Financial Performance and Trends in the Telecom Industry

Applied Value Q3 2021

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Applied Value Telecommunications Practice

Telecommunication has been a core practice area for Applied Value since our inception in 1997. Over the last 20+ years, we have supported a wide range of clients across the telecommunications value chain and across continents.

We generate client value and provide tangible results by applying an unbiased perspective, having a hands-on approach, and recognizing the importance of delivering value fast.

About this report

This report tracks the financial performance of major players in the telecommunications industry ranging from operators to infrastructure OEMs and mobile device makers.

We hope that you find this report insightful, and we welcome feedback or opportunities for further discussions.

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Applied Value's telecom report tracks the financial performance of major players in the industry

Operators

américa móvil
AT&T
STC
BCE
ooredoo
SK telecom
verizon
BT
airtel
swisscom
telenor
TELE2
TDC
Deutsche Telekom
TURKCELL
ROGERS
Telia Company
AIS
MILLICOM THE DIGITAL LIFESTYLE tigo
TELUS
اتصالات etisalat
elisa
kt
Telefónica
proximus
KDDI

Infrastructure OEMs

NOKIA
ERICSSON
HUAWEI
ZTE

Device OEMs

SAMSUNG
Xiaomi
HUAWEI
Lenovo

Contents

Executive summary

Key takeaways per segment

Operators

1. The operators' quarterly revenues grew YoY in all regions, however revenue in Q3'21 suffered a reduction of 2.5% compared to the previous quarter
2. Average ROIC for analyzed operators reached 7.8%, while yearly NOPAT margin remained at just below 12.4%
3. Turkcell achieved the highest EBITDA margin in Q3'21 of 51.6%, compared to the lowest recorded margin of 29.0% for KT Corp

