
Summary

The year 2021 was an unusual one in telecom. After a COVID-plagued 2020, telcos saw the strongest revenue growth in a decade: full-year 2021 revenues were \$1,891 billion (B), up 5.5% from 2020. Capex surged even more, up 10.1% YoY to \$325B. The ratio of capex to revenues, or capital intensity, reached 17.2% in 2021, the highest level since 2015. This record makes clear that the jump in capex (and revenues) was not fueled merely by exchange rate fluctuations. Rather, the 2021 network spending surge was due to a few factors: COVID-delayed projects finally getting fulfilled; 5G's spread into more countries and growth in subscriber counts; 5G core scaling up with a growing number of stand-alone deployments, many leveraging partners from the cloud; and increased fiber deployment in rural areas and for mobile infrastructure connectivity, in some cases supported by government subsidies. The capex climb took place as telcos chose from a smaller set of suppliers than in previous years: the US-sponsored entity list has severely limited opportunities outside China for Huawei, which is still the world's largest telecom vendor. There has been a small amount of rip and replace activity to cope with vendor bans, but the bigger effect is less competition during the RFP process. This also has the effect of pushing up capex outlays a bit. Excluding China/HK-based companies (which haven't finished reporting), the top 10 biggest capex spenders in 2021 were AT&T, DT, Verizon, NTT, Comcast, Vodafone, Orange, Charter, America Movil, and Telefonica. The biggest capex gains in 2021 were seen at America Movil (+\$2.54B versus 2020 total), Telecom Italia (+\$2.49B), Verizon (+\$2.09B), AT&T (+\$1.93B), Deutsche Telekom (+\$1.74B), BT (+\$1.63B), and Rakuten (\$1.47B). The DT jump is inflated slightly by its Sprint acquisition, which closed in April 2020. Regarding the spending outlook, our latest official forecast calls for \$328B in capex in 2022, a bit higher than 2021; we are maintaining this target for now, but there is a high level of uncertainty and considerable downside risk.

Early 4Q21 data: capex up >10% YoY for 3 straight quarters

Based on preliminary stats for 4Q21, telco capex totaled \$93.3B, up 11.1% from 4Q20. The second and third quarters of 2021 achieved growth of 14.3% and 10.0%, respectively. These growth rates were somewhat inflated by a low base period, as COVID shut down economies for most of 2Q21 and part of 3Q21. The strong fourth quarter is more indicative of good market fundamentals, though, and a build cycle underway. Telcos are spending heavily to upgrade networks to 5G, with a growing number beginning deployment of stand-alone 5G core networks, often relying on collaboration with webscale operators like AWS, Azure and GCP for key functions. Indeed, these three cloud providers recorded an estimated \$0.84B in revenues to the telco sector in 4Q21, nearly double the 4Q20 total of approximately \$0.45B.

Comparing second half 2021 (2H21) capex with 2H20 capex, the biggest telco capex increases came at America Movil, AT&T, BT, Telecom Italia, Verizon, and China's three big telcos. 5G builds and supporting fiber investments were central to all these increases. Sizable declines in the same time period were seen at a relatively small number of companies: DT, Liberty Global, NTT, SoftBank, and STC. STC got off to an early start with its 5G build, which moderated 2021 spend. SoftBank and Liberty Global both sold properties in the last two years, which impacts comparisons. DT had to allocate a huge amount of cash to spectrum acquisitions in 2021: 8.4B Euros, from 1.7B in 2020. That affected DT's ability to spend on networks. As for NTT, its 4Q21 capex actually increased slightly YoY, but a weakened Yen resulted in a lower USD figure.