



North America Cable, Satellite & Telecom Services

Will industry-wide improvements in bad debt persist?

Can bad debt improvement continue to be a margin tailwind? One of the surprising trends over the last couple of years has been a sharp decline in bad debt across cable and telecom companies, contrary to past trends during macro down cycles. Despite the macro impact of Covid as well as a potentially adverse accounting treatment change, the anticipated increase in bad debts did not occur and in fact, both cable and telecom companies saw improvement in bad debt. Consequently, wireless and cable companies saw an unexpected margin tailwind from this source, especially in 2021 of 15-50bps. However, as we look at in more detail in the note, these tailwinds may be difficult to sustain in 2022, with both cable and telecom companies potentially facing this headwind.

Who is most exposed? Overall, while bad debts will likely be an issue for both cable and telecom sectors, we believe the impact on telecom could be muted to some extent by other revenue offsets. On the cable side however, the impact could be more visible, although it may not revert back to 2019 levels because of margin tailwind from the low origination environment. Across operators, Comcast and Verizon benefitted the most from bad debt improvement last year despite having the highest quality subscriber base and may need to offset this comp with other sources. Charter could be a bit more exposed even relative to the comp from last year because of the fact that it started off with a higher base of bad debts relative to others in the industry.

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INDUSTRY UPDATE

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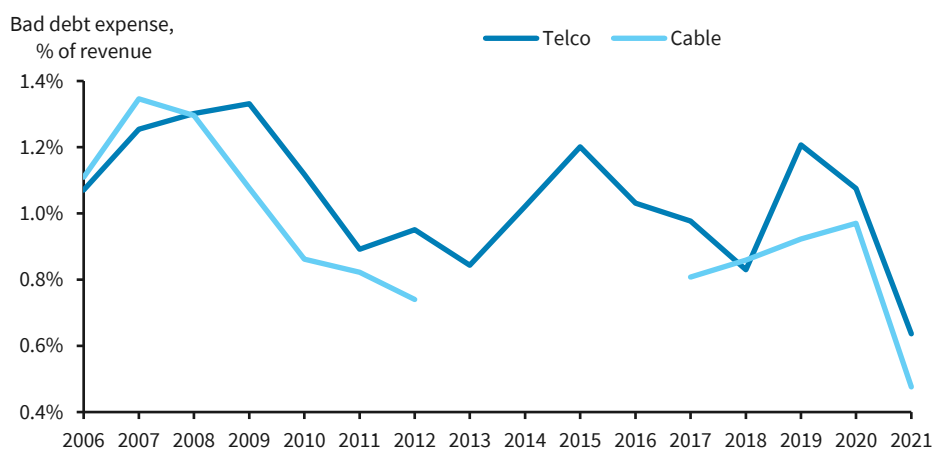
Improvement in bad debt expense across the industry

One of the surprising trends over the last couple of years has been a sharp decline in bad debts across cable and telecom companies, contrary to past trends during macro down cycles. Bad debt provisions as a percentage of revenue increased from ~1.1% to ~1.25-1.35% in 2007 ahead of the recession, and remained elevated in the ~1.3-1.4% range through 2008 and 2009 but then returned to ~<1% of revenues, once the recession ended. The exception to this was from ~2014-16 for wireless companies. However, this was not due to worsening customer quality but rather the move from handset subsidies to financing, which resulted in greater equipment bad debts being recognized up front. Therefore, the majority of the last decade was characterized by healthy growth with both increasing penetration levels and favourable credit quality.

This was starting to reverse in 2019 even before Covid disruptions, with bad debts increasing meaningfully, especially in wireless, to levels comparable to the 2009 recession (Figure 1). Interestingly, this was broad-based across nearly all seven of our distribution companies.

FIGURE 1

2019 trends of worsening bad debt reversed in 2020 and improved even more steeply in 2021, as industry bad debt as a % of revenue dropped across telco and cable companies to ~0.6%, from ~1.12% in 2019



Source: Company Reports, Barclays Research

Note: Telco includes VZ, T, TMUS. Cable includes CMCSA, CHTR, ATUS. Unavailable 2012-2017 due to gross accounting method which is not comparable.

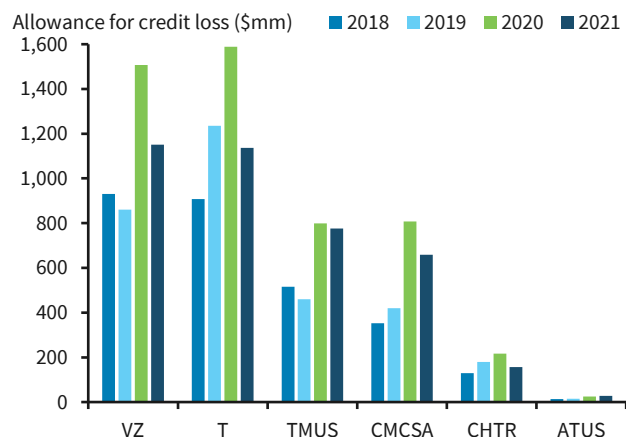
We expected this headwind to worsen during Covid, consistent with past macro cycles (Please see [Bad debts likely to exacerbate industry slowdown](#), 13 April 2020). In addition, new accounting standards should in theory have resulted in higher bad debt recognition, something that most companies did initially anticipate in early 2020. In the beginning of 2020, new accounting standards mandated that credit losses were to be measured by an expected loss model, in advance of actual credit catalysts. Until that point in time, credit losses were measured as actual incurred loss. The new methodology of anticipating the uncollectible receivables aligns the projected bad debt expense with the related revenue recognition in the same period. Since credit loss models were for the most part based on backward looking models, the pre-Covid spike in bad debts potentially resulted in 2020 allowance for credit loss being adjusted upward as per the new standards. However, the initial adjustment upon adoption of the new standard was not reported as an expense and instead was recorded as an opening balance adjustment. All subsequent changes in the allowance are recorded as bad debt expense. Based on the new methodology, every telecom and cable company increased allowances for credit losses meaningfully in 2020 (Figure 2).

