Industry Top Trends

S&P Global Ratings

Telecoms

Macro headwinds will slow but not stop earnings growth

January 23, 2023

This report does not constitute a rating action



What's changed?

Telecom industry to be relatively resistant to a weaker macro outlook due to its utility-like characteristics. Potential demand destruction will be limited to specific businesses or regions.

Margins will be generally resistant to inflationary headwinds. Pass through of cost increases combined with operational efficiency will limit the impact of inflation on profitability.

Rising interest rates will likely pressure ratings. Speculative-grade entities will be hit harder.

What are the key assumptions for 2023?

Modestly rising revenue reflecting cost pass-throughs, increased uptake of higher margin services, and improved cost controls.

Capital expenditure has peaked, but will remain elevated as fiber and 5G rollout continues.

Deleveraging is taking time. Capital expenditures are lower but EBITDA growth is slower, and aggressive shareholder returns could preclude a material improvement of leverage levels.

What are the key risks around the baseline?

Margin pressure if inflation and unemployment rise higher, decreasing discretionary spending.

Access to capital markets. Volatile capital market and higher interest rates would increase liquidity and refinancing risks.

Generating adequate returns. Constrained size and scale, aggressive competition, service commoditization, and pro-consumer regulation could continue to limit returns on investments.

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Ratings Trends: Telecoms

Chart 1

Ratings distribution

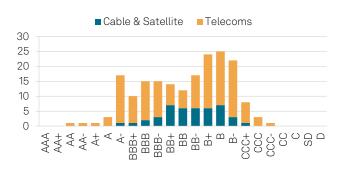


Chart 3

Ratings outlooks

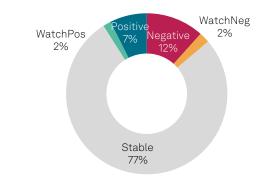


Chart 5

Ratings outlook net bias



Source: S&P Global Ratings. Ratings data measured at quarter-end.

Chart 2 Ratings distribution by region

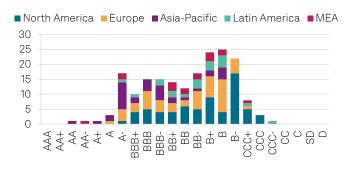


Chart 4

Ratings outlooks by region

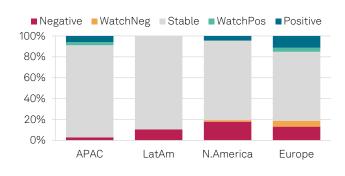
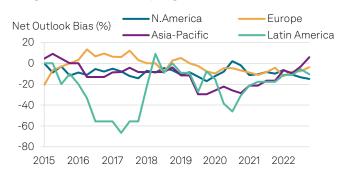


Chart 6

Ratings net outlook bias by region



Industry Outlook: Global

Ratings trends and outlook

Ratings in the telecommunications sector have been in line with our expectations. In recent months the sector's credit profile has been relatively stable, albeit with a slightly declining trend. Overall, 79% of telecom issuers had a stable outlook at year-end 2022, down from 84% in the previous year and in line with 2020 year-end results. The proportion of companies with negative outlooks or CreditWatch placements were essentially unchanged at 14% compared to 13% a year ago; companies with positive outlook or CreditWatch placements improved to 9% from 3% last year. Globally the net outlook bias has changed to negative 5% compared to negative 9% at year-end 2021. Downgrades outpaced upgrades by close to 3 to 1. Positive rating actions in Asia and Latin America (Latam) were offset by negative actions in the U.S. and Europe, the Middle East, and Africa (EMEA). Rating actions in the U.S. reflected weaker capital market and business conditions while actions in EMEA were often company-specific, or driven by sovereign rating constraints.

For 2023 we still expect high leverage in spite of modestly reduced capital expenditure (capex) investments--recessionary headwinds could slow EBITDA growth, which could weigh on the industry's credit quality, especially if cash flow declines more than expected or financial policies focus on shareholder returns in lieu of lower capex. Merger and acquisition (M&A) opportunities and asset divestitures will likely slow, reducing debt-funded transactions but also limiting funding flexibility for the capital-intensive industry.

Investment-grade ratings should remain stable through 2023 because of generally stronger business attributes and greater financial flexibility. About 80% of the investment grade companies have a stable outlook with only 10% on negative outlook or CreditWatch placement, in most cases reflecting company-specific leveraging transactions. About 75% of the speculative-grade portfolio has a stable outlook.

For speculative-grade issuers, protracted high interest rates or a prolonged recession with limited access to capital markets could particularly impact those with tight liquidity or nearterm financing needs. Issuers with limited scale and differentiation, companies indexed to legacy offerings or high investment needs, or companies with refinancing needs in the near-term remain most vulnerable to negative actions in the coming year.

Main assumptions about 2023 and beyond

1. Positive growth rates despite macro headwinds

With inflation-driven price increases, we expect revenue gains globally. Similar to 2022, emerging markets will benefit from stronger demand while increased competitive intensity in the U.S. and Europe will limit growth.

2. Peak capex is over but still high

Capex intensity for the industry will remain elevated in 2023 but lower than 2022 levels. Capex spending has peaked for both Europe and Asia, while some U.S. cable and Latam wireless and wireline companies (telcos) will increase capex this year. Fiber-to-the-home (FTTH) expansion, 5G rollout, and continued investment in infrastructure will drive spending.

3. Credit metric improvements will remain constrained

Rising interest rates, high inflation, and a recession will likely limit revenue and EBITDA growth. Less capex will lead to marginally better free cash flow and financial flexibility, but we expect no material improvement in credit metrics.

Positive but uneven growth rates despite macro headwinds. Demand for telecom services should protect the industry amidst rising rates and our expectations of a shallow recession in 2023. With telecom operators mostly able to pass on their cost increases to consumers, we expect low-single-digit revenue growth while a focus on cost efficiency measures and synergy execution should lead to stronger earnings growth. We expect faster growth (mid- to high-single digits) in Asia-Pacific and Latin-America, with low single-digit growth in the U.S. and Europe.

- In the U.S., wireless service revenue growth will be about 2%, reflecting competition from
 cable companies. Weaker subscriber growth and aggressive promotions amongst higher
 competitive intensity will limit revenue expansion. Business wireline services face secular
 industry pressures as large customers accelerate their digital transformation and cut costs,
 and small/midsize business (SMB) customers scale back operations against a backdrop of
 deteriorating economic conditions. Like in 2022, we foresee low-single-digit revenue growth
 for the U.S. cable business, reflecting average revenue per user (ARPU) growth, footprint edgeouts, and improving wireless economics.
- In the **eurozone**, we expect low-single-digit revenue growth as operators continue to raise prices, though at different rates in different markets, to pass on elevated labor, energy, and wholesale costs. European tower companies have automatic price escalators and energy cost pass-throughs that also support revenue growth.
- Mid-single-digit revenue growth in **Latin America** reflects the increasing needs for remote connectivity and streaming entertainment, indicating continued demand for broadband and wireless services.
- In **Asia**, the return of roaming revenues and the migration to high-priced mobile tariff plans on faster 5G networks will continue to expand modest revenue growth in 2023.

Capex spending has peaked but is still elevated. We forecast an overall decline in global capex as the bulk of spending to support fiber and 5G rollout in different regions is largely tailing off-except in the U.S. cable space and Latam. Ongoing deployment of next-generation infrastructure will keep capex intensity at 16%-18% of revenues, down from 19%-20% in 2022. In the U.S., 2023 telco capex will decline by approximately 10%, reflecting the reduction in 5G-related capex by Verizon and T-Mobile. U.S. cable operators will continue their capex investments for network upgrades, not only to protect market share in the short term but to support sustained ARPU growth in the long term. Even though capex in the eurozone has peaked as fiber deployments and initial 5G coverage requirements wind down in certain countries, we still forecast high spending for the region with countries like Germany and the U.K. ramping up fiber buildout, and 5G deployment shifting from initial coverage to densification. Similarly in Asia, telcos' peak spending on initial upfront capex has passed but will remain elevated as investments in fiber and 5G support increasing adoption. On the other hand, Latam capex spending will continue to grow to roll out 5G infrastructure. But with telecoms reaping the benefits of previous investments, we expect capex intensity to improve. Of course, with current inflationary headwinds, material, equipment, and labor costs could pressure capex budgets. We expect most companies in that situation would push out capex rather than stress balance sheets amidst prolonged weakening of macroeconomic conditions.

Credit metrics and financial policy

Credit metric improvements will remain constrained, and we see a possibility of more negative ratings, especially in the speculative-grade space. With the increasing reliance on connectivity, we expect the global telecom industry to grow by low single-digits despite weak macroeconomic conditions. However, rising interest rates, persistently high inflation, and a shallow recession may constrain revenue and EBITDA growth in 2023. In addition, companies will continue to invest in network infrastructure. A combination of already leveraged balance sheets, weak EBITDA growth, and high capex spending will limit leverage improvement.

Against the backdrop of inflationary pressures and higher Interest rates, we expect leverage and liquidity management will remain key considerations for telecoms. They may consider pushing out capex, or consider alternate means to fund their capex, including sale of noncore assets, monetization of networks, or joint venture (JV) structures to move investment off balance sheet. Government subsidies could also lead to more economically viable investments.

Weak stock prices could push many telcos to return more money to their shareholders, hampering any material improvement in the industry's leverage profile. We will therefore focus on financial policy and capital allocation. For highly leveraged speculative-grade companies, amid high interest rates and volatile capital markets, risks to refinancing and liquidity are elevated and could pressure credit quality.

