

The Sunday Brief: CES Preview Edition – Consistency Despite Motion

Happy New Year from the Midwest. We took a three-week break to catch up on some rest and spend the Holiday season with family and friends. Hope that your December was equally relaxing.

The news cycle after our December 11 Brief was full, and most of this week's issue will focus on market commentary with some final thoughts on a dismal year. Then we put the lid on our final 2022 Brief with some thoughts on the consumer electronics industry. Tomorrow we will publish the final Apple iPhone 14 Pro and Pro Max availability charts of this launch cycle. For those of you who have missed a few posts on this topic, [inventory backlogs eased considerably](#) (particularly for Verizon) last week and we are down to specific colors (silver) driving backlog.



As referenced above, we will be attending the Consumer Electronics Show (in a Fastwyre Broadband capacity) and will also be hosting the annual TSB dinner at [Gordon Ramsay Pub and Grill](#) at Caesar's at 7:00 p.m. on Thursday, January 5. The reservation is for eight and we have two slots left. Please notify us at sundaybrief@gmail.com if you are interested in joining the discussion. We will send out final details on Tuesday and look forward to a fun time.

The Year That Was

FAB FIVE		Shares outstanding (end of yr unless noted)					Stock Price (last trading day of year)					Equity Value (\$B)		Annual Change		2022 YTD PERFORMANCE					
Stock Name	Symbol	Dec-20	Dec-21	Sep-22	Dec-19	Dec-20	Dec-21	Dec-18	Dec-19	Dec-20	Dec-21	Amount	Percent	30-Dec	% change	Value Gained/Lost (\$B)	Current market cap	16-Dec	23-Dec	1-wk change	2-wk change
Apple	AAPL	16,788.0	16,319.4	15,908.1	\$ 293.65	\$ 131.97	\$ 177.57	\$ 733	\$ 1,284	\$ 2,216	\$ 2,898	\$ 682	31%	\$ 129.93	-27%	\$ (758)	\$ 2,067	\$ (685)	\$ (727)	\$ (31)	\$ (73)
Alphabet (Google)	GOOG	674.1	661.0	12,943.0	\$ 1,337.62	\$ 1,751.88	\$ 2,893.59	\$ 720	\$ 923	\$ 1,181	\$ 1,913	\$ 732	62%	\$ 88.73	-39%	\$ (724)	\$ 1,148	\$ (697)	\$ (710)	\$ (14)	\$ (28)
Microsoft	MSFT	7,542.2	7,496.9	7,454.5	\$ 157.70	\$ 222.42	\$ 336.32	\$ 768	\$ 1,199	\$ 1,678	\$ 2,521	\$ 844	50%	\$ 239.82	-29%	\$ (719)	\$ 1,788	\$ (683)	\$ (727)	\$ 8	\$ (36)
Amazon	AMZN	503.6	508.8	10,201.7	\$ 1,847.84	\$ 3,256.93	\$ 3,334.34	\$ 738	\$ 920	\$ 1,640	\$ 1,697	\$ 57	3%	\$ 84.00	-50%	\$ (844)	\$ 857	\$ (804)	\$ (831)	\$ (13)	\$ (39)
Facebook/ Meta	FB	2,847.6	2,765.9	2,682.2	\$ 205.25	\$ 273.16	\$ 336.35	\$ 374	\$ 585	\$ 778	\$ 930	\$ 152	20%	\$ 120.34	-64%	\$ (579)	\$ 323	\$ (582)	\$ (586)	\$ 6	\$ 2
Totals								\$ 3,333	\$ 4,911	\$ 7,492	\$ 9,959	\$ 2,467	33%			\$ (3,625)	\$ 6,183	\$ (3,451)	\$ (3,581)	\$ (43)	\$ (174)
Change								\$ 1,579	\$ 2,581	\$ 2,467											
Cumulative Change										\$ 4,159	\$ 6,626										