Despite the macro impact of Covid as well as the accounting change, the anticipated increase in bad debts did not occur. In fact, bad debt performance improved significantly over the last couple of years with 2021 bad debt as a percentage of revenue dropping by nearly half among cable and telecom companies.

This unexpected improvement combined with the change in accounting methodology is likely to have a multi-year spill over impact. For instance, the downward revision of credit loss allowance estimates vs early 2020 company model outputs likely pushed down allowance estimates for 2021 (Figure 3), thereby helping margins. The models used to estimate credit loss vary by company and likely depend on subscriber specific quality metrics. However, given the unusual macroeconomic drivers over the last couple of years, it is likely that bad debt cycles remain unusually volatile, especially on account of phasing in and out of government support programs.

FIGURE 2

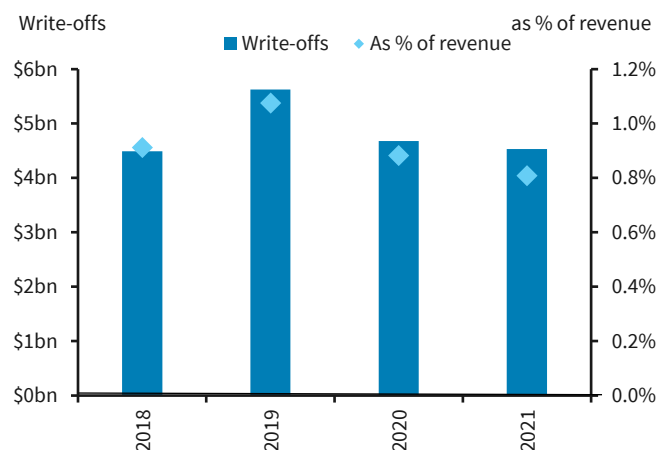
Allowances for credit loss were adjusted upward in 2020 following the adoption of new accounting standard



Source: Company Reports

FIGURE 3

Improved trends in write-offs contributed to lower estimates for credit loss and drop in bad debt expense in 2021



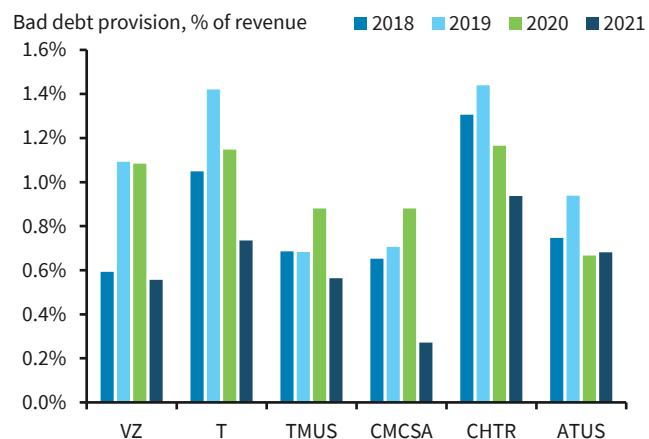
Source: Company Reports

Note: Telco includes VZ, T and TMUS. Cable includes CMCSA, CHTR, and ATUS.

Companies expensed record low normalized amount for bad debts due a reversal of allowances for credit loss from the prior year due to improvement in payment trends. The improvement in 2021 vs 2019 has been broad-based across telco and cable companies and has served as an overall margin tailwind across the sector (Figure 4). As a result of these factors, telecom and cable companies saw a margin tailwind of ~40bps in 2021 purely on account of bad debt expense coming in lower than recent years (Figure 5).

FIGURE 4

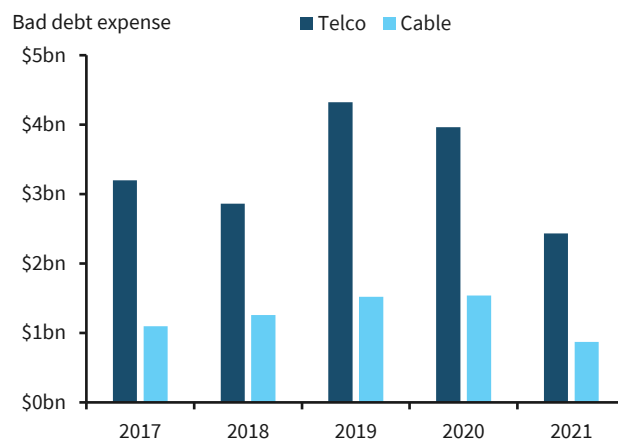
Bad debt expense improved across the cable and telco sectors in 2021 vs 2019