Key risks or opportunities around the baseline

1. Sustained Inflation and a prolonged recession could pressure earnings

Telecom operators have been able to pass on cost increases to customers. However, a deep recession, higher unemployment, and lower discretionary spending could lead to higher churn amongst price-sensitive customers, contributing to higher competition and lower revenues and cash flow.

2. Limited access to capital markets and a slowing M&A market could Increase risk

Rising interest rates and a slow capital market could increase liquidity and refinancing risks for smaller speculative-grade telecoms. Investment-grade telecoms could face reduced funding from asset divestment or JV opportunities, constraining their capex spending.

3. Adequate returns remain out of reach

Competition, service commoditization, and pro-consumer regulatory policies could preclude an adequate return on large investments. However, we see potential for more industry-supportive regulation and policy.

Sustained inflation and a prolonged recession could pressure earnings. Historically the telecom industry has been recession resistant, and consumers and businesses are still unlikely to reduce their connectivity in the event of an economic slowdown. However, a deeper and longer recession with rising interest rates could pressure earnings and cash flow. In mature markets, weaker subscriber trends could exacerbate the pressures from consumers deferring upgrades, migrating to less-expensive plans, or switching to value providers. Higher unemployment and reduced headcount could worsen subscriber metrics further and increase price sensitivity. Thus, despite the stable characteristics of the industry, in a deep recession, revenue and cash flow could decline.

Limited access to capital markets and a slowing M&A market could increase risk. Most telecoms refinanced aggressively in the past few years against a backdrop of near-zero interest rates; therefore, we view upcoming debt maturities to be manageable. However, elevated interest rates and a choppy capital market will pressure speculative-grade companies with already elevated leverage, significant floating rate debt exposure, and weaker liquidity cushions, which could put them at a high risk of downgrade. Rising interest rates and a slow capital market could also impact investment-grade companies as market conditions could reduce valuations for transactions (asset divestitures, JVs) and could restrain capex spending or growth opportunities.

Adequate returns remain out of reach. The industry continues to struggle to improve its return on capital. Pro-consumer regulatory policies have shaped the competitive dynamics in most jurisdictions over the past decade and have been a factor in our downgrades. Lower wholesale tariffs, network unbundling requirements, spectrum set-asides and caps, support for new entrants to spur competition, and a limited appetite for consolidation have hindered incumbents from achieving greater returns on their investments. Indeed, the return on capital across rated telcos has generally been declining, to less than 5% in 2022 from over 7% in 2012. However, we believe pandemic-related lessons have the potential to slightly shift policies, to promote sustained network investments that support network resilience and greater broadband access. This in turn could foster a more-profitable and credit-supportive environment. Ultimately, regulatory pressures, particularly around consolidation, could ease somewhat and lead to a more sustainable competitive environment. We have seen a few cases of this in Asia-Pacific already, and European regulators will be revisiting the subject in 2023. And of course, looser regulations create other uncertainties, and we do not believe a complete regulatory about-face is probable, given the customer protections that some regulations afford.

Industry Outlook: North America

Ratings trends and outlook

Overall, S&P Global Ratings believes U.S. and Canadian telecom and cable is well positioned to withstand current inflationary pressures and a shallow recession in 2023. We believe consumers will continue to prioritize connectivity and issuers will be able to pass on higher costs, generally. We expect telecom operators in the investment grade will allocate cash flow to debt reduction and to reaching their leverage targets following several years of substantial debtfunded M&A, spectrum purchases, and network upgrades. In cable, despite slowing broadband subscriber growth due to increased competition, we expect solid free cash flow generation and credit metrics to remain steady.

In 2023 we expect rating trends will continue to skew to the negative across U.S. telecom and cable, although we anticipate rating actions will be concentrated among the lower-rated

issuers with limited scale and pricing power, where weaker macroeconomic conditions and rising interest rates will have the greatest impact. Many of these companies have capital structures with significant exposure to floating rate debt that could hurt interest coverage ratios, depress cash flow, and pressure liquidity, while a higher rate environment could make it more difficult to refinance upcoming maturities at similar or affordable rates. Among U.S. wirelines, fiber providers, and data center operators, execution will be critical in their ongoing expansion, and higher energy and labor costs, coupled with supply chain constraints, could hurt credit quality.

Main assumptions about 2023 and beyond

1. Shallow recession will constrain credit metric improvement

Despite the sector's resilience to macroeconomic pressures, persistently high inflation, a recession, elevated capex, and rising interest rates could limit leverage improvement for U.S. wireless operators following their aggressive spending in recent spectrum auctions. These headwinds could also reduce returns, push up the cost per home passed, and ultimately curtail FTTH deployments for the U.S. wireline operators in 2023. For incumbent cable providers, a weaker economy may hurt SMB customers (typically accounting for about 15%-20% of their revenue) and slow the pace of broadband ARPU growth if customers delay speed upgrades.

2. Convergence increases competitive intensity

Increasing competition in cable from fixed wireless access (FWA) providers will likely result in limited customer growth, while mature industry conditions and aggressive competition in mobile from the cable operators (who are bundling wireless service with in-home broadband) should constrain subscriber growth and margin expansion for U.S. telcos.

3. Capital spending remains elevated

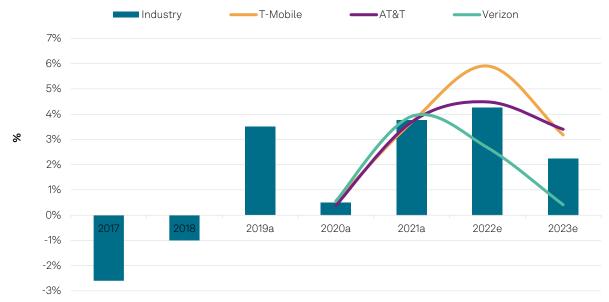
While we expect significant reductions in capex for Verizon and T-Mobile, fiber builds for the wireline companies and AT&T Inc. combined with cable network upgrades will likely keep capex elevated for the sector has a whole. We expect government-subsidized rural broadband expansion to spur significant spending by cable and/or telcos in 2024 and beyond.

We expect modest earnings growth but limited credit metric improvement. U.S. telecom providers are poised to withstand a deteriorating macroeconomic environment and high interest rates given the increasing dependence of consumers and businesses on connectivity. Therefore,

we do not expect any material degradation in credit quality. That said, leverage in the sector is already elevated while higher interest rates and capex will limit leverage improvement.

The U.S. wireless market remains very competitive with cable gaining market share. We expect industry service revenue growth to slow to around 2% in 2023 from around 4% in 2022 due to aggressive competition and weaker subscriber growth, despite rate hikes that passed along higher costs to customers (see chart 7). Further, all the carriers are offering aggressive promotions to upgrade subscribers to 5G handsets and higher-tier data plans, which hurts profitability. While capex will likely remain above historical levels as the mobile operators build out their 5G networks, we expect it to decline in 2023 relative to 2022, primarily due to lower spending by Verizon on its C-band spectrum deployment and T-Mobile on its 2.5 GHz spectrum, coupled with capex synergies from its acquisition of Sprint. As such, we expect free cash flow generation to improve in 2023, which should enable some leverage reduction.

Chart 7



U.S. Wireless Annual Service Revenue Growth (%)

a--Actual. e--Estimate. Source: S&P Global Ratings.

While the longer-term outlook for U.S. wirelines is more favorable, near-term headwinds could

damage credit metrics. In the consumer business, building out FTTH across their footprint became more challenging in 2022 due to rising labor costs and supply chain constraints. While fiber returns on investment were good when the cost of capital was low, this may not be the case as interest rates rise and valuations decline. In addition, many of these companies are not fully funded for their build plan, which means they will need to access capital markets over the next couple of years. The rising cost of capital and a weakening economy could prompt some to scale back FTTH deployments to conserve cash flow. However, not building fiber is a lost opportunity that increases the risk of declining revenue and cash flow as they lose copper-based broadband customers to cable.

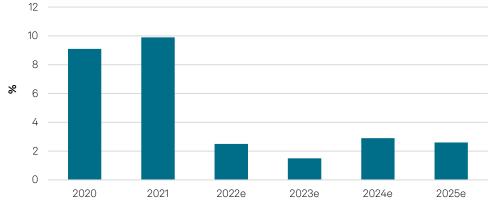
Similarly, business wireline services face secular industry pressures and technology shifts as

business customers migrate to less expensive networking technologies. Large enterprise customers are focused on accelerating their digital transformation to reduce expenses in the face of a deteriorating economic conditions. This trend will extend revenue and EBITDA declines for U.S. wirelines over the next several years. While the SMB segment represents a lower percent of its revenue base than it did 10 years ago due to market share losses to cable, it is also at risk in an economic downturn since many of these customers will scale back operations or go out of business altogether.

In cable, we expect that broadband subscriber trends will remain pressured in 2023 with FWA continuing to garner most of the industry net adds, with gradually intensifying FTTH competition. However, we believe the industry will achieve low-single-digit annual EBITDA growth for the foreseeable future driven by the following (see chart 8):

- Low-single-digit high-speed data (HSD) ARPU growth.
- Footprint edge-outs, potentially accelerated by government subsidies into areas where there isn't FTTH competition.
- Improving wireless economics. We expect that with greater scale and migration of traffic onnetwork, wireless can provide modest EBITDA growth over time.

Chart 8



Cable Industry EBITDA Growth (%)

e--Estimate. Source: S&P Global Ratings.

While we expect incumbent cable providers will continue to take share in the SMB segment, growth could stall in a recession in 2023.