TELCO TOP FIVE		Shares outstanding (end of yr unless noted)					Stock Price (last trading day of year)					Equity Value (\$B)		Annual Change		2022 YTD PERFORMANCE					
Stock Name	Symbol	Dec-20	Dec-21	Sep-22	Dec-19	Dec-20	Dec-21	Dec-18	Dec-19	Dec-20	Dec-21	Amount	Percent	30-Dec	% change	Value Gained/Lost (\$B)	Current market cap	16-Dec	23-Dec	1-wk change	2-wk change
AT&T	T	7,126.0	7,126.0	7,126.0	\$ 38.56	\$ 28.75	\$ 24.60	\$ 193	\$ 276	\$ 205	\$ 175	\$ (30)	-14%	\$ 18.41	-25%	\$ (44)	\$ 131	\$ (44)	\$ (45)	\$ 1	\$ (1)
Verizon	VZ	4,141.0	4,197.8	4,199.8	\$ 60.77	\$ 58.73	\$ 51.96	\$ 220	\$ 252	\$ 243	\$ 218	\$ (25)	-10%	\$ 39.40	-24%	\$ (53)	\$ 165	\$ (62)	\$ (57)	\$ 4	\$ 10
T-Mobile	TMUS	1,241.6	1,249.3	1,244.2	\$ 78.42	\$ 134.85	\$ 115.98	\$ 54	\$ 67	\$ 167	\$ 145	\$ (23)	-13%	\$ 140.00	21%	\$ 30	\$ 174	\$ 33	\$ 30	\$ (0)	\$ (3)
Comcast	CMCSA	4,598.2	4,533.2	4,323.4	\$ 44.76	\$ 52.40	\$ 50.33	\$ 151	\$ 203	\$ 241	\$ 228	\$ (13)	-5%	\$ 34.97	-31%	\$ (70)	\$ 151	\$ (72)	\$ (69)	\$ (1)	\$ 2
Charter	CHTR	193.7	172.7	155.7	\$ 485.08	\$ 661.55	\$ 651.97	\$ 64	\$ 104	\$ 128	\$ 113	\$ (16)	-12%	\$ 339.10	-48%	\$ (54)	\$ 53	\$ (60)	\$ (55)	\$ 1	\$ 6
Totals								\$ 683	\$ 903	\$ 985	\$ 879	\$ (106)	-11%			\$ (191)	\$ 675	\$ (205)	\$ (195)	\$ 5	\$ 14
Change								\$ 220	\$ 82	\$ (106)											
Cumulative Change										\$ 302	\$ 196										
Relative market cap								4.88	5.44	7.61	11.33						9.16				

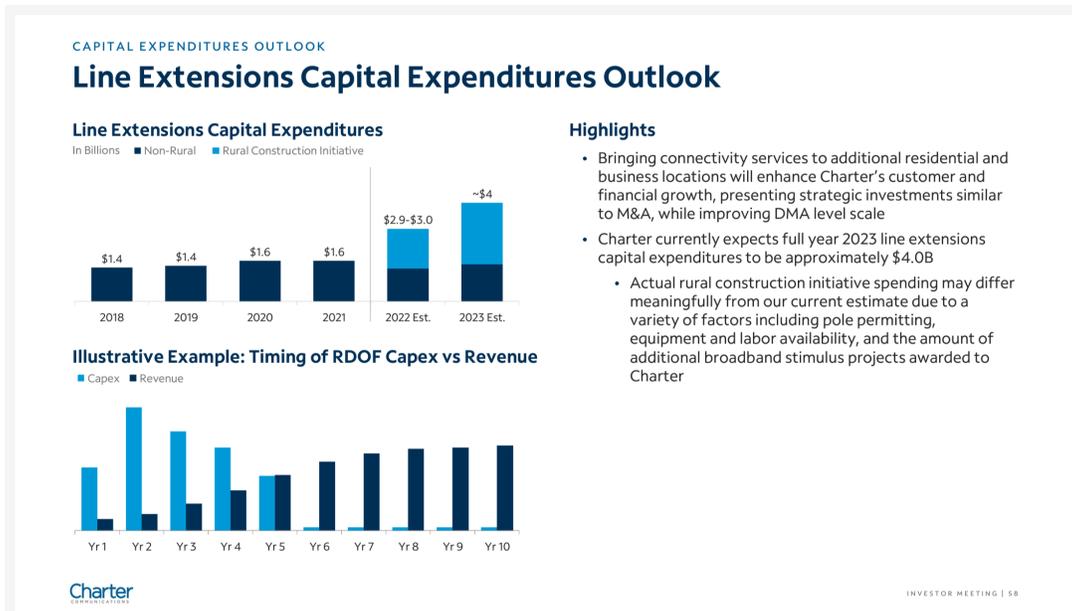
The Fab Five closed 2022 with a market cap loss of \$3.625 trillion. Every stock was down at least 27% and each stock lost at least a half trillion dollars. Within the Fab Five, only two companies held on to their 2021 gains – Microsoft (current stock price at February 2021 level) and Google (current stock price at Jan 2021 split-adjusted level). Meta (formerly Facebook) wiped out four years of equity appreciation in 2022. Federal Reserve Chairman Jerome Powell pulled away the easy monetary policy punchbowl and the largest gainers during COVID collapsed.

Believe it or not, things were slightly worse for the Fab Five in early November with cumulative losses just shy of \$3.7 trillion. But there's no sugarcoating here – growth is out, and value is in as we enter 2023.