Source: Company Reports, Barclays Research

FIGURE 5

The decline in bad debt expense contributed ~40bps of margin benefit to the sector overall

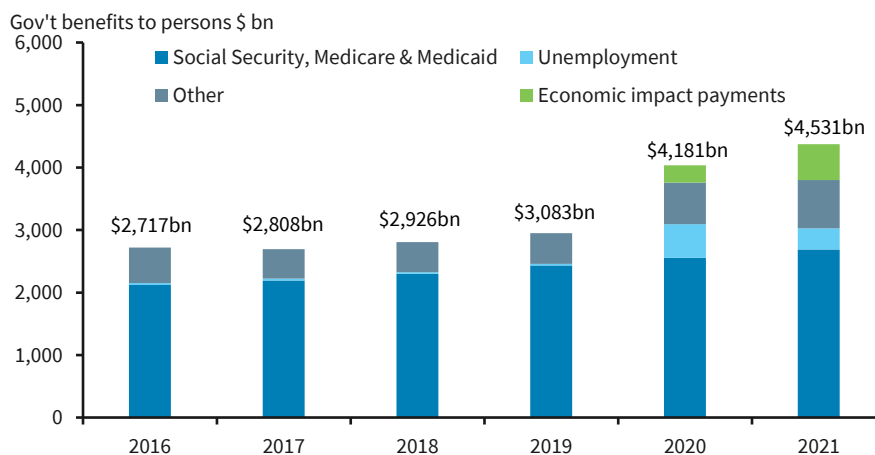


Source: Company Reports, Barclays Research

These improvements in payment trends were likely driven by a combination of government income and connectivity support programs as well as the importance of connectivity during the work from home environment over the last couple of years. Government social benefits to persons soared in 2020, and continued to grow in 2021, driven primarily by increases in unemployment insurance, economic impact payments established by the CARES act, and other pandemic response programs (Figure 6).

FIGURE 6

Federal pandemic response programs grew government benefits by over 1/3 in 2020 to ~\$4,181 bn, and to ~\$4,531 bn in 2021, far above historical levels

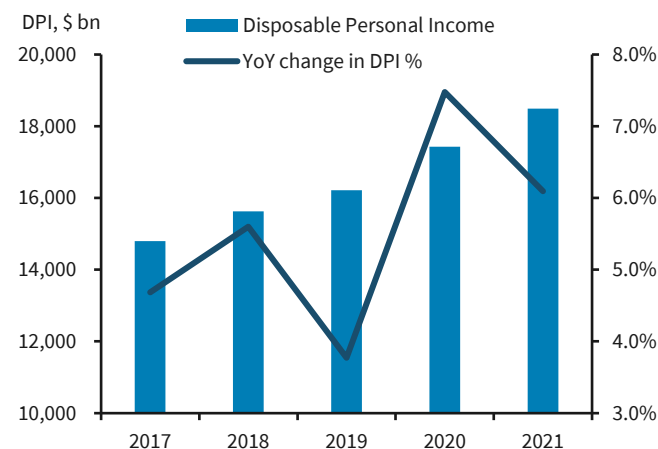


Source: U.S. Bureau of Economic Analysis

The increased government funding translated to growth in disposable personal income of ~7.5% and ~6% in 2020 and 2021 (Figure 7). Since the start of the pandemic in 1Q20, government benefit spending peaked in 2Q20 and 1Q21 (Figure 8), due to economic impact payments, which were established through the CARES act and provided direct payments to individuals through stimulus checks.

FIGURE 7

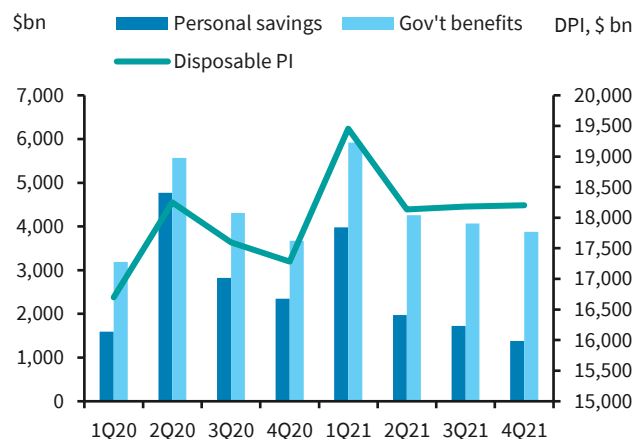
Disposable personal income benefitted from government pandemic relief funding and grew ~7.5% in 2020...



Source: U.S. Bureau of Economic Analysis, Barclays Research

FIGURE 8

...peaking at ~\$19.5bn in 1Q21, along with government benefits at ~\$5.9bn



Source: U.S. Bureau of Economic Analysis, Barclays Research

As it relates to bad debt expense, government stimulus improves customers' ability to pay, and therefore reduced expected credit loss estimates and bad debt in 2021. With pandemic response programs ended or winding down (Figure 9), bad debt expense could face pressure due to worsened collections. Not all government programs were equally impactful and in fact, direct payment subsidy programs for connectivity (like the EBB program for instance), don't seem to have contributed based on disclosures from telecom companies.

