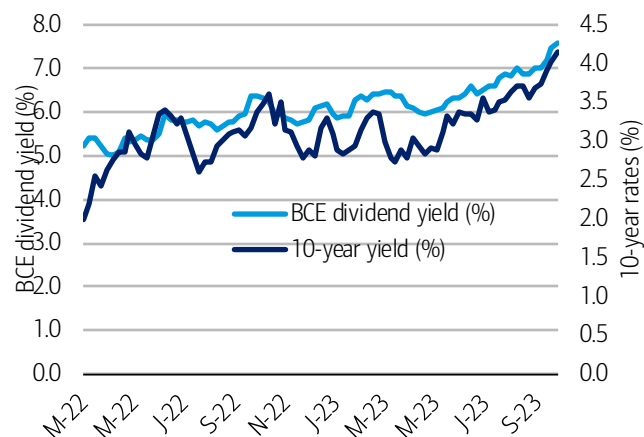


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 7: BCE dividend yield and 10-year rate (March '22 - present)

Both rates and dividend yields moved higher this past year



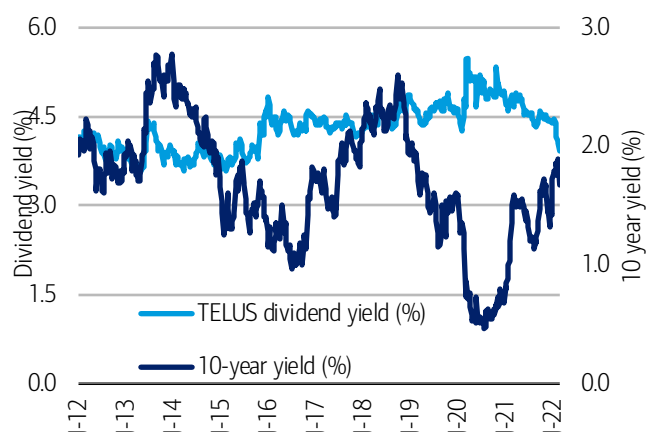
Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

If we step back and examine a longer time horizon, the relationship is much less straight forward. As 'rates' moved from near 3% to below 1% dividend yield fluctuated around a narrow range. Historically, we do not observe the lockstep movement observed over the past year.

Exhibit 8: TELUS div yield and rates (Jan'12 – March '22)

Dividend yield hovered around 4.5% as rates fluctuated

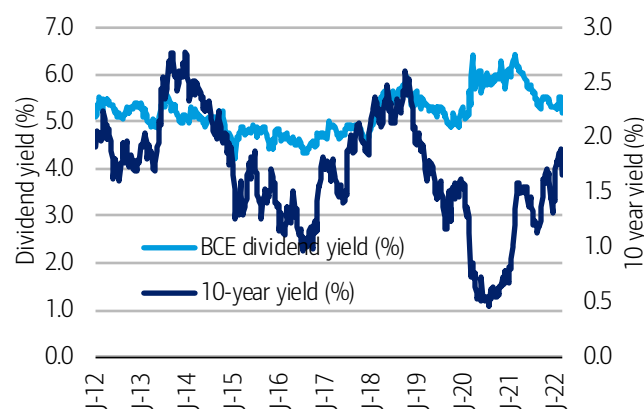


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 9: BCE div yield and rates (Jan'12 – March '22)

Dividend yield hovered around 5.2% as rates fluctuated



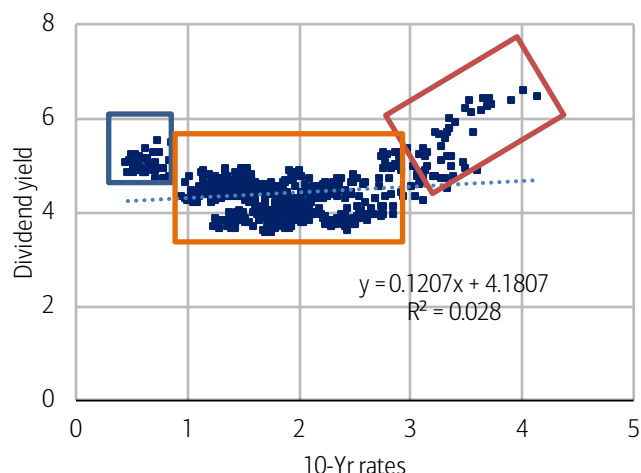
Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

We have plotted the government 10-year bond yield and the dividend yields of TELUS and BCE since Jan 2012 below. The slope of the trend line is positive which indicates some positive relationship between higher rates and higher dividend yields. On the left of each graph, when rates fall below 1%, this coincides with the COVID pandemic. On the right-hand side when rates are above 3%, this is the most recent time period. For both TELUS and BCE, the dividend yields in the most recent period (right hand side) materially differ from the historical relationship outside of the COVID pandemic. The recent increase in rates accompanies rising dividend yields at an increasingly large gap beyond the historical trend line. History does not support recent stock moves in relation to the move in rates, in our view.