The Telco Top Five had a slightly gettier go of it thanks to synergy-fueled gains at T-Mobile. As we noted in our Labor Day Brief [here](#), they became the highest-valued telecom company in the world this year. Overall, there was an \$83 billion

equity value shift between Verizon and T-Mobile in 2022, culminating a decade of change between the two companies. We think that T-Mobile's success vs. Verizon was one of the most underreported stories of the year.

The major story for December, however, was Charter (-10.4% for the month). The post-Rutledge management team held an investor meeting on December 13 (materials [here](#)) where they disclosed increased spending on rural initiatives. This slide generated the most concern:



Capital concerns related to rural deployments overshadowed all of the other positive information shared by Chris Winfrey, Rich DiGeronimo and Jessica Fischer. The day after this presentation Charter's stock dipped 16%, a record one-day loss. Over half of that amount was recovered in the last two weeks of the year, but Charter ended 2022 down 48% or \$54 billion. The stock now stands at a level not seen since February 2019.

Charter's rural strategy (specifically their broad participation in the Rural Development Opportunity Fund or RDOF auction) meaningfully diverges from their peers. Neither Comcast nor Cox participated (at least to the same extent) as Charter. With this commitment comes costs – approximately \$4,000 per home passed after all RDOF subsidies are paid. Charter did the best job possible explaining why this strategy would yield long-term value to their shareholders, but the payback horizon is very different from traditional neighborhood/ suburban expansion.

Charter was not the only stock in the telecommunications universe with a "half off" sale. Cable One, a predominately rural DOCSIS-based broadband provider, was down 60.2%. Altice, the current (and likely continued) owner of rural properties acquired through Suddenlink, was down 72.3%. Lumen, a telephone provider serving many western states since their divestiture of many geographies to Brightspeed, was down 59.0%. Dish, the satellite turned new-model open RAN mobile company, was down 57.3%. This compares to an overall S&P 500 loss of 19.7%. Smaller capitalizations were impacted even more than their larger peers, and lofty valuations will not return until interest rates subside.

Short-term losses are not inhibiting Charter from showing some moxie in their Spectrum Mobile expansion. Here's a brief chronology of the evolution of wireless pricing in the last 60 days:

- **October 31, 2022:** Spectrum introduces [Spectrum One](#). This includes baseline broadband (up to 300 Mbps down /10 Mbps up), advanced Wi-Fi, and one line of unlimited mobile for \$49.99/ mo. for the first 12 months (\$115/ mo. starting in month 13). This is not positioned as a limited time promotion but rather as a flagship product for Spectrum.
- **November 22, 2022:** T-Mobile reintroduces their [“4 for \\$100”](#) promotion. This includes four iPhone 14 devices for “free” (credit check required – all phones need to be financed on Equipment Installment Plans). This offer does not include taxes and fees. This offer is available, however, to existing customers. T-Mobile’s regular price is four for \$150 (taxes and fees included) so it’s more like a \$25/ mo. reduction in MRC on an apple-to-apples basis with taxes and fees included in their current promotion.
- **December 22, 2022:** Verizon responds by introducing a limited time [“\\$25 per line for four lines”](#) promotion right before the Christmas holiday. It matches T-Mobile’s \$100 price point but customers must bring their own devices. Customers on this plan are not eligible for discounts on fixed wireless. Spectrum was undercut by their own MNO – yikes.
- **December 26, 2022:** Spectrum Mobile runs a “limited time” offer to existing broadband (and new to Spectrum Mobile) customers only – [Buy One/ Get One Free for 12 months](#). This applies to unlimited plans only and customers are limited to one BOGO per account. Two lines of unlimited for \$15/ mo./ line for the first year, then \$29.99/ line starting in month 13 (we think this is a lot easier to stomach than Spectrum One’s jump from \$50 to \$115/ month). Spectrum Mobile’s price includes taxes and fees.



What these actions show is that a noticeable subset of customers continues to shop for mobile services. The prospect of converting an entire family of four (or five) is not as daunting as it was three or four years ago. Saving \$20-30/ month is meaningful with costs rising faster than wages, and Spectrum’s continued use of the Verizon brand in their advertising is beginning to impact consideration. Soon, switching will be even easier as more new smartphone releases feature e-SIM (the iPhone 14 series is the first mega device to do so).

How do these activities impact fourth and first quarter metrics? We should see T-Mobile gain as the “four for \$100” promotion stood unchallenged for most of December. Spectrum will gain with their broadband base and incrementally attract new broadband users (“movers”) with their Spectrum One offer. Verizon will lose fewer customers to T-Mobile and Spectrum but it is unlikely that postpaid phone additions will be spectacular in the fourth quarter (if they keep the promotion going through the first quarter, the story might be different). AT&T, Comcast, Dish and some of the smaller MVNOs such as Straight Talk (a Verizon Tracfone brand) should see moderate net losses. We think that the iPhone 14 Pro and iPhone 14 Pro Max shortages hurt AT&T and the cable MVNOs.