FIGURE 9

Most federal pandemic response programs are winding down, if not already ended

Select Federal Pandemic Response Programs (\$ bn)	2Q20	3Q20	4Q20	1Q21	2Q21	3Q21	4Q21
Extended Unemployment Benefits	0.1	3.7	12.9	25.0	5.8	5.7	2.4
Pandemic Emergency Unemployment Compensation	6.3	26.7	82.1	97.8	104.5	61.5	3.5
Pandemic Unemployment Assistance	74.4	138.3	106.8	95.3	82.1	50.0	2.4
Pandemic Unemployment Compensation Payments	698.9	413.9	14.7	286.9	237.2	113.2	-
Child tax credit	30.2	30.2	30.2	34.4	34.4	218.9	223.2
Economic impact payments	1,078.1	15.6	5.0	1,933.7	290.1	38.9	14.2
Lost wages supplemental program	-	106.2	35.9	1.6	0.6	0.1	-
Paycheck Protection Program loans to NPISH	57.2	81.2	24.4	10.8	24.7	14.0	2.0
Provider Relief Fund to NPISH	160.9	58.4	34.5	42.8	26.6	37.4	64.4
Total	2,106.1	874.2	346.5	2,528.3	806.0	539.7	312.1

Source: U.S. Bureau of Economic Analysis, Barclays Research

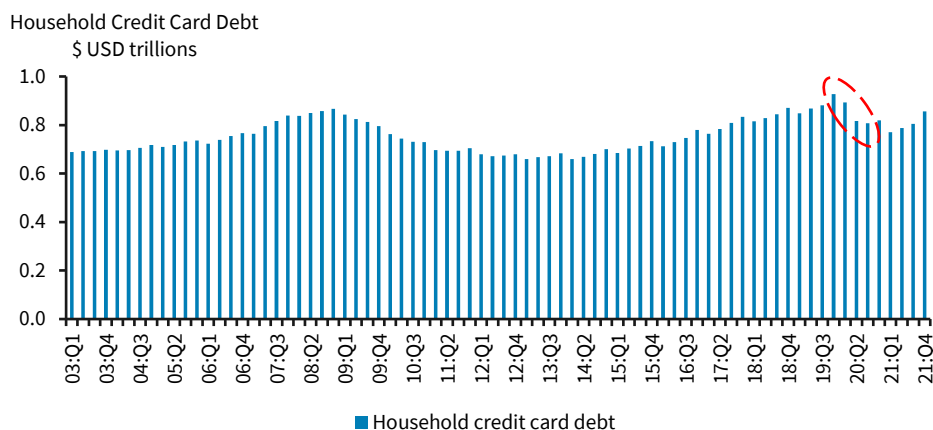
Note: In USD billions.

Household credit card balances declined by ~\$76bn in 2Q20, the largest quarterly decline on record¹ (Figure 10). We note that in addition to government stimulus, the decline in credit card debt was fuelled by a drop in consumer spending. As stay at home orders kept people at home, money that usually would have been spent on recreational activities like eating out or traveling was put towards paying down credit card debt. The drop in credit card debt in 2Q20 was the opposite of the general assumption that debt would increase due to lost income and financial strain caused by COVID-19.

¹ Congressional Research Service: COVID-19: Household Debt During the Pandemic, 6 May 2021

FIGURE 10

Household credit card balances declined by ~\$76bn in 2Q20, the largest recorded quarterly decline



Source: Federal Reserve Bank of New York, New York Fed Consumer Credit Panel/Equifax

The overarching assumption of the pandemic leading to increased debt was the same as held by companies who increased allowance for credit loss in early 2020. In reality, payments improved, and companies subsequently lowered expectations for credit loss, thereby benefitting from a decline in bad debt expense. Government funding allowed customers a greater ability to pay bills, resulting in a decrease in write-downs, improved customer credit quality, and a lower estimated expected credit loss allowance.

In a recent report² Experian notes that the average FICO Score improved to 714 in 2021, up from 710 in 2020, and the percent of delinquent accounts declined to ~1.67% in 2021 from 1.82% in 2020 (Figure 11). The weighted-average FICO score of Verizon's consumer device payment plan agreements originated in 2021 was 709, higher than those originated in the past 4 years (Figure 12).

² Experian: What Is the Average Credit Score in the U.S.? 22 February 2022

FIGURE 11

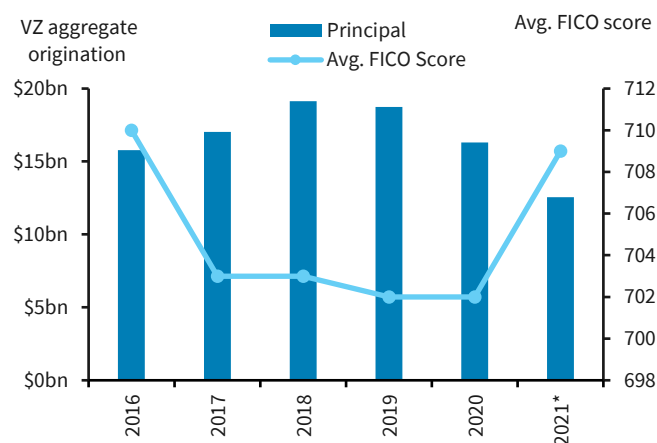
FICO scores across all generations improved in 2021, along with the % of delinquent accounts