In Canada, we expect wireless service revenue to show mid-single-digit growth. Roaming revenue is approaching pre-pandemic levels and consumers are continuing to migrate to higher-priced 5G plans. We also believe lower wireless penetration (compared to the U.S. and Europe) and increased immigration through 2025 will continue to support wireless revenue growth higher than recent years. As Telus and BCE essentially complete their FTTH and fixed wireless access to a significant part of their broadband footprint, we also expect growth in their wireline revenue in the low- to mid-single digits, supported by the bundling opportunities.

Convergence is increasing competitive intensity in the U.S. Heightened competition from FWA combined with lower family or household move activity and maturing market conditions caused cable broadband subscriber growth to stall across the industry, with Charter and Comcast each reporting roughly 1.5% growth in the third quarter of 2022, year-over-year, while some smaller operators have reported modest declines. We project relatively flat subscriber trends across the industry in 2023, with scaled operators offsetting the impact from modest share loss to FWA with edging out of existing footprint.

We expect that FWA will continue to gain market share with discounted service relative to cable, appealing to more price-sensitive customers that may be willing to compromise on speed and/or reliability compared with a wired cable connection. We believe many of these households subscribe to copper-based services and historically had converted to cable when copper

networks failed to meet their data requirements. Fixed wireless fills the gap between cable and copper, typically offering better speeds than copper at a lower price than cable.

In mobile, we expect U.S. cable operators will be more aggressive as their in-home broadband business faces greater competitive pressures from fixed wireless and FTTH. We believe this trend, coupled with mature industry conditions in the mobile market, will contribute to slower service revenue growth of around 2% in 2023 for the U.S. wireless operators compared with about 4% In 2022. We expect cable will take over 40% of postpaid net adds in 2023, up from around 30% in 2022.

Canadian carriers have benefited from the convergence approach, and we expect them to further integrate their services. With FTTH covering a significant portion (70%-80%) of Bell and Telus' broadband footprints, competitive intensity has increased significantly in the broadband space, with the telcos getting most of the net adds compared to the cablecos. The wireless space continues to be competitive, with the three incumbents still having close to 85% of market share.

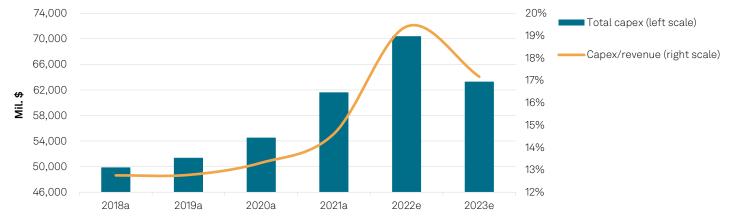
U.S. capex will remain elevated in 2023. We expect U.S. telco capex will decline in 2023 by around 10% but remain significantly above historical levels (see chart 9). We base our forecast on the following factors:

- With much of the C-band spend complete, we expect Verizon's capex to decline by around \$5 billion in 2023.
- As T-Mobile achieves network synergies from its acquisition of Sprint, we expect the company to realize procurement savings and greater 5G deployment efficiencies, which should result in an approximate \$2 billion to \$3 billion decline in capex in 2023.
- Conversely, we expect elevated levels of capex from wireline operators Lumen, Frontier, Consolidated, Ziply Fiber (NW Fiber), and TDS Telecom.
- We also expect AT&T's capex to remain steady at around \$24 billion.

In line with the U.S., capex in the Canadian telco space is also expected to decline as both Telus and BCE complete their two-year accelerated capex plan starting in 2021. RCI capex, pro forma the Shaw acquisition, is likely to increase significantly but still stay within the usual capital intensity envelope. Overall, capital intensity in the Canadian space will remain in the 16%-18% range of telecom revenues. The C-band spectrum auction will be held towards the end of 2023; we forecast spending in C\$6 billion-C\$8 billion for the incumbents, although material cash payments are not due until the second quarter of 2024.

Chart 9

U.S. Telco Capital Expenditures



e--Estimate. Source: S&P Global Ratings.

spglobal.com/ratings

For the cable operators, we expect capex to accelerate over the next two to three years

although network investments will probably be funded with cash from operations (see chart 10). Comcast and Charter currently operate at their stated leverage targets so increased capital spending is likely to come at the expense of share repurchases. However, for certain highly leveraged operators that have operational challenges, such as Altice USA and Radiate, there is less financial flexibility to make these investments so the tradeoff of limited near-term cash generation (and leverage reduction) in exchange for a path towards to earnings growth is more nuanced.

Cable operators are taking different approaches to upgrading their existing networks, largely to protect existing market share, while also providing a path to long-term ARPU growth through significantly faster internet speeds. These different strategies will influence the timing and amount of capex and network capabilities in certain markets, but the trend is toward multi-gig download speeds and at least gigabit upload speeds. We believe upgrades to the existing hybrid fiber-coaxial (HFC) plant can largely be completed within historical capital spending envelopes of low-teens percent of revenue, on average (whereas conversion to FTTH will cost significantly more).

Chart 10

26.000 18% Capex (left scale) 24,000 17% Capex/revenue (right scale) 22,000 16% 20,000 15% φ ĭï. 18,000 14% 16,000 13% 14,000 12% 12,000 11% 10% 10,000 2019 2020 2021 2022e 2023e 2024e 2025e

Rising Cable Capital Expenditures

e--Estimate. Source: S&P Global Ratings.

Credit metrics and financial policy

We do not expect a material degradation in credit quality among U.S. telecoms. In wireless, we expect modest leverage improvement due to lower capital spending and stronger free cash flow generation, partially offset by high interest rates and aggressive competition, which could limit earnings growth. While we expect these companies will work towards their leverage targets, pressure to return more money to shareholders or more aggressive capital spending could constrain credit metric improvement over the next couple of years.

Most cable providers still have financial flexibility from FOCF generation, combined with modest EBITDA growth. We project that, on average, incumbent cable operators can reduce leverage by about 0.2x-0.3x per year. This deleveraging ability is lower than it has been in recent years (at least 0.5x) due to slowing earnings growth, higher capital spending, and rising interest rates. Therefore, management teams may need to scale back on shareholder returns to maintain appropriate credit metrics for the existing ratings.

To the extent that business prospects weaken such that EBITDA growth turns sustainably negative, we could reevaluate our rating triggers. Therefore, we will be monitoring operating metrics such as HSD subscriber trends, HSD ARPU growth, and EBITDA per home passed.

Key risks or opportunities around the baseline

1. Rising interest rates, persistently high inflation, and deeper recession could pressure earnings and free cash flow

While our U.S. forecast calls for a shallow recession, a steeper economic downturn, coupled with persistent inflation and high interest costs could drive earnings lower and hurt free cash flow. To date, issuers have been able to pass along cost increases to consumers. However, if economic conditions deteriorate more than expected, customer churn, payment delays, and bad debt could increase, contributing to lower earnings and declining free cash flow. Most cable operators are also raising broadband prices, which could spur some lower-value customers to opt for cheaper FWA alternatives.

2. Wirelines could slow the pace of FTTH builds to conserve cash flow if supply chain challenges and high Interest rates persist

While our forecasts do not assume any meaningful FTTH buildout delays in 2023, there could be headwinds if global supply chain, labor, and inflationary pressures persist. Since most of these issuers are rated in the speculative-grade category and are generating negative free cash flow, they are dependent on favorable credit market conditions. With interest rates likely to remain elevated, the wirelines may be forced to scale back their capital expenditures to conserve cash flow.

3. Shareholder returns

Given capital market conditions and currently low stock prices, we are already seeing hints that U.S. telecom providers will look to improve shareholder returns through stock buybacks or delay their plans for leverage reduction.

Rising interest rates, persistently high inflation, and deeper recession could pressure earnings and free cash flow. U.S. telecom and cable historically has been fairly recession resistant, and most consumer and business customers are unlikely to rid themselves of mobile and broadband service in the event of an economic downturn. However, we believe a deeper-than-expected recession, coupled with high interest rates and persistent inflation could pressure earnings and free cash flow for the sector. In wireless, with U.S. penetration levels above 100%, this scenario would likely result in even weaker subscriber trends, particularly in the business segment as companies reduce headcount to preserve margins. In the consumer segment, customers may migrate to less expensive data plans, or even prepaid services. Switching activity will also likely increase with value providers, including T-Mobile and cable operators Comcast Corp. and Charter Communications Inc., being the beneficiaries. We would also expect higher bad debt expense and churn levels. In cable broadband, ARPU growth could slow as customers defer plans to upgrade to faster, more expensive speed tiers, while bad debt expense could also increase.

U.S. wirelines could slow the pace of FTTH builds to conserve cash flow. U.S. wireline operators that are deploying FTTH have substantial return on capital hurdles to meet considering the significant upfront investments required for fiber. Ultimately, we believe FTTH will need to discount its internet service to attract new customers but the capital-intensive nature of fiber limits pricing flexibility to some degree. We believe this is especially true considering that the clearest pathway to adequate returns on FTTH investments is to monetize demand for faster

internet by increasing ARPU over time. And, higher interest costs are likely to make it challenging to meet these return thresholds.

While our forecasts do not assume any meaningful FTTH buildout delays in 2023, there could be some potential headwinds if global supply chain, labor, and inflationary pressures persist. At the same time, since most of these issuers are speculative grade, have significant exposure to floating rate debt, and are generating negative free cash flow, they are dependent on accommodative credit market conditions. Higher interest costs may force the wirelines to scale back their capex to conserve cash flow but not investing will leave their legacy copper-based broadband service exposed to ongoing market share losses. On the other hand, if capex remains elevated, FOCF deficits could be greater than anticipated over the next year, putting the most leveraged capital structures in a vulnerable position.