Exhibit 10: TELUS dividend yield and 10-yr rates

Current dividend yield materially above historical trendline

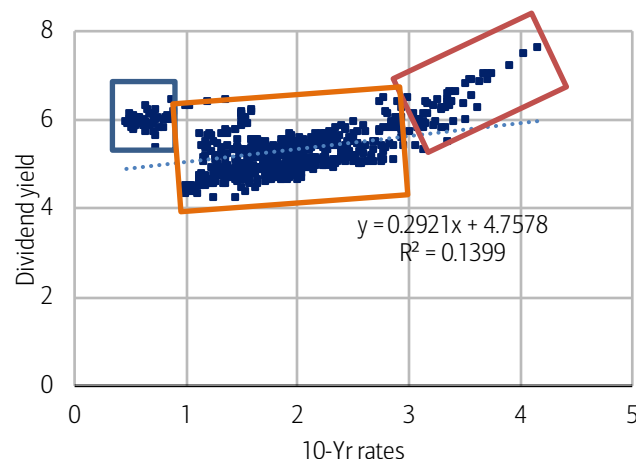


Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 11: BCE dividend yield and 10-yr rates

Current dividend yield materially above historical trendline



Source: BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

3Q expectations

Largest variances vs. consensus

We highlight noteworthy variances between our estimates and the Street here. We have the Street low estimate for BCE's consolidated revenue mainly due to our Street low equipment revenue forecast. We are the Street low for TELUS's consolidated revenue due to below-Street forecasts for equipment revenue and wireless service revenue.

Exhibit 12: Notable variances

We are below the Street on consolidated revenue for BCE and TELUS and the low estimate for BCE equipment revenue

	BofA	Consensus	vs. Consensus	Low	High	Range
BCE Consolidated Revenue	6,085	6,168	(83)	6,085	6,245	2.6%
TELUS Consolidated Revenue	5,035	5,116	(81)	5,035	5,182	2.9%
BCE Wireless equipment	675	733	(58)	675	761.20	11.7%

Source: BofA Global Research estimates, Visible Alpha

BofA GLOBAL RESEARCH

Consolidated revenue and adj. EBITDA

We forecast both revenue and adjusted EBITDA growth for the incumbents in 3Q23. Our growth rate forecast is slightly below consensus. We have lower equipment revenue estimates than the Street and we forecast slightly lower EBITDA margins in 3Q than consensus but we are not the Street low estimate for any of the incumbents and the estimate ranges are fairly narrow. On a consolidated basis, we are not expecting surprise results this quarter.

Exhibit 13: BofA consolidated revenue and EBITDA vs. consensus

BofA is below the Street estimates for EBITDA in 3Q

	BofA	Consensus	vs. Consensus	Low	High	Range
Consolidated Revenue						
Rogers	5,015	5,058	(43)	5,012	5,099	1.7%
BCE	6,085	6,168	(83)	6,085	6,245	2.6%
TELUS	5,035	5,116	(81)	5,035	5,182	2.9%
Consolidated EBITDA						
Rogers	2,355	2,364	(8)	2,281	2,396	4.9%
BCE	2,658	2,680	(22)	2,655	2,748	3.5%
TELUS	1,811	1,831	(20)	1,790	1,873	4.5%

Source: BofA Global Research estimates, Visible Alpha

BofA GLOBAL RESEARCH

Wireless

Rogers and Quebecor should lead year-over-year wireless service revenue growth due to the inclusion of Shaw Mobile and Freedom subscribers, respectively. The main underlying driver of service revenue growth will be net adds which we believe will remain robust in 3Q. ARPU growth in recent quarters was primarily driven by a return of high margin roaming revenue. Roaming revenue has leveled off and will not likely contribute to overall ARPU growth. We expect Rogers will report the highest ARPU increase at approximately 0.8% y/y while we expect BCE to report a slight contraction, in part due to lower overage revenue caused by higher data plans.