	2020	2021
Average FICO Score	710	714
Silent generation (76+)	758	760
Baby boomers (57-75)	736	740
Generation X (41-56)	698	705
Millennials (25-40)	679	686
Generation Z (18-24)	674	679
Avg. Credit Utilization Ratio	25.2%	25.3%
Delinquent Accounts	1.82%	1.67%

Source: Experian

FIGURE 12

Verizon consumer FICO scores rose in 2021



Source: Company Reports, Barclays Research

*2021 period is 1 Jan 2021 through 31 Aug 2021.

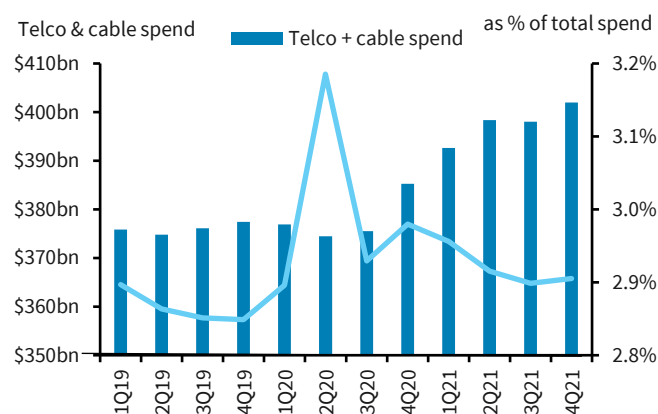
Note: Avg. FICO score is the weighted average FICO score of consumer obligors under Consumer DPP agreements

Further, the pandemic has increased reliance on telco services due to remote work and school environments. Relative spending on telco, cable and internet services increased to ~3.2% in 2Q20 (Figure 13). In 2021, share of spending normalized, but remained slightly elevated at ~2.92% of spending, vs ~2.86% in 2019. On a more granular level, the share of real personal consumption expenditures spent on telco services and internet access increased in 2020, while spending on cable fell (Figure 14).

Looking ahead, unless expanded versions of programs like the EBB (now folded into the ACP), are adopted by mainstream operators, there could be a risk to margins from bad debt normalization. Also, given the new accounting methodology for bad debts, an additional layer of uncertainty could arise from company specific credit loss models. These just may not have enough historical data to factor in the lead lag effect and unusual scale of recent government support programs as well as growing uncertainty from factors such as stagflation. These factors may not impact all companies evenly as subscriber quality mix is not even across cable and telecom operators and this could drive some variability in performance.

FIGURE 13

Share of personal consumption expenditures on telco and cable services peaked at ~3.2% in 2Q20 and remains elevated compared to 2019 levels



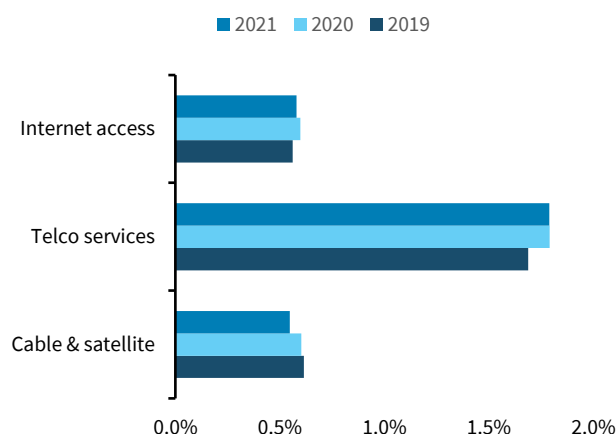
Source: U.S. Bureau of Economic Analysis, Barclays Research

Note: Telco + cable spend includes cable, satellite and other live TV services, telecommunication services, and internet access.

Note: Real personal consumption expenditures, chained (2012) dollars.

FIGURE 14

Telco services, primarily cell service, gained the larger share of expenditures in 2020, while relatively less was spent on cable and satellite



Source: U.S. Bureau of Economic Analysis, Barclays Research

Note: Real personal consumption expenditures, chained (2012) dollars.

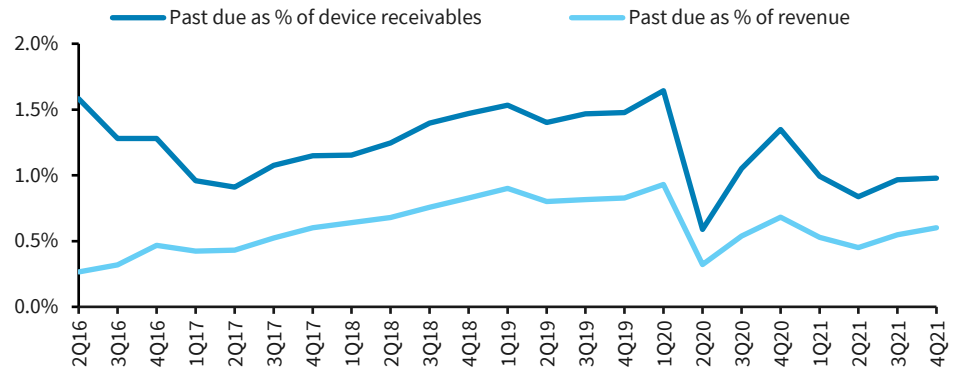
Who is most exposed?