Capital allocation decisions are in the spotlight as stock market prices weigh on shareholder returns. US telcos are currently in the middle of a massive investment cycle with wireline companies deploying FTTH while wireless service providers are building out mid-band spectrum acquired in recent auctions. As a result, we expect the first priority for capital allocation in 2023 will be network investment. With leverage already elevated, we expect the U.S. telcos to allocate any excess cash flow to debt reduction. However, given capital market conditions and currently low stock prices, we are starting to see some hints that U.S. telecom providers will look to improve shareholder returns through stock buybacks or delay their plans for leverage reduction. While we expect the larger cable operators to allocate more money to capital expenditures, we also expect excess cash flow will go to shareholder returns rather than debt reduction. Some examples include:

- AT&T said it expects to achieve its net leverage target of 2.5x by 2025. Previously, management indicated it would reach its leverage target in 2023. While we don't expect the company to buy back stock, we believe capex will remain elevated, at around \$24 billion annually, for an extended period, which will limit leverage reduction.
- American Tower said on its 2022 third quarter conference call that it expects to opportunistically restart its share buyback program, although this will be partially offset by an additional \$570 million investment from Stonepeak in its data center business.
- In September 2022, Comcast Corp. announced it would increase its share repurchase authorization to \$20 billion, having bought back \$9 billion in 2022. Still, this was in-line with our expectations as the company will operate around 2.4x leverage.

Industry Outlook: EMEA

Ratings trends and outlook

We expect largely stable ratings in 2023, supported by resilient demand and operating fundamentals. Our base case is for modest revenue and EBITDA growth driven by higher pricing, and slightly lower capex. While a deep recession could expose the sector to downside risk from reduced consumer and enterprise spend, our current assumptions yield incremental deleveraging for the sector, though insufficient for material ratings upside.

We enter 2023 with negative outlooks and CreditWatch placements on 18% of our ratings (up from 10% a year ago), netting to a net negative bias of about 5%. While still a relatively modest negative bias, the increase is mainly due to growing liquidity and refinancing risks, a contributing factor in half of the negative outlooks and CreditWatch placements. The rest are due to operational challenges, and the consequences of potential M&A.

Positive outlooks have also increased slightly and are also driven by M&A and operational developments, and in one case by a management shift to more conservative financial policy. Of our European telecom ratings, 70% carried a stable outlook (compared with 85% a year ago).

Though 2022 downgrades outpaced upgrades 11-to-1, the ratio understates the sector's stability as the downgrades were largely driven by idiosyncratic rather than sectorwide operational factors. Seven were linked to sovereign downgrades: the four Russian telcos that we downgraded in March and subsequently withdrew (Veon, Rostelcom, MTS, and Megafon); Turkcell and Turk Telekom, which we downgraded twice; and VF Ukraine. Of the remaining three, two were driven by the financial consequence of strategic decisions (Proximus accelerating capex and Cyfrowy expanding into renewable energy), and only two reflected operational difficulties, both in the particularly challenging Italian market (Telecom Italia, which we downgraded twice, and Eolo). This was balanced by our upgrade on Telekom Austria after strong performance and continued deleveraging.

Main assumptions about 2023 and beyond

1. We expect modestly rising revenue and earnings despite macro and inflation headwinds

We expect revenue gains averaging 1.0%-1.5% over the next two years, driven by higher pricing as inflation is partially passed through to customers. At the same time, cost control from efficiency programs, realization of synergies, and energy cost mitigations (like hedging and power purchase agreements (PPAs)) can carve out additional margin to drive incremental EBITDA gains.

2. Capex for incumbent telcos is modestly declining despite inflation pressure

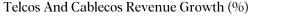
We think capex to support incumbent fiber and mobile rollouts has plateaued and is modestly declining. While ongoing next generation infrastructure deployment will keep capex intensity at 16%-18% of revenues, we believe the peak passed in 2020 at 19%, and modest declines will improve free operating cash flow (FOCF) and financial flexibility. Inflation is a concern, but we expect operators will, if needed, generally push capex into future periods to stay within their investment budgets.

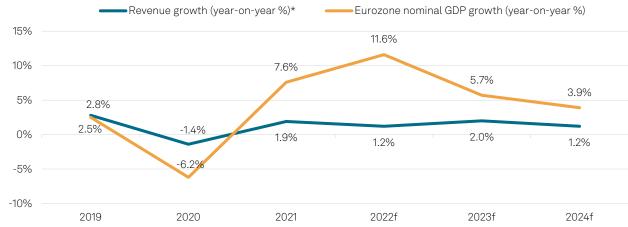
3. Credit ratios should remain stable with incremental improvements creating headroom

Despite the above, the sector positives are modest and credit improvement remains elusive for the sector. We do not expect indefinite inflationary price hikes, and hopes of revenue acceleration through more-for-more pricing have been repeatedly thwarted by competition. Stagnant revenue is unlikely to change with 5G until at least mid-decade, assuming compelling 5G-dependent use cases emerge.

We expect modest nominal revenue growth despite macro headwinds. The utility-like nature of telecom services and infrastructure should broadly protect the sector's credit quality. Under our base case of 5.7% nominal GDP growth in 2023 for the eurozone (zero real GDP growth), we expect about 2% revenue growth for the telecom sector (see chart 11). While positive in nominal terms, telecom growth lags inflation and will be negative in real terms.

Chart 11





*Organic revenue growth based on local currency revenues. f--Forecast. Source: S&P Global Ratings.

Some markets have been quicker to raise prices (e.g. UK, BeNeLux, and the Nordics), while others have lagged due to high levels of competition and churn risk (e.g. Italy and Spain). Although

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uneven in terms of timing and magnitude, we think price hikes are likely in 2023, with elevated labor, energy, and wholesale costs a rising tide for all operators that will help to push up revenues.

Operators in northern markets are likely to continue with price hikes, either on an ad hoc basis or automatically through CPI-plus contract terms, as in the U.K. In southern countries we expect prices will finally rise with the rest of the market. This has begun to happen in Italy for example, with selective price hikes from incumbent Telecom Italia amongst its peers. These moves should accelerate if wholesale costs increase, or as migration to fiber continues. We see a split wholesale pricing evolution emerging in markets like the U.K. and Italy as a positive Influence on service revenues, with increasing copper and decreasing fiber access pricing accelerating customer conversion to higher-ARPU fiber products.

Within the Middle East and Africa (MEA), we expect telecom and tower operators in Africa, especially those with multi-country exposures such as MTN Group, will see revenue growth outpace European operators. This is driven by our expectation of continued demand growth for telecom infrastructure, resilience in voice revenue, and robust data revenue growth supported by increasing mobile and data penetration and strong demand for mobile financial services.

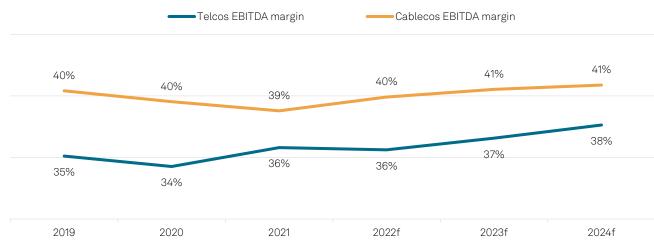
We also expect telcos in the Gulf Cooperation Council (GCC) to deliver steady performance in 2023 with a moderate 0%-2% growth in their mature domestic operations, with a stronger midsingle-digit growth rate expected for Saudi Telecom, driven by dynamic enterprise segment and stronger growth of non-telecom services in Saudi Arabia. GCC rated telcos benefit from leading market positions, allowing them to capture growth as they continue to innovate on product offerings and develop non-telecom services, including mobile money, ICT (information and communications technology), cyber, and cloud amongst others, while we expect the economies will continue to rebound, helped by high oil prices amid moderate inflationary pressures on consumers relative to other regions. The performance of their international subsidiaries though, particularly for Emirates Telecommunication (e&, UAE) and Ooredoo (Qatar), will remain sensitive to stiffer competition in emerging markets and foreign currency fluctuations, which may erode domestic growth.

Earnings and margin should rise, even with pressure from inflation. Telecom operators are not immune to inflation, but we assess their exposure as manageable. The cost component in Europe with the highest level of inflation is energy, but it typically only amounts to 2%-3% of telecom revenue. When unmitigated, there can be a tangible impact, though likely absorbable if temporary, and most European telcos have energy hedges and power purchase agreements that dampen energy price volatility, reducing the impact.

Labor is a more significant exposure at 15%-20% of revenue. But labor costs have lagged inflation so far. And when combined with long-standing efficiency programs that have been rationalizing costs for years, especially wages at incumbent operators, we expect durable margins, though perhaps not the originally intended efficiency gains (see chart 12). Combined with price hikes, we think telcos will be able to more than offset the effects of inflation and generate modestly higher adjusted EBITDA.

Chart 12

European Telecoms Average Margins (% Of Sales)



f--Forecast. Source: S&P Global Ratings.

Though there have been notable exceptions, like Telenor (where an absence of energy hedging eroded its 2022 EBITDA by about 3%), the sector is relatively well positioned. With average adjusted EBITDA margins high at 38% and 41% for telcos and cablecos, respectively, the sector is much better placed to absorb erosion than low-margin sectors like Retail, where a margin impact amounting to 2%-3% of revenue can reduce absolute EBITDA by a quarter to a half.