We also find it intriguing that [Cox would use CES to introduce their revamped Cox Mobile brand](#) given the current wireless brawls breaking out (and the fact that they do not have the iPhone available in their stores). The article linked above indicates that their unlimited product will sport a \$45 monthly price tag. However, despite an aggressive competitive price, Cox may be able to make a stronger converged case in areas like Phoenix, Omaha, and Las Vegas against Lumen who does not have a bundled mobile/ broadband offer. We will get to see their pitch and promise to provide analysis in the next Brief.

Finally, AT&T and BlackRock [announced their Gigapower joint venture](#) right before the Christmas holiday. Details were light, and we expect CFO Pascal Desroches to provide additional information at the Citi conference (also in Las Vegas) on January 4. Here’s what we know or can safely assume from the announcement:

- **Scope:** Outside the 21-state AT&T wireline service footprint. This means that if AT&T were to choose to expand in Windstream’s territory in the Charlotte suburbs, they would need to provide their own capital (and not BlackRock’s) to the effort

- **Target:** We are reading AT&T's release literally but believe that the first application of the Gigapower network is going to be to reduce out-of-territory access costs. Simply put, they will target 5G cell sites (including C-Band additions) and existing business customers. This is troubling news for the already struggling Verizon wholesale unit, but also bad news for cable companies who sell access to AT&T today
- **Structure:** This will be an open access network with AT&T as an anchor tenant. Said differently, AT&T is a joint constructor (using their design needs) and others can pull fiber into the Gigapower venture's subducts or lease fiber from the venture. This structure is particularly interesting to power companies who are looking for diverse, reliable fiber sources for their substation communications efforts. This would also be very useful to Waymo and other efforts by Google (including the YouTube TV + NFL Sunday Ticket)

We originally misread the joint venture announcement with a residential/ community focus and were puzzled that the initial target would only be 1.5 million locations (as context, the Tampa/ St Pete MSA, the only metro portion of Florida that AT&T does not meaningfully cover, has about 1.6 million households). Our re-read of the announcement indicates that this will be much broader and pay for itself through internal (access) cost reductions. The revenues lost to companies such as Lumen and Verizon and Comcast will carry high margins. Bottom line: The announcement is not surprising but has the potential to be broader and more impactful than our first read.

CES – Consistency Despite Motion

We usually devote a large portion of this Brief to next week's Consumer Electronics Show (CES) but the deluge of news over the Holidays preempted a more robust analysis. Here's what we are going to be looking for in Las Vegas:

1. Chipset progress. What advances have occurred since the 2020 show with respect to processing speeds, power consumption, and cost? How will these changes impact the adoption rate of tomorrow's generation of televisions, cameras and other peripheral devices (including Virtual Reality headsets)? As we have mentioned in previous Briefs (specifically our discussion of 5G's impact on handsets [here](#)), material improvements in smartphones are not appearing on the horizon
2. Software-powered decisions. Assuming the path is clear for #1, can software keep up? What results from continuously learning algorithms (we recall the "[sentient](#)" comments from former Google employee Blake Lemoine that resulted in his firing last June)? How do new developments like ChatGPT impact productivity? We think there's a substantial impact to the communications sector from smarter chatbots, and clearly believe that the value of aggregated and anonymized data can improve products and services
3. Consistency despite motion. Many of this year's CEO keynotes discuss mobility. Being able to improve the customer experience while stationary is one thing but providing consistency while in motion (on a plane, on a tractor, on the Autobahn) is an entirely different matter. Gigabit per second experiences at 30,000 feet is entirely possible over the next five years with the right infrastructure, but that value proposition has not been fully articulated by either airlines or the ISPs that serve them. As we have articulated previously over the last decade, we think AT&T could have done much more with their connected vehicle strategy, but now they have the opportunity to create unique value for their shareholders due to their broad coverage (why AT&T and Walmart auto service centers or Meineke did not form a venture to improve information flow is a mystery). Our antennae will be tuned to the use of faster speeds in transport – there's a readily available productivity equation that can spur innovation

That's all the time and space we have for our year-end issue. On January 15, we will share our CES findings (including any new news out of the Citi conference) and discuss upcoming earnings implications of the wireless multi-line promotional activity described above and iPhone 14 backlogs. Until then, if you have friends who would like to be on the email distribution, please have them send an email to sundaybrief@gmail.com and we will include them on the list (or they can sign up directly through the website). Enjoy the rest of the year and [Go Chiefs](#) and [Davidson Wildcat basketball!](#)