Exhibit 14: BofA wireless estimates vs. consensus

BofA is the low estimate for TELUS wireless ARPU in 3Q

	BofA	Consensus	vs. Consensus	Low	High	Range
Wireless service revenue						
Rogers	1,970	1,973	(3)	1,933	2,007	3.7%
BCE	1,839	1,836	3	1,806	1,852	2.5%
TELUS	1,761	1,777	(16)	1,761	1,796	1.9%
Wireless EBITDA						
Rogers	1,271	1,260	11	1,204	1,294	-7.2%
Postpaid net additions						
Rogers	187	181	6	150	200	27.6%
BCE	160	168	(8)	155	181	15.4%
TELUS	143	146	(4)	130	155	17.1%
Wireless equipment						
Rogers	578	562	15	506	609	18.3%
BCE	675	733	(58)	675	761	11.7%
TELUS	561	583	(21)	540	627	14.8%
Wireless ARPU						
Rogers	BofA	Consensus	vs. Consensus	Low	High	Range
Rogers	57.30	57.47	(0.17)	56.31	58.43	3.7%
BCE	60.51	60.35	0.16	59.85	60.94	1.8%
TELUS	59.48	59.98	(0.50)	59.48	60.37	1.5%

Source: BofA Global Research estimates, Visible Alpha

BofA GLOBAL RESEARCH

Combined wireless and wireline comparison

We aggregate the wireless and cable estimates for Rogers to compare against the CTS segment at BCE and the Ttech segment at TELUS. Our 3Q estimates are slightly below consensus. The largest variance to consensus is BCE. We believe BCE's 3Q results will reflect some pressure from falling high margin overage revenue as wireless data buckets increase and broadband promotions remain elevated. Across the incumbents the variance to consensus EBITDA is relatively small and continues to reflect y/y growth.

Exhibit 15: Telecom segment estimates

We have below consensus EBITDA estimates

	BofA	Consensus	vs. Consensus	Low	High	Range
Telecom revenue						
BCE	5,475	5,552	(77)	5,475	5,607	2.4%
TELUS	4,328	4,374	(46)	4,328	4,432	2.4%
Rogers	4,539	4,556	(17)	na	na	na
Telecom EBITDA						
BCE	2,469	2,498	(29)	2,469	2,551	3.3%
TELUS	1,632	1,643	(11)	1,608	1,669	3.7%
Rogers	2,323	2,328	(6)	na	na	na

Source: BofA Global Research estimates, Visible Alpha

BofA GLOBAL RESEARCH

Media

Advertising weakness will continue to impact Media in 3Q. While there is little variance between our estimates and consensus, the range of estimates is relatively wide.

Exhibit 16: Media segment estimates

Advertising market weakness will impact 3Q profitability

	BofA	Consensus	vs. Consensus	Low	High	Range
--	------	-----------	---------------	-----	------	-------



Exhibit 16: Media segment estimates

Advertising market weakness will impact 3Q profitability

Media Revenue						
Rogers	557	550	6	530	583	9.6%
BCE	705	711	(7)	705	733	4.0%
Media EBITDA						
Rogers	83	82	1	74	88	17.0%
BCE	189	185	4	176	196	10.9%

Source: BofA Global Research estimates, Visible Alpha

BofA GLOBAL RESEARCH

3Q expectations by company

Rogers: Buy rated; C\$75 price objective

The integration of Shaw and related synergy realization are running on schedule to slightly ahead of schedule based on our conversations with the company. RCI continues to target \$200mn in synergies in calendar 2023E and an annual run rate of \$600mn by 1Q24 or earlier. We expect management to update investors on its progress when it reports 3Q results. We do not expect RCI to deviate from its existing synergy realization or its deleveraging timeline.

We expect RCI to once again lead the market in wireless net additions in the context of overall strong wireless subscriber growth. Robust growth is driven in part by large numbers of new Canadians among which Rogers captures a disproportionate share. RCI also has a new western-Canada wireline base into which it can sell wireless service which is also helping.

Wireless service revenue growth will be driven by RCI's leading subscriber growth and the inclusion of the Shaw mobile subscribers. Wireless pricing was a key focus during the busy back to school quarter and we will look for RCI to comment on the competitive intensity and the level of discounting in the market. We believe the market was competitive but showed healthy signs as promotional offers were short lived and pricing reverted back to regular levels when the back-to-school season ended. We expect a similar focus on pricing and promotions to re-emerge in 4Q over the holiday season.

The cable segment will see improved y/y performance against easy comps last year when it dealt with a network outage. We forecast improvements in both broadband net additions and customer relationship net additions.