Telecom

To assess Verizon's customer payment trends, we analyze overdue device payments as an indicator of a customer's ability to pay. To contextualize the amount overdue, we look at past due billings both as a % of total device payment plan receivables, and as a % of revenue. In 1Q20, increased delinquencies were a result of waiving late fees and keeping customers connected pursuant to the FCC's Keep America Connect (KAC) pledge. However, the KAC pledge did not have a substantial or lasting effect on billings - the delinquency rate was moderated by 2Q20, and overdue billings declined. Overdue device payments have generally been lower-than-historical levels for the past six quarters, with the lowest in 2Q20 (Figure 15). The timing indicates that the steepest improvement in overdue bills was a likely the result of government actions in response to the COVID-19 pandemic, including stimulus checks and subsidy programs as well as the increased importance of connectivity in a work-from-home environment.

FIGURE 15

Verizon overdue device payment plan receivables troughed in 2Q20 and remain improved in 2021 vs 2018 and 2019 levels

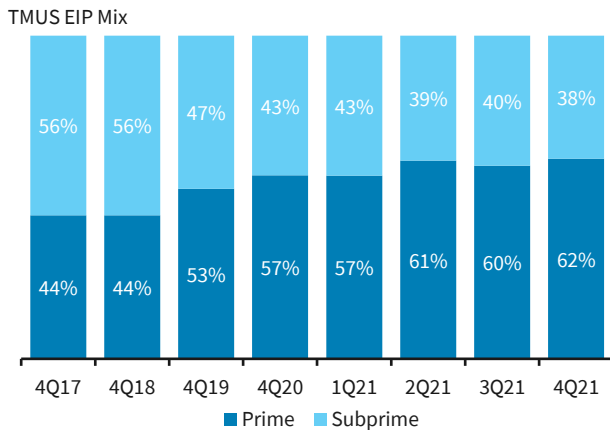


Source: Company Reports, Barclays Research

The improvements in customer payment trends was also seen at T-Mobile, evidenced in part by the change in mix of EIP receivables portfolio customer credit profile. Lower risk prime customers now make up 62% of EIP receivables, a significant improvement from 53% in 2019 (Figure 16). EIP receivables over 30 days overdue also improved in 2021, after peaking in 2Q20 (Figure 17). T-Mobile's lower bad debt expense in 2021 was due to the reversal of estimated bad debt reserves established in 2020 associated with the aforementioned accounting change and conservative provisioning due to the expected economic impact of the COVID-19.

FIGURE 16

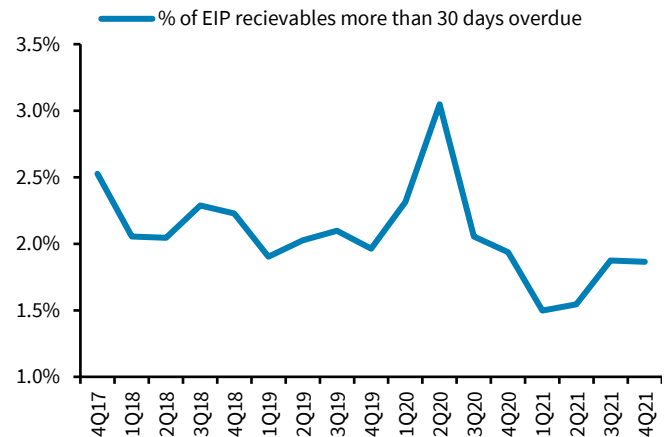
TMUS EIP customer quality has improved substantially over the last twelve months....



Source: Company Reports, Barclays Research

FIGURE 17

...along with overdue EIP receivables



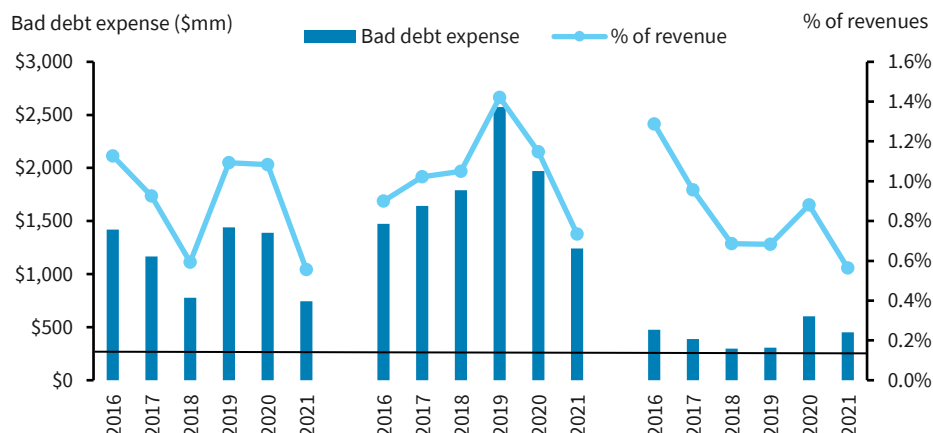
Source: Company Reports, Barclays Research