Meanwhile, tower companies like Cellnex, Vantage, and Inwit are particularly well placed with long-term contracted revenue certainty. With terms that include energy cost pass-throughs, they have lower-than-average exposure to cost inflation. And with automatic price escalators and sector trends driving colocation opportunities, they have a clear path for topline growth and margin expansion.

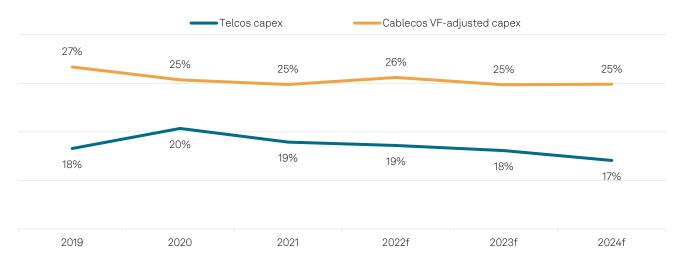
For MEA, we expect resilient EBITDA margins for most African operators. Even though we see some pressure from consumer affordability and regulatory price caps, increasing inflation and currency volatility, we expect ongoing expense efficiency programs, mostly targeting optimization of device, network and commission costs, as supportive mitigation.

In the GCC, focus on cost control will remain high, as the operators strive to sustain domestic profitability exceeding 40%-50% on a reported EBITDA basis. 5G infrastructure will support increasing data consumption, but we don't have sufficient evidence of its profitability as the operators generally don't disclose it. In their international businesses, which are mostly exposed to less profitable prepaid mobile revenue, operators will focus on passing on cost increases to offset higher inflation.

Capex for incumbent telcos is declining despite inflation pressure. Telco capex in Europe has been chronically elevated since 4G rollouts almost a decade ago, sustained by 4G densification, fiber, and 5G. But with fiber deployments in large markets like Spain and France winding down, and initial 5G coverage requirements largely met across many markets with low band frequency, we believe the peak has passed. We don't expect capex intensity to fall back to pre-4G levels of low-teens, but we expect lower levels of around 17%-18% over the next two years, down from 19% in 2020 (see chart 13). The still-high spending is needed to support fiber rollouts in the U.K. and Germany, and ongoing 5G implementation.

Chart 13

European Telecoms Average Capex (% Of Sales)



f--Forecast. Source: S&P Global Ratings.

Inflation has not only increased material and equipment costs but also the cost of labor, which can range from a third to 50% of capex. When faced with the prospect of raising investment budgets to maintain upgrade or greenfield programs, we expect most operators will push spending into future periods rather than raise spending and squeeze FOCF. With historically low return on capital levels and only modest 5G monetization prospects, we think high frequency densification of the 5G network is the most likely candidate for slower rollouts in order to control investment budgets.

In MEA, we anticipate high levels of capex in Africa to be sustained the given roll-out of network coverage infrastructure and network upgrades aimed at supporting robust growth in data services demand and expansion of fintech (mainly mobile money) platforms. This will result in reduced FOCF headroom especially for operators like Telkom, with an evolving business model toward new generation products.

Amongst GCC operators, capex will remain at 15%-17%, but this reflects two stories. Within domestic markets, mature telecom infrastructure and already-advanced 5G investments will lead to lower capex, averaging 10%-12% of revenue in 2023 and 2024, and translating into stronger free cashflow generation. Investments in the region will focus on maintenance and continued 5G and fiber rollout, particularly in Saudi Arabia, where the government's Vision 2030 program targets broadband coverage of 90% in densely populated cities. Meanwhile, investments outside the region will be much higher at up to 20%-25% of revenue. This is required at international subsidiaries for 4G rollout, network expansion, and fiber.

Credit metrics and financial policy

We expect modest revenue, EBITDA, and FOCF gains will create headroom for ratings, but with the exceptions of DT, Cellnex, and VOD, we do not see metric improvement leading to positive ratings momentum. This is because revenue growth prospects are mainly due to inflation, which is not a reliable long-term driver, and a headwind to margin expansion efforts.

Consistent service revenue growth has been challenging for the sector in general, and for Europe in particular given high fragmentation and competition. Despite increased data traffic which has required sustained levels of relatively high operating expenditure (opex) and capex spend, operators have not been able to reliably raise prices through more-for-more offers, which has led to a long-term deterioration in return on capital.

With low growth prospects and equity values, operators have little financial flexibility to address their significant investment and shareholder return demands. We will therefore focus on financial policy and capital allocation decisions. With a tighter funding environment, we expect operators will continue to monetize tower assets. Fixed-line assets may also be sold down, as in the case of Telenor and Altice Portugal, though a company's competitive positions can weaken if taken too far. We also expect more off-balance-sheet financing for fiber projects, such as the joint ventures we have seen at Telefonica, Altice France, Proximus, KPN, and Bouygues, among others. Meanwhile, shareholder return policies could eat into any potential for increased headroom in credit ratios, and we will be on the lookout for aggressive returns.

In MEA, the recent deleveraging in African network and tower providers leads us to expect broadly stable credit metrics. However, higher levels of planned capex and resumption of shareholder dividends could squeeze both FOCF and DCF, potentially weighing on credit metrics. As a result, we expect limited upgrades. Corporate activity, through asset monetization and/or geographic diversification, remain an important potential driver of ratings in future given most African telco ratings are constrained by country risk and/or sovereign considerations.

Key risks or opportunities around the baseline

1. A more severe economic downturn could erode our telecom forecast into negative growth

If Europe dips into a deep recession rather than our zero-growth forecast, more pockets of rating pressure may emerge. We believe the exposure is highest in the most competitive markets, like Italy and Spain, where higher unemployment and falls in discretionary spending could increase price-sensitivity and competition, leading to higher churn and revenue declines.

2. Prolonged inflation and high interest rates that constrain access to capital markets could punish high yield issuers with more leveraged capital structures

The sector's average debt maturity is long dated at over five years, with over 80% at fixed rates. But speculative-grade issuers with nearer term maturities face liquidity risks if capital market access tightens. For highly leveraged issuers where free cash flow generation and interest coverage are critical credit measures, higher interest rates could pressure ratings.

3. Transaction risks exist to both the upside and downside

Market consolidation remains an upside risk that could moderate competition and improve growth prospects. At the same time, asset sales, which have generated financial flexibility, may slow or yield lower valuation multiples in today's tighter funding environment.

A more severe economic downturn could erode our European telecom forecast, with the worst effects likely in Italy and Spain. We would expect the initial softening will come from the

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enterprise customer base resulting from reduced headcount and project spending, particularly among SMBs. For retail consumers, deep falls in disposable income may not result in mass cordcutting but it can increase consumer price sensitivity. Customers looking for better value are more likely to churn, incentivizing low-price competition by carriers. In such a scenario, we think the most vulnerable players are those in countries like Italy and Spain, with competitive market structures including challengers focused on growing to scale.

Even if the revenue tailwinds from inflation persist, we think price hikes could become untenable. Pushing all the costs to customers with reduced budgets could backfire, leading to consumer and regulatory pushback, and further opening the door to price competition by aggressive challengers. A backlash could lead to government intervention and undermine any regulatory appetite for in-market consolidation and lighter-touch wholesale regulation, topics that have or will have relevance for several markets, including the U.K. and Spain.

Prolonged inflation and high interest rates that constrain access to capital markets could punish speculative-grade issuers with more leveraged capital structures. Near-term telecom refinancing needs are modest after years of extending maturity walls in a near-zero interest rate environment. If capital markets remain choppy in 2023, our first concern is for liquidity, and that high yield issuers refinance opportunistically and early to avoid a maturity-driven crunch. Telecom Italia is an example where the potential refinancing risk of large 2024 maturities was one of the factors contributing to our negative outlook.

If protracted, high interest rates (currently 7%-8% annual yields) will work their way into capital structures, but as a ratings risk this pressure will build more slowly. For single 'B' category issuers like Altice, where we focus on free operating cash flow and interest coverage ratios, higher interest costs will eventually put pressure on metrics and ratings.

Transaction risks exist to both the upside and downside. Spanish regulators are considering market consolidation between Orange and Masmovil. Notable will be whether operators in Spain make significant inflationary price hikes before the mid-2023 decision, and if that affects the approval process. If approved with modest or no remedies, it would mark a shift in the regulatory posture. We think such an outcome could improve growth prospects by balancing the market more sustainably and rationalizing aggressive price competition. A positive outcome in Spain could also encourage deals in markets like the U.K. or Italy.

Numerous European telcos have sold off infrastructure assets to fund investments, debt reduction, and shareholder returns. But after five years of this, many tower portfolios have been sold down. In addition, high interest rates could erode peak valuation multiples of 30x for tower portfolios, and constrain purchase funding. We therefore expect a cooling of tower transactions, curbing one of the sector's financial levers. That said, we think prospective buyers and sellers remain incentivized, and that smaller fiber build transactions will remain active given the number of buildout projects, their more manageable size, and lower valuation multiples. This can help operators manage capex, but a decisive movement to asset-light models will have negative implications for business profiles as we view fiber networks as strategic to competitive profiles.