We maintain our Buy rating and C\$75 price objective. We expect RCI to deliver on its merger synergy targets and delever at 0.5x per year before factoring in any potential improvements in the western cable footprint. RCI has the potential to improve legacy Shaw's cable performance through increased investment in the network, bundling with a superior wireless product, and leveraging its existing distribution scale to drive sales of both wireless and cable services.

TELUS: Buy rated; C\$30 price objective

Since the close of the Rogers/Shaw merger, the market has wondered how Rogers's presence in the western wireline market (in place of Shaw) would change the competitive landscape. To-date, we do not believe it has had a material impact. We continue to expect TELUS to generate a similar number of broadband and wireless net adds as it did last year thanks to its consistent go-to-market strategy and focus on high value customers and fostering a subscriber base with lower churn. We do not believe 3Q will show any signs of a price war or uneconomic escalations to competitive intensity.

Heading into 3Q we lowered our margin expectations for the Ttech segment to reflect a slower pace of realizing the cost benefits from the LifeWorks integration/synergies and the slower than initially modeled pace of achieving the cost savings from the cost efficiency program. While we have modeled a longer time to achieve the savings we remain confident TELUS will achieve them. We will listen for an update on how the

Health and Agriculture businesses are performing into the 4Q when TELUS reports 3Q results.

The segment of the business most exposed to the current macro headwinds is TELUS International (TIXT). Technology sector cost cutting in one of its largest verticals is impacting top-line growth. The headwinds are partially offset by growth in other verticals (e.g. banking, financial services, and insurance). Current guidance assumes improving trends in the second half of 2023. TIXT management is guiding to y/y declines in EBITDA in 3Q followed by a return to y/y growth in 4Q. We expect TELUS to update investors on these expectations during 3Q results.

We maintain our Buy rating and C\$30 price objective. Underlying demand for its core telecom services remains strong and is the main driver of wireless service revenue growth. TELUS is executing on multiple initiatives to improve the performance, including the LifeWorks integration and synergies as well as the cost efficiency program. While the LifeWorks integration is already beginning to contribute to results it will not be until 2Q24 that the cost efficiency program adds material benefits to the bottom line. We also expect DLCX to begin to show improving results by year end and will look to management for an update on its outlook.

BCE: Neutral rated; C\$62 price objective

BCE has invested heavily to increase its fibre footprint, acquire wireless spectrum and roll out 5G service. While these investments will generate growth over the long term, its high dividend payout ratio is getting more attention from investors. In a high rate environment, investors wonder if BCE can sustain its dividend growth model. We believe subscriber growth, falling capex, lower cost networks, and lower customer service costs will sustain the current growth model. We expect BCE to update investors on its long-term plans to return to its target dividend payout range and share a timeframe to achieve its targets.

The Street and our estimates both forecast strong wireless subscriber growth and wireless service revenue growth between 4-5% y/y. Wireless service revenue growth will be entirely driven by subscriber growth as ARPU is forecast to decline y/y in 3Q. Recovery of international roaming revenue has plateaued and BCE is experiencing a decline in data overage revenue as more subscribers adopt larger data plans and go into overage less frequently.

We maintain our Neutral rating and C\$62 price objective. We believe the current valuation fairly reflects BCE's steady wireless and consumer broadband subscriber growth offset by headwinds in Business Wireline and Media.

Stocks mentioned

Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
BCE	BCE US	BCE Inc.	US\$ 38.58	A-2-7
YBCE	BCE CN	BCE Inc.	C\$ 52.53	A-2-7
RCI	RCI US	Rogers	US\$ 39.41	A-1-7
YRCIB	RCI/B CN	Rogers	C\$ 53.62	A-1-7
TU	TU US	TELUS Corp	US\$ 16.91	A-1-7
YT	T CN	TELUS Corp	C\$ 23.01	B-1-7

Source: BofA Global Research

Price objective basis & risk

BCE Inc. (YBCE / BCE)



Our \$62 (US\$46) price objective is based on an 8.5x forward (2024E) EV/EBITDA multiple. Over the last 5-years, BCE has traded at an average multiple of 8.3x. We think that the small 0.2x multiple premium is justified by BCE's solid execution, wireless growth, expanding FTTP footprint and strong FCF growth, partially offset by headwinds in Business Wireline and Media.

Downside (upside) risks to our price objective are multiple contraction (expansion) related to competitive and regulatory concerns in wireless, weaker (stronger)-than expected revenue growth due to economic and competitive pressures and accelerating wireless/wireline substitution, slower (faster)-than expected progress in cost reduction and a reversal (continuation) of the continuing P/E multiple expansion.