T-Mobile experienced a longer lag than AT&T and Verizon before it saw a benefit from improvement in expected credit loss. While AT&T and Verizon bad debt expense dropped 2020 as well as in 2021 (Figure 18), T-Mobile recorded higher bad debt expense in 2020, before dropping in 2021. T-Mobile attributed higher bad debt expense on receivable portfolios in 2020 to adverse macro-economic conditions and payment behaviour of customers, including those who have been placed on collection hold as part of a commitment to the KAC pledge, an elevated number of delinquent payments, Sprint customers, and the new accounting standard. We note that prior to its merger with TMUS, Sprint postpaid phone churn was higher than total postpaid churn, a trend that rarely, if ever, happens in the wireless

industry and likely implied a weak origination base of postpaid phone subs. For the nine months ended 30 Sept 2020, T-Mobile recorded \$155m of incremental bad debt to the macro economic impacts of the pandemic, of which \$46mm was directly related to the KAC pledge. In 2021, T-Mobile benefitted from the reversal of the elevated reserves established in 2021, as bad debt expense dropped to \$452m from \$602m.

FIGURE 18

Telcos saw a reversal of 2019 bad debt trends in 2020 and 2021



Source: Company Reports, Barclays Research

Looking ahead, bad debt trends across the industry is likely to normalize relative to last year which could create a margin headwind for all operators. The unknown factor could be any unexpected impacts on account of the lapsing of Covid-related unemployment benefits and potential change in consumption basket due to inflation. The improvement in credit scores highlighted earlier tend to lag the change in average credit quality, which has likely driven some caution in terms of forward commentary from companies with respect to bad debts. Verizon saw the biggest benefit from bad debt trends in 2021, with margins tailwinds of ~50bps, compared to ~43bps for AT&T, and ~19bps for T-Mobile. The acquisition of Tracfone could potentially exacerbate this pressure to some extent. However, operators are also likely to see offsets from the return of roaming, wholesale revenue growth and continued upgrades to higher end plans. In addition, Tracfone customers can benefit from the Affordable Care Program (ACP) subsidy. AT&T's industry leading subscriber growth last year, driven by hand set promotions, could raise some concerns on subscriber quality but the structure of these promotions also limits risk on handset balances and therefore absolute P&L impact of any increase in bad debts at least in the recent gross add base. AT&T will also see margin offset from growth in wholesale revenues and roaming in '22.

Overall, while telecom operators could see bad debts emerge as a margin headwind, we believe the overall impact on margins may be offset by other factors.

Cable

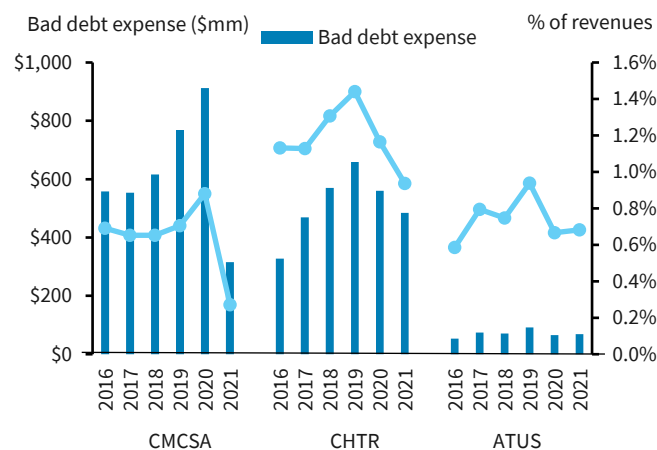
Pre-Covid, bad debts grew across the cable industry even normalized for acquisitions. Charter and Altice both saw bad debts as a percentage of revenue increase in 2019 and bad debts grew ~19% and ~11% CAGR ('17-'19) between Charter and Altice, respectively, vs. revenue CAGRs of ~5% and ~2%. On a reported basis, Comcast ex-NBCU also saw gross bad debts grow materially pre-Covid, but this was impacted by the acquisition of Sky. Reported bad debts grew slower-than-reported revenue (ex-NBCU) (~17% vs. ~20% 2Y CAGR till '19) which implies that underlying US distribution bad debts improved over the few years pre-COVID.

Post-Covid, bad debt trends improved across the industry. Comcast exhibited the largest improvement, with bad debt expense declining ~65% in 2021 vs 2020 (Figure 19). Altice is the only cable or telco company that did not benefit from bad debt expense improvement last year, but it did improve vs. 2019 levels. Charter filings indicate the decrease in bad debt expense was partly driven by government stimulus packages and below normal customer activity level, providing an estimated ~15bps of margin benefit.

In the case of CHTR, some metrics of sub quality, such as receivables aging, were starting to improve pre-Covid (Figure 19). However, this was partially due to billing modifications made by the company whereby accounts were charged for a full month of service, vs. pro-rated previously, if disconnected. More recently however, Charter's aging profile has deteriorated, despite tailwinds from government support programs highlighted previously (Figure 20). In 2020, Charter waived ~\$102m of receivables, recorded as a reduction of revenue, for COVID-19 impacted customers with overdue balances at the end of KAC and other state-mandated programs. State mandates continued to contribute to elevated accounts past due in 2021, but the overall increase in accounts past due in 2021 from 2020 was attributed to pre-existing balances for customers' participation in the Emergency Broadband Benefit program which was rolled out in May 2021 (Figure 20).