Asset monetization and the development of non-telecom services are high on the agendas of GGC telcos. Ooredoo recently announced plans to carve out and partially sell its 20,000 towers across the group, and Saudi sovereign investment fund PIF made an around \$3 billion offer to acquire 51% in Saudi Telecom Co.'s (stc's) over 15,500 towers in the country (see "<u>PIF's Offer for 51% Tower Stake Is Credit Neutral For stc</u>," published Nov. 22, 2022), after it completed the acquisition of 8,000 towers from Zain KSA (unrated). Ooredoo also intends to carve out and partly sell data centers. We think the asset monetization trend will continue across the region in 2023. Stc was one of the first operators to monetize its non-telecom assets, including the listing of its ICT business in 2021 and a partial sale in its fintech arm back in 2020. We think the proceeds from

assets monetization will be primarily reinvested in non-telecom services, as the telcos strive to create new growth avenues, including data centers, cyber, ICT, digital services, and fintech. Most of them pioneered in the region, offering the first licensed digital banks. Exceptional dividend distribution could be another use for excess cash, particularly in the absence of a clear external growth appetite, which would not immediately weaken the ratings given generally low leverage and sufficient headroom. That is with the exception of e& that recently bought an 11% stake in Vodafone PLC and made an offer to increase its stake in its Saudi associate Mobily for \$2.12 billion, which if successful could leave no headroom under the credit ratios. We think the development of non-telecoms services offers attractive growth rates, but meaningful contribution to profits will take years to materialize. Notwithstanding, it offers attractive monetization and value creation opportunities.

Industry Outlook: Latin America

Ratings trends and outlook

Rating performance in Latin America continues to improve. Credit quality has been restored to pre-pandemic levels and the negative rating bias is down to 10%, compared with the 17% negative bias from last year and close to 35% a couple of years ago. Absent the constraints that certain ratings have with respect to sovereign caps, we see a comfortable headroom for companies to cope with short-term risks stemming from inflation, high interest rates, and weak economic growth. However, almost 80% of our rated portfolio is in speculative-grade territory and could face restrictive conditions in an already tight financing environment.

Companies facing the more relevant downside risks are Axtel due to the continued weakening of its revenue base, and Oi S.A. considering a higher risk of a debt restructuring. In Argentina, credit quality for the sector is weighted by tight central bank regulations on accessing foreign exchange. The only rated investment-grade names are in Mexico and Chile: America Movil, Grupo Televisa, Telefonica Moviles Chile, and Entel benefit from leading positions in the segments and markets where they operate, as well as from stronger financial risk profiles and liquidity.

Main assumptions about 2023 and beyond

1. Unfavorable financing conditions will further induce discipline towards leverage

High financing costs coupled with low refinancing needs and limited access to capital market funding should continue to discourage the incremental use of debt and further contribute to a financial strategy that focuses on reducing leverage.

2. Healthy demand for data remains a key factor for top line performance

Increasing needs for remote connectivity and streaming entertainment are supportive of demand for broadband and wireless services.

3. Limited M&A activity would shift focus to other value opportunities

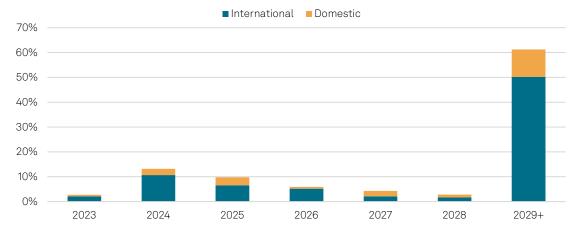
Regulatory restrictions and financial discipline will tend to limit M&A activity. Instead, telcos will pursue further organic growth through targeted capex, and could implement initiatives to unlock shareholder value.

Unfavorable financing conditions will further induce discipline towards leverage. The strong financial discipline by telcos in Latin America has not only kept leverage comparatively low with respect to U.S. and EMEA but has improved liquidity headroom to mitigate short-term risks. The proactive liability management to extend debt maturities in 2021 largely explains the relatively low refinancing risk that Latin American telcos face in 2023, as short-term market debt represents less than 3% of the total outstanding balance, both in local and foreign currencies (see chart 14).

If financing costs globally stay higher for longer than previously anticipated, with benchmark yields more than 100 basis points from a year ago, we expect telcos in the region to maintain a cautious approach towards the use of debt in the months to come, particularly for speculative-grade issuers. In addition to rising financing costs, access to capital market financing is still problematic, particularly for lower-rated issuers.

Chart 14

LatAm Debt Maturity Profile



Source: S&P Global Ratings

Healthy demand for data remains a key factor for top line performance. We expect data consumption will continue to grow in 2023, particularly because increasing needs for remote connectivity and streaming entertainment will support demand for fixed wireless and broadband services.

Mobile subscriber penetration remains relatively low in Latin America, slightly above 70%. We expect the increase in wireless coverage across most markets will drive higher data usage and revenue in the next few years. In 2022 we estimate the region reached the milestone of 460 million internet users, which represents a penetration rate of about 72%. For 2023, we expect internet subscriber growth in the low single-digit area. Corporate information technology (IT) and data communication penetration is still relatively low and we expect it to increase in coming years, underpinned by cloud and security services. Penetration growth, however, could be constrained by weak economic growth in the near term.

Limited M&A activity would shift focus to other value opportunities. In 2023 we're expecting limited M&A activity not only due to a regulatory environment that fosters competition but to financial discipline towards the use of debt. Instead, capital allocations will mostly focus on organic growth and customer retention. Larger participants will likely expand the fiberoptic business as well as the mobile networks to handle higher data demand, customer growth, and for the deployment of the new 5G network. For smaller players, we also expect increasing investments in the fixed network, home broadband, IT solutions, and the gradual development of digital services for SMBs and corporations.

We could also see the implementation of initiatives to unlock asset value. For instance, last year America Movil received regulatory approval for its joint venture with Chilean-based VTR, and the company also completed a spin-off of its telecom towers and other related passive infrastructure in Latin America.

Credit metrics and financial policy

In tandem with the generally stronger macroeconomic performance in the region, the financial performance of Latin America's telcos still shows resilience across most markets. During 2022 credit metrics were mostly aligned with those of 2021 or even improved. Leverage remains under control, with debt to EBITDA broadly lower compared to telcos in developed markets. For 2023 we expect companies to continue posting healthy earnings, and weaker economic conditions

would have only a mild impact on credit quality. We expect debt to EBITDA generally below 3.0x and FFO to debt of about 30%.

In the last three years, financial discipline has been essential to protect credit quality. As we continue to expect difficult business conditions in the near term due to weak economic activity, high interest rates, and persisting inflationary pressures, we don't believe telcos would normalize shareholder returns, but would prioritize the prudent use of debt and keep an ample liquidity headroom.

Considering that short-term buffers--i.e., low leverage and liquidity headroom--will remain in place, supported by an extended debt maturity profile that limits refinancing risk, we also expect companies will continue to manage foreign exchange exposure to address the mismatch between local currency-denominated revenues and foreign currency debt. Sovereign ceilings or parent company rating caps are still relevant factors that could weigh on a few names within our rated portfolio.

Key risks or opportunities around the baseline

1. A sharp recession could further weigh on credit metrics

Our base-case considers a shallow recession in the U.S. as well as low single-digit growth in the region. A deeper and extended recession with implications on top-line performance could ultimately increase pressure on credit metrics.

2. A stronger dollar could pressure leverage

There's still a mismatch between local currency revenue generation and foreign currency debt, and the potential depreciation of major currencies could have repercussions on leverage.

3. Increasing requirements for 5G infrastructure will require sizable multiyear capex allocations

The rapid adoption of 5G is shaping the capex profile for the sector, and financial risks could emerge if carriers increase the use of debt to fund these investments.

A sharp recession could further weigh on credit metrics. We expect low-single-digit GDP growth in countries like Argentina, Brazil, Mexico, Chile, and Colombia. Such weak growth in the region is mainly explained by the fading post-pandemic catch-up/recovery momentum, weakened demand from key major trading partners, still-elevated prices eating into disposable income growth, and the lag from policy rate hikes holding back consumption and investments.

In recent years, the telecom sector has been highly resilient to difficult economic and business conditions, and we've seen companies coping by ramping up broadband services, paid-TV, and mobile connectivity. However, a sharp or prolonged economic dip in 2023 could weigh on the sector's operating and financial performance. The uncertainty over the magnitude and duration of a recession is a key factor for short-term growth prospects and for the timing for executing capital investments. In a scenario where revenues grow below inflation due to pressures on ARPU and where input costs don't normalize, telcos could face a slight drop in margins. In our view, lower-than-expected EBITDA and high working capital requirements from lower receivables could result in weaker leverage metrics that ultimately pressure credit quality.

A stronger dollar could pressure leverage. Foreign currency-denominated debt for telcos in Latin America represents close to two thirds of total indebtedness for the sector, and America Movil is the largest issuer accounting for more than 50% of total outstanding market debt from rated entities. Such exposure to exchange rate volatility--to a mismatch between local currency-denominated revenues and foreign currency debt obligations--remains an important risk for telco

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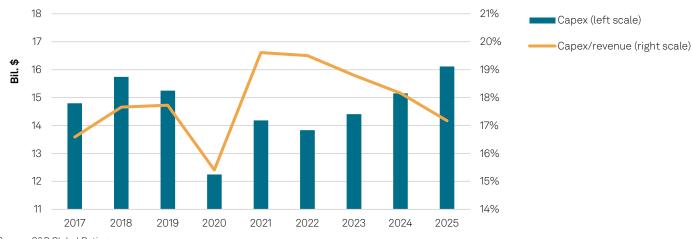
operators in Latin America. Persisting inflationary pressures in the U.S. that result in a tighter monetary policy could trigger a significant currency depreciation in some countries in Latin America, and potentially take a toll on cash flows on a dollar basis and hurt credit metrics. The currency mismatch continues at about 25% of foreign currency debt, and we estimate a 10% currency depreciation could increase leverage between 0.1x and 0.2x.

Increasing requirements for 5G infrastructure will require sizable multiyear capex allocations.