Rogers Communications (YRCIB / RCI)

Our C\$75 (US\$60) price objective is based on a forward (2024E) EV/EBITDA multiple of 8.1x. This is above RCI 5-year average multiple of 7.8x but within the range of 6.8x to 9.0x. We believe a multiple near the upper end of its historical range is justified after its merger with Shaw due to 1) synergy realization, 2) ample FCF to delever the balance sheet, and 3) expanded growth opportunities.

Downside risks to our PO are the inability to reach cost synergy targets, merger integration issues, and higher than expected costs required to realize targeted synergies.

TELUS Corporation (YT / TU)

Our C\$30 (US\$22) price objective is based on a forward EV/EBITDA of 9.3x, which is a premium to TELUS's historical average of 8.2x but within its range of 6.9x - 9.8x. We believe the premium is justified by its higher growth, more attractive business mix, and solid execution.

Downside risks to our PO are a decline in historically high sector multiples, an acceleration of wireless margin/average revenue per user (ARPU) compression in a maturing and competitive market, ARPU pressure from more aggressive regulation and competition from Freedom Mobile, further economic slowdown in Western Canada, and, in the wireline segment, and failure to show progress in expanding cash flow margins.

Upside risks are better-than-expected revenue growth driven by strong execution, with the key drivers being continuing investments in fibre-to-the-premise (FTTP) and increasing wireless data consumption, and better-than-expected improvement in wireline cash flow margins.

Analyst Certification

I, David W. Barden, CFA, 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.

North America - Telecom Services Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	American Tower Corp.	AMT	AMT US	David W. Barden, CFA
	AT&T Inc.	T	T US	David W. Barden, CFA
	Cogent	CCOI	CCOI US	David W. Barden, CFA
	Digital Realty Trust Inc	DLR	DLR US	David W. Barden, CFA
	Dycom Industries, Inc.	DY	DY US	Alexander Waters
	Equinix, Inc.	EQIX	EQIX US	David W. Barden, CFA
	Quebecor Inc.	YQBRB	QBR/B CN	Matthew Griffiths, CFA
	Rogers Communications	RCI	RCI US	David W. Barden, CFA
	Rogers Communications	YRCIB	RCI/B CN	David W. Barden, CFA
	TELUS Corporation	YT	T CN	David W. Barden, CFA
	TELUS Corporation	TU	TU US	David W. Barden, CFA
	T-Mobile US	TMUS	TMUS US	David W. Barden, CFA
NEUTRAL				
	BCE Inc.	YBCE	BCE CN	David W. Barden, CFA
	BCE Inc.	BCE	BCE US	David W. Barden, CFA
	Crown Castle Inc	CCI	CCI US	David W. Barden, CFA
	SBA Communications Corporation	SBAC	SBAC US	David W. Barden, CFA
	Uniti Group Inc	UNIT	UNIT US	David W. Barden, CFA
	Verizon Communications Inc.	VZ	VZ US	David W. Barden, CFA
UNDERPERFORM				
	Cogeco Communications Inc.	YCCA	CCA CN	Matthew Griffiths, CFA
	Dish Network Corporation	DISH	DISH US	David W. Barden, CFA
	Lumen Technologies Inc.	LUMN	LUMN US	David W. Barden, CFA

Disclosures

Important Disclosures

Equity Investment Rating Distribution: Telecommunications Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	53	49.07%	Buy	38	71.70%
Hold	30	27.78%	Hold	20	66.67%
Sell	25	23.15%	Sell	13	52.00%

Equity Investment Rating Distribution: Global Group (as of 30 Sep 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1869	53.48%	Buy	1046	55.97%
Hold	828	23.69%	Hold	461	55.68%
Sell	798	22.83%	Sell	370	46.37%

^{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%

^{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.

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: BCE Inc., Rogers, TELUS Corp.

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: Rogers.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one or more of its affiliates: BCE Inc., Rogers, TELUS Corp.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: BCE Inc., Rogers, TELUS Corp.

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: BCE Inc., Rogers, TELUS Corp.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: BCE Inc., Rogers.

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: BCE Inc., Rogers, TELUS Corp.

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: BCE Inc., Rogers, TELUS Corp.

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: BCE Inc., Rogers, TELUS Corp.

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: BCE Inc., Rogers, TELUS Corp.

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

Class B shares are nonvoting: Rogers.

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 Prudentiel 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.bofam.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 Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSF); 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 Investment Industry Regulatory Organization of Canada; 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 (DFA); 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.

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 HKSCF; 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 DFA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclaimers](#) for further information.

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 2023 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 or 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 information.