FIGURE 19

Comcast recorded the largest improvement in bad debt profile in cable operators



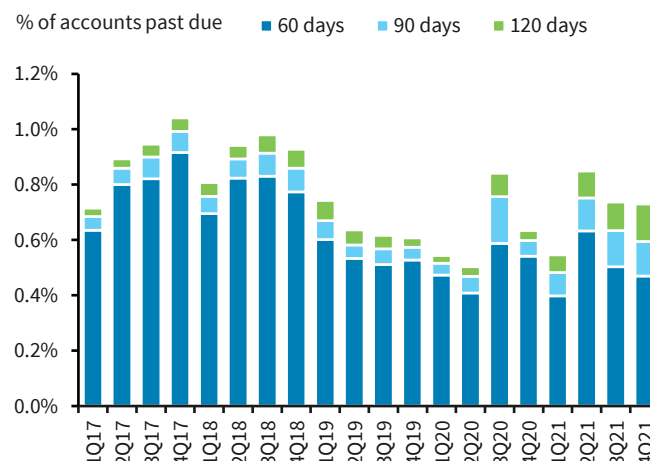
Source: Company Reports, Barclays Research

* CMCSA ex-NBCU; 2018 and 2019 impacted by Sky

^ CHTR 2016 and 2017 impacted by TWC

FIGURE 20

Charter's rise in accounts past due has been attributed to state mandates arising from COVID-19 and the EBB Program



Source: Company Reports, Barclays Research

Some differences in trends between cable companies is likely attributable to demographic differences between cable footprints (Figure 21). Comcast overall has the best demographic profile, exhibited by higher median household income and lower unemployment rate, as has been the case for some time on average. A better demographic profile implies higher quality subscribers, those more likely to choose pricier plans, and less likely to miss contractual payments that would result in bad debt expenses. Charter tends to operate in DMAs with weaker demographics, and is more skewed towards rural and lower income areas than Comcast and Altice, which likely increases sensitivity to the macro environment and is reflected in average bad debt expense as a % of revenue higher than its peers. Altice demographics are difficult to directly compare to Charter and Comcast because of the uniquely high concentration in the New York market but we find it interesting that despite this advantage, its normalized bad debt as a proportion of revenues is now higher than Comcast.

FIGURE 21

Demographics in Comcast's top 10 DMAs are the strongest among cable providers

Top 10 DMAs	% of subs	Median HH income	Median HH income CAGR (2016-21)	Unemployment rate	%HHs, <\$25k	3-yr avg. bad debt as % of revenue
Comcast	48%	84,832	4.7%	4.9%	14.6%	0.62%
Charter	44%	71,623	4.6%	5.2%	16.9%	1.18%
Altice	80%	80,719	4.3%	5.3%	17.4%	0.76%

Source: Company Reports, Barclays Research, S&P Market Intelligence

However, with ATUS being forced to promote aggressively to get back to growth, both Charter and Comcast seeing sudden slowdown in broadband growth and heightened competition and more government connectivity subsidies, there could be some pressure on companies to consider targeting lower quality origination pools. Given the differences in demographics and base subscriber quality, we believe Charter could potentially be more exposed to this risk than Comcast and on this front, may have a tough comp in Q1 vs last year.

Overall, while bad debts will likely be an issue for both cable and telecom sectors, we believe the impact on telecom could be muted to some extent by other revenue offsets. On the cable side however, the impact could be more visible, although it may not revert back to 2019 levels because of margin tailwind from the low origination environment.

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Materially Mentioned Stocks (Ticker, Date, Price)

AT&T (T, 21-Mar-2022, USD 23.16), Overweight/Neutral, A/CD/CE/D/E/J/K/L/M/N

Altice USA (ATUS, 21-Mar-2022, USD 11.81), Equal Weight/Neutral, A/CE/D/E/FA/J/K/L/M

Charter Communications, Inc. (CHTR, 21-Mar-2022, USD 565.77), Equal Weight/Neutral, A/CE/D/E/J/K/L/M/N

Comcast Corp. (CMCSA, 21-Mar-2022, USD 46.67), Overweight/Neutral, A/CD/CE/D/E/J/K/L/M/N

T-Mobile US Inc. (TMUS, 21-Mar-2022, USD 125.97), Overweight/Neutral, A/CD/CE/D/J/K/L/M

Verizon Communications Inc. (VZ, 21-Mar-2022, USD 51.10), Equal Weight/Neutral, A/CD/CE/D/E/J/K/L/M/N

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Comcast Corp. (CMCSA)	DISH Network Corp. (DISH)	Grupo Televisa, S.A.B. (TV)
Liberty SiriusXM Group (LSXMA)	Rogers Communications Inc. (RCI)	Rogers Communications Inc. (RCI-B.TO)
Shaw Communications Inc. (SJR)	Shaw Communications Inc. (SJR-B.TO)	Sirius XM Radio Inc. (SIRI)
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