The footprint of 5G technology in the region is still insignificant at less than 25 million subscriptions, but leading carriers continue to push forward on its deployment. We expect 5G investments to account for up to 25% of the capex budget within the next couple of years, a dramatic uptick from 2021 where 5G allocations represented less than 10% of capex.

Despite the high capex requirements for 5G infrastructure and spectrum auctions we don't see major risks from a financial risk profile standpoint because we expect telcos to follow the historical trend of keeping total capex below 19% of revenues (see chart 15).

Chart 15



LatAm Capex Profile

Source: S&P Global Ratings.

However, leverage risks could emerge if we see capital investments consistently trending close to 20% of revenue without being accompanied by incremental cash flow generation that limits the use of debt. This is particularly important within the context of legacy capex requirements to enhance networks, increase installed capacity, and for maintenance purposes, on top of spectrum acquisitions.

Industry Outlook: Asia-Pacific

Ratings trends and outlook

Asia-Pacific's (APAC's) telecom sector net rating bias has improved to neutral, compared to about negative 20% a year ago. Divestment-driven deleveraging underpinned the improvement. For example, we revised the outlooks of Singapore Telecommunications Ltd. and its subsidiary Singtel Optus Pty Ltd., as well as that of Hong Kong Telecommunications (HKT) Ltd, to stable from negative; we also placed Voyage Digital (NZ) Ltd. on Credit Watch with positive implications. These rating actions were catalyzed by divestments, including the sale and leaseback of key passive mobile network infrastructure. Similar actions by other telcos, while not having resulted in positive rating actions, provided them with more rating cushion.

Compared to the current bias, the net rating bias was in negative territory since 2016. Leverage pressure had built up as telcos faced steep 5G and fiber capex needs, while struggling to achieve earnings growth. Entities have also been investing in areas adjacent to the traditional connectivity business, such as in ICT services and data centers.

Ratings of APAC telcos should be broadly stable in 2023. We expect a modest EBITDA growth despite macroeconomic and inflationary headwinds. Demand for faster speeds, higher data consumption, and some return of roaming revenues will spur earnings. There's also fast-growing fixed broadband adoption in some South and Southeast Asian markets when penetration remains low.

Proactive balance sheet management, including continued divestments of non-strategic assets, supports the broadly stable outlook. There is some divergence of capex risks across markets, hinging on the progress of 5G rollout. Sporadic 5G spectrum auctions could weigh on leverage.

Main assumptions about 2023 and beyond

1. Mildly rising earnings spurred by rising connectivity demand

Telcos' earnings will benefit from rising mobile data traffic, wireline adoption, and the return of roaming revenues.

2. Capex intensity should ease slightly

We believe average capex intensity (capex as a proportion of revenue) will decline from 28% in 2021, as telcos in markets such as Japan, Korea, and Taiwan have passed their initial upfront capex hump and have started reaping benefits of these investments. Average capex will nonetheless remain high, with intensity at 20%-24% through 2024, as investments into 5G and fiber continue to support increasing adoption.

3. Infrastructure assets and business structure reevaluation amid M&A

APAC telcos will continue reevaluating their ownership of passive infrastructure assets. Monetization of these assets could ease balance sheet pressure arising from 5G capex and other M&A activities. Investments adjacent to the traditional connectivity business should continue as telcos seek new growth engines. **Earnings will rise mildly despite inflationary pressures.** We expect telcos' earnings to benefit from the return of roaming revenues as international travel picks up. The rising demand for faster and more data will spur upgrades to higher-priced mobile tariff plans, which may be for more-advanced networks or higher data allowances.

Migration to 5G services also supports earnings in some markets. Telcos have divergent pricing strategies for 5G mobile services. Some operators, such as China Mobile Ltd., are charging a premium while others, such as India's Bharti Airtel, are not. For telcos that choose not to charge a premium on 5G, ARPU and earnings could still benefit because data use typically rises with migration to 5G.

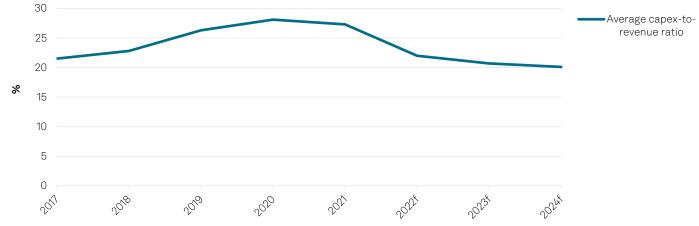
At the same time, the pandemic has increased online collaboration with a permanent shift toward a hybrid work model. This will support increasing adoption of fixed-line broadband. This trend is especially prevalent in markets where fixed-line broadband remains underpenetrated, such as in the Philippines and Thailand.

The advent of 5G has raised the viability of fixed-wireless broadband as an alternative to fixedline alternative. This can boost the earnings of telcos in markets such as Australia and New Zealand, as fixed-wireless broadband allows them to bypass low-margin reselling of national fixed-broadband networks.

Cost-cutting measures will blunt the impact of inflation-driven cost increases, but some pressure from higher energy and labor costs remains inevitable. Price hikes in some markets, such as Australia, will help to counter these pressures. However, in markets where competition makes price hikes difficult or where consumers are price-sensitive, margins will narrow. That said, we expect any softening of consumer spending to be mild and temporary. This is given the sector's utility-like demand characteristics.

Average capex intensity should ease but will remain high. The first wave of high 5G spending has passed for majority of the rated APAC telcos, but high capital investments remain--albeit in a disciplined manner (see chart 16). We expect telcos to continue to improve their 5G and fiber networks based on adoption rates and the success of 5G industrial use-cases.

Chart 16



APAC Telcos' Capex Intensity Should Ease, But Remain High

Note: Excluded Summit Digitel Infrastructure Ltd. because of its exceptionally high capex intensity at inception in 2019. f--Forecast. Source: S&P Global Ratings.

The balance sheets of telcos will continue to diversify away from traditional connectivity operations. This is to boost long-term earnings potential. For example, Thailand's Advanced Info Service Public Co. Ltd. and Korea's SK Telecom Co. Ltd. and KT Corp. are investing in data centers. Others, such as China Mobile and Singapore Telecommunications Ltd. (Singtel), are putting money into cloud services and information and communications technology.

Asset sales to fund M&A and capex. We expect telcos will continue to reevaluate infrastructure asset portfolios and business structures. Tower sell-downs by telcos will likely continue because towers are passive and not key to network advantage. They are also relatively mature and accessible on a third-party basis. The recent spate of tower transactions has afforded telcos some financial flexibility (see table 1). Proceeds from monetizing such assets that are not key to the telcos' competitiveness can create funding capacity for their capex and other growth engines.

Table 1

Three Examples Of Deleveraging Following The Sale Of Tower Assets In APAC

	Debt	EBITDA	Debt/EBITDA (x)
Telstra Corp. Ltd. (Mil. A\$)*			
Adjusted amounts (A)	13,574	6,569	2.07
Cash proceeds from sale	(2,800)	-	
Incremental lease liability	898	-	
Adjusted for tower sale transaction (B)	11,672	6,569	1.78
Net deleveraging (A-B)			0.29
Singapore Telecommunications Ltd. (Mil. S\$)§			
Adjusted amounts (A)	12,333	5,020	2.46
Cash proceeds from sale	(1,850)	-	
Incremental lease liability	1,217	-	
Adjusted for tower sale transaction (B)	11,700	5,020	2.33
Net deleveraging (A-B)			0.13
PLDT Inc. (Mil. PHP)†			
Adjusted amounts (A)	258,737	97,403	2.66
Cash proceeds from sale	(77,000)	-	
Incremental lease liability	27,500	-	
Adjusted for tower sale transaction (B)	209,237	97,403	2.15
Net deleveraging (A-B)			0.51

Note: We illustrate the deleveraging impact using adjusted figures from the fiscal year right before tower sale transaction. *Fiscal year ended June 30, 2021. §Fiscal year ended March 31, 2021. †--Fiscal year ended December 31, 2021. A\$--Australian dollar. S\$--Singapore dollar. PHP—Philippine peso. Sources: Company disclosures, S&P Global Ratings.

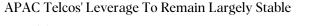
If telcos were to monetize other infrastructure assets, especially active assets, it could weigh on their business strength. In determining the implications for the telcos' credit profiles, we will consider, among other factors, the extent to which the assets drive the telcos' competitive advantage, the level of control retained in these assets, and the change to leverage.

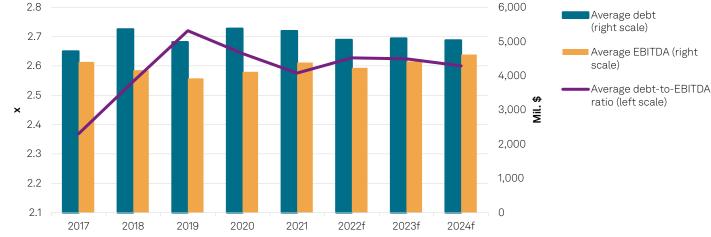
We believe telcos will be strategic about investments that are not key to competitive advantage, to preserve their balance sheets. This could mean divesting such business segments, as Hong Kong Telecommunications Ltd.'s disposal of data center assets. It could also mean entering such businesses with a partner, as Singtel is doing with its digital bank business.

Credit metrics and financial policy

We expect leverage to remain largely stable over the next two years. We estimate debt-to-EBITDA ratio of APAC telcos to remain 2.5x-2.7x, from 2.6x in 2021 (see chart 17).

Chart 17





Note: Excluded Nippon Telegraph and Telephone Corp., PT. Profesional Telekomunikasi Indonesia, Summit Digitel Infrastructure Ltd. and Voyage Digital (NZ) Ltd. due to acquisition-led debt increases or high inception leverage. f--Forecast. Source: S&P Global Ratings.

We expect telcos to manage leverage carefully to fund capex and investments, with asset divestments as one of the key funding levers. Debt has crept up with each iteration of mobile network and fixed broadband, while the resultant earnings benefits have fallen short. Therefore, as spending remains elevated, we expect telcos to create the necessary funding capacity from divesting assets that are not a competitive advantage. Resultant cash proceeds from asset divestments can be put toward capex and investments. Some telcos may also use asset divestments to support shareholder returns, as the traditional connectivity business has struggled to achieve strong earnings growth and new growth engines take time to develop.

Key risks or opportunities around the baseline

1. Prolonged recession could weaken consumer sentiment

Consumers' spending power could dip and slow upgrades to higher-priced services and newer devices. This could be protracted in the event of a deep recession. Bad debt could rise and working capital cycles could lengthen, weighing on telcos' cash flows and leverage.

2. Competition could ease in some markets but rise in others

Markets such as Taiwan and New Zealand could see competitive pressures abate with consolidation, while markets with new entrants, such as in Philippines (Dito Telecommunity Corp.), could face more intense wireless competition than in the past.

3. Investments could weigh on leverage due to lag in payback

Telcos must make upfront 5G network and spectrum investments. Yet, meaningful monetization from industrial-use cases ranging from self-driving cars to smart factories remains distant. Expensive--but necessary--spectrum purchases could stretch the telcos' balance sheets. Telcos' investments into new growth engines have been on a rise, in a bid to boost long-term earnings potential. Such investments, if debt-funded, can erode rating headroom.

A prolonged recession could dent telcos' earnings. While we expect telcos to be resilient, a deep recession can still lead to a prolonged dial-back in spending on telco services. Consumers will delay more discretionary upgrades. For example, migration to 5G, where 5G-enabled devices are required, will moderate. Some consumers may even trade down. Telcos with a high proportion of prepaid subscribers will be hit the hardest, as consumers can easily scale back spending.

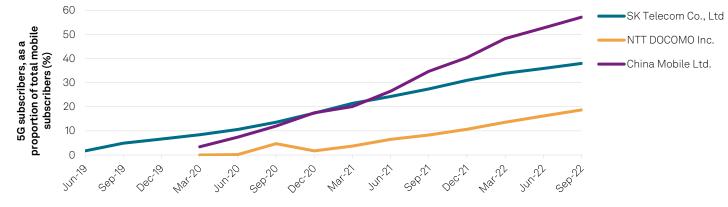
Severe currency depreciation in weaker Asia-Pacific economies could exacerbate the situation. The costs of imported handsets and network equipment will increase. This can further weaken consumer demand for handset upgrades, as well as increase the capex burden for telcos.

Consolidation and new entrants could change competitive pressures. Assuming the regulatory anticompetitive hurdles are cleared, consolidation typically results in stronger players, more rational pricing, and lower risk of a new player entering the market. Indeed, after the merger of TPG Telecom and Vodafone Hutchison Australia, ARPUs have risen in Australia over the past two years. On the other hand, telcos in markets with new entrants may face earnings and balance sheet risks. For example, PLDT has incurred much higher capex over the past two years partly in anticipation of the new competition in both mobile and fixed line. The heightened competition also limits the ability of incumbents to raise prices. For example, Dito's wireless plans are priced below the market to attract subscribers.

Heavy upfront investments could weigh on leverage as payback takes time. Telcos are making substantial investments into 5G, ranging from network equipment to spectrum, and these costs may continue to be elevated even for telcos that have already adopted 5G, to increase capacity and coverage. They may also be necessary as telcos that previously adopted non-stand-alone 5G models move toward stand-alone 5G models. Sporadic spectrum auctions, such as in Taiwan and Thailand, where timing is uncertain, could lead to deviations from our base case.

The potential uses of 5G networks goes far beyond mobile devices. By extension, the monetization opportunities for telcos will too. However, significant returns are unlikely to come soon. For now, 5G will likely be used to offer consumers faster mobile and fixed-wireless access. And this migration will depend on the availability and uptake of 5G-enabled devices, which remains limited. In early 5G-adopter markets such as Korea, China, and Japan, 5G adoption only reached an average of about a quarter of the subscriber base after two years (see chart 18).

Chart 18



5G Adoption Will Be Gradual, As Seen In Early Adopters

Sources: Companies' filings, S&P Global Ratings.

Rising investments into new growth engines could also stretch telcos' balance sheets. While they may boost long-term earnings potential, incremental earnings take time to ramp up. When

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further away from the familiar connectivity business, such investments could translate into higher execution risks too.

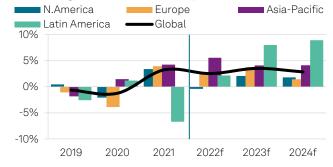
Related Research

- Telecom Tower Operators Show Their Mettle, Jan. 18, 2023
- <u>Assessing The Impacts Of Higher Interest Rates On 'B-' Rated U.S. Telecom And Cable</u>
 <u>Issuers</u>, Jan. 11, 2023
- U.S. Telecom And Cable Sector Will Remain Calm Amid A Sea Of Recession Uncertainty In 2023, Jan. 9, 2023
- Asia-Pacific's Stretched Telcos Turn To Tower Sales, Nov. 21, 2022

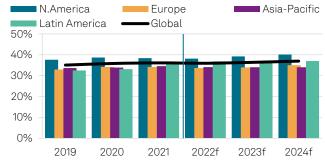
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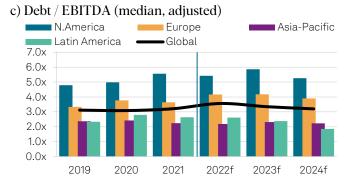
Telecoms - Fixed and Wireless Chart 19

a) Revenue growth (local currency)

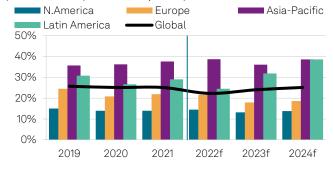


b) EBITDA margin (adjusted)



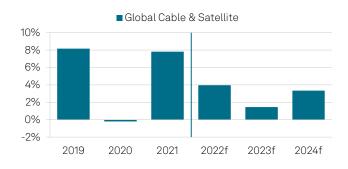


d) FFO / Debt (median, adjusted)

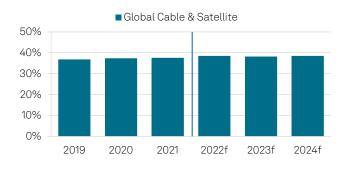


Cable and Satellite

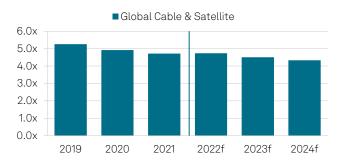
Chart 20 a) Revenue growth (local currency)



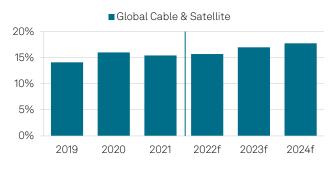
b) EBITDA margin (adjusted)



c) Debt / EBITDA (median, adjusted)



d) FFO / Debt (median, adjusted)



Source: S&P Global Ratings. f = Forecast.

Revenue growth shows local currency growth weighted by prior-year common-currency revenue share. All other figures are converted into U.S. dollars using historic exchange rates. Forecasts are converted at the last financial year-end spot rate. FFO—Funds from operations.

Cash, Debt, And Returns: Telecoms

Chart 21

Cash flow and primary uses

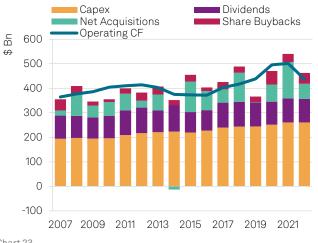


Chart 23

Fixed- versus variable-rate exposure

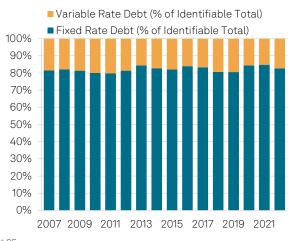
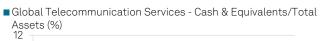
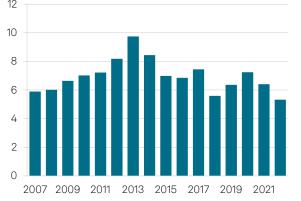


Chart 25

Cash and equivalents / Total assets





Source: S&P Capital IQ, S&P Global Ratings calculations. Most recent (2022) figures use the last 12 months' data.

Chart 22 Return on capital employed

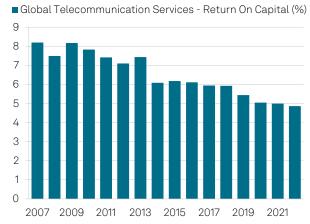
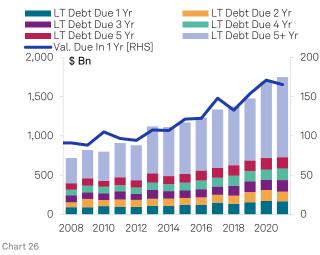


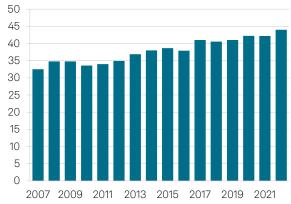
Chart 24

Long-term debt term structure



Total debt / Total assets

Global Telecommunication Services - Total Debt / Total Assets (%)



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