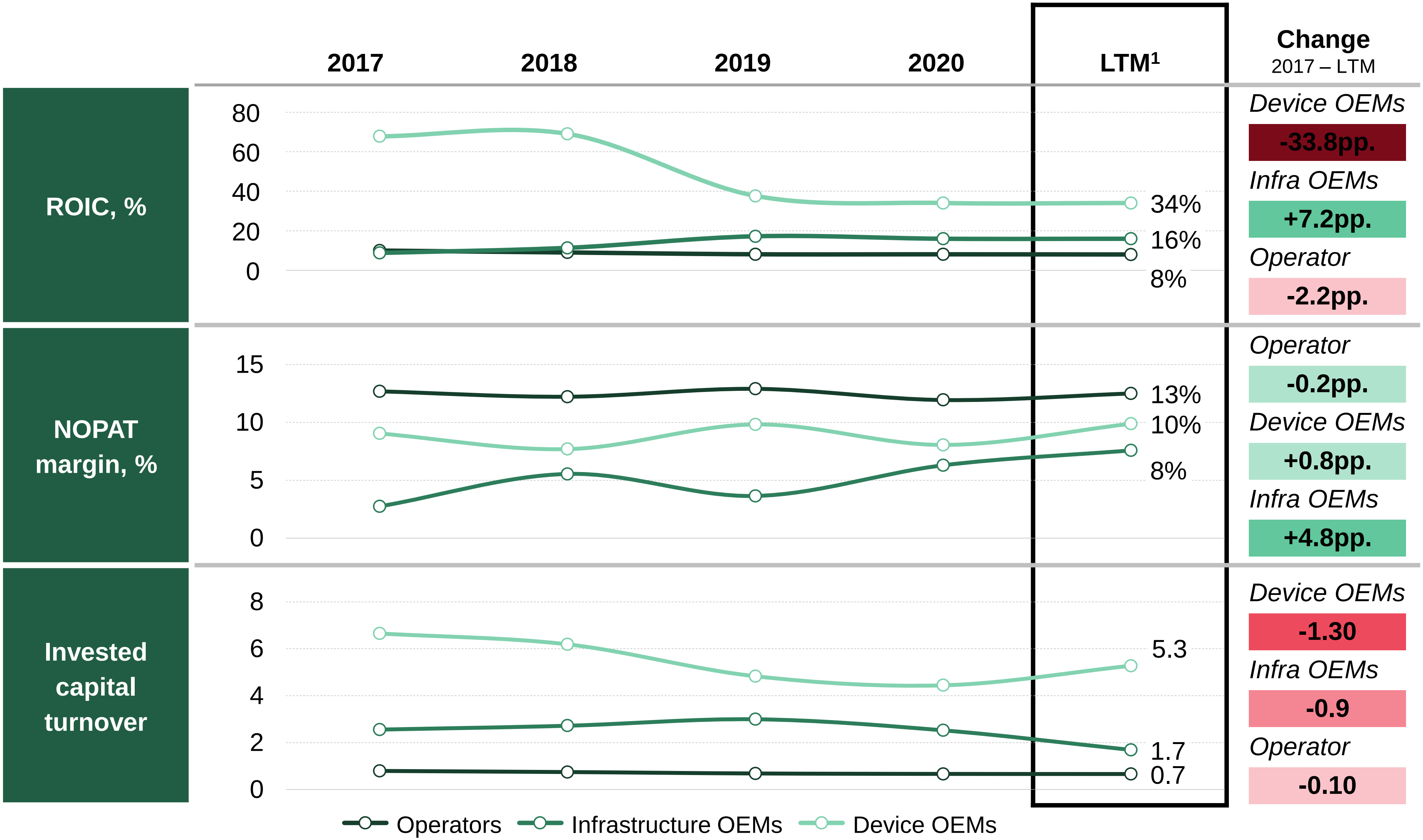
Infrastructure OEMs

1. Infrastructure OEMs obtained high R&D/Sales due to heavy investments
2. Ericsson led the segment with 33.7pp. ROIC improvement (FY2017-LTM), as a result of a strong NOPAT margin development (+14.5 pp.)
3. Ericsson's CTR has been stable around 2.4 in the past three years, while Huawei and ZTE both suffered from CTR reductions due to slower inventory & receivables turnovers

Device OEMs

1. Global smartphone shipments declined by 6.5% YoY in Q3'21. Samsung held its leading position – Xiaomi recorded a 15% QoQ shipment decrease due to component shortages
2. Global PC shipments continued to grow during Q3'21 – commercial PCs started to lead the way, while consumer PCs were falling behind
3. All device OEMs, except Huawei, had positive yearly segment revenue development in LTM compared to FY2020

Financial overview (1/2): Yearly performance



Notes: 1. LTM refers to Q4'20 – Q3'21 for most companies included in the report. LTM analysis of Huawei based on the period of Q3'20 – Q2'21; ROIC (Return on Invested Capital), NOPAT (Net Operating Profit After Tax); Deviations due to different selection of operators and restated company financials. Telecom report data is based on fiscal years and calendar quarters.

Financial overview (2/2): Quarterly performance

	Segment	Q3'21	Q2'21	Q1'21	Q4'20
Sales Y-o-Y (% change)	**Operators**	-0.5%	7.2%	11.0%	4.6%
	Infrastructure OEMs[1]	-20.2%	-20.2%	-1.0%	0.0%
	Device OEMs[2]	10.1%	19.1%	34.7%	13.9%
NOPAT Y-o-Y (p.p. change)	**Operators**	0.3 pp.	0.4 pp.	0.9 pp.	-1.1 pp.
	Infrastructure OEMs[1]	1.7 pp.	1.5 pp.	1.5 pp.	4.0 pp.
	Device OEMs[2]	2.2 pp.	1.9 pp.	3.4 pp.	0.8 pp.
EBITDA Y-o-Y (p.p. change)	**Operators**	0.4 pp.	-0.8 pp.	-0.6 pp.	-0.6 pp.
	Infrastructure OEMs[1]	2.9 pp.	1.9 pp.	2.0 pp.	5.5 pp.
	Device OEMs[2]	3.3 pp.	2.4 pp.	4.1 pp.	1.0 pp.

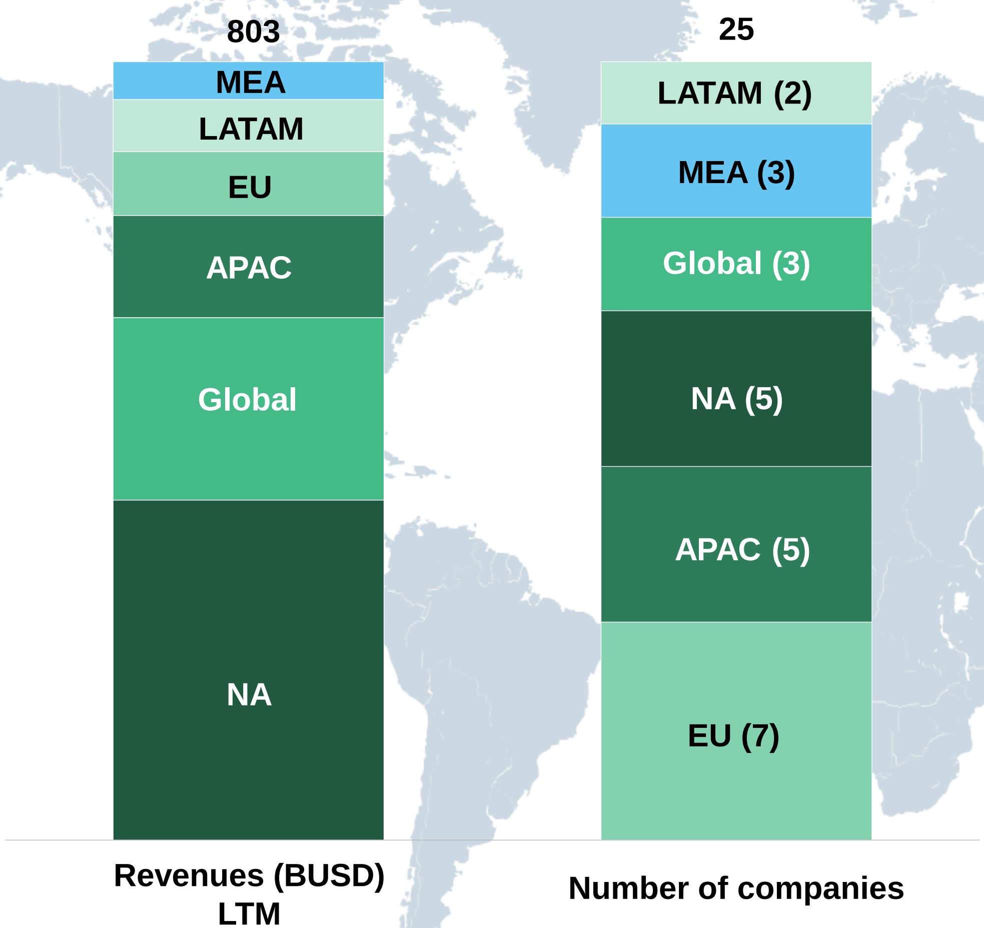
Notes: Telecom report data is based on fiscal years and calendar quarters; NOPAT: Net Operating Profit After Tax

Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Contents

The Q3'21 report covers 25 of the largest operators globally, accounting for over 800 billion USD in revenues

Report overview
Revenue in MUSD, and company breakdown by regions



Note: Global operator refers to those with transregional business establishments.
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Key takeaways from the operator segment

Key takeaways

Creating Shareholder Value

1. The ROIC of the selected operators averaged at 8.0% during LTM – a decrease by 0.4 pp. compared to LTM-1, mainly due to a lower average NOPAT margin
2. KDDI recorded the highest ROIC in the peer group at 16.1%, followed by Elisa (13.9%) and STC (13.2%). Bharti Airtel improved its ROIC the most in LTM (+3.4%) as a result of strengthened balance sheet and improved financial and operating performance

Revenue Performance

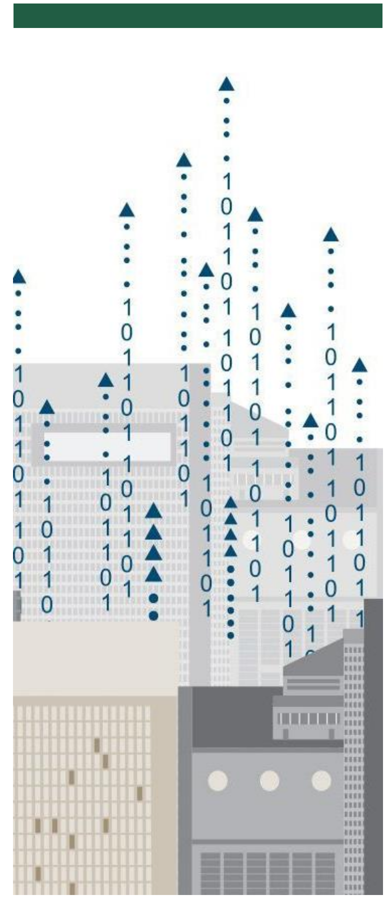
1. The YoY quarterly revenues for each region stayed relatively constant, except for a 1% increase in the MEA region; all other regions had decreasing revenue in YoY
2. Turkcell had the most significant revenue improvement YoY, owing to an increase in subscriber gains in all operating regions

Margin Performance

1. Averaged yearly EBITDA margin for selected operators grew from 32.7% (2017) to 34.1% (LTM), while NOPAT margins flattened around 12.5%
2. Turkcell and Bharti Airtel's had strong EBITDA developments during Q3'21 compared to Q3'20, resulting in the two highest EBITDA margin during the quarter in the peer group

Capital Expenditure

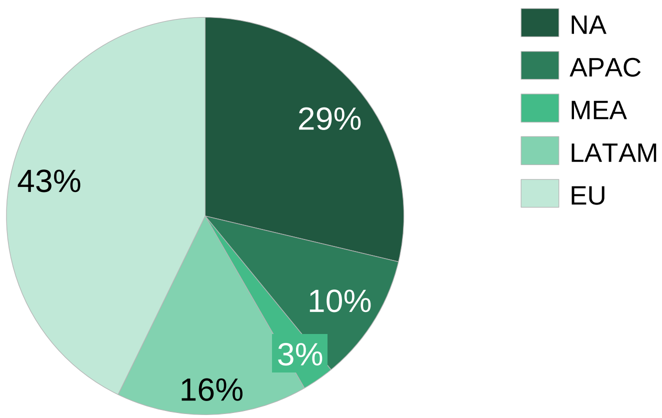
1. From 2017 to LTM, North American operators cut back on CAPEX by 21.5%, while European operators increased in CAPEX during the same period, from 17.3% to 18.8%
2. CAPEX over sales averaged at 15.2% in Q3'21, and more than half of the operators experienced a positive YoY CAPEX development



Q3’21 events across the Operator segment

Industry news

Aug-2021	**The Middle East** payment revolution bring many opportunities for telecom-company-backed wallets to capture market shares because of regulatory changes.
Sep-2021	**5G** typically requires vast amounts of investments while return is unclear, thus operators need to continuously reinvent business support systems (BSS) and operational support systems (OSS).
Sep-2021	**Telecommunication companies** are expected to increase their network coverage and density, adding spectrum and upgrading active. Thus, it is essential to explore monetization opportunities.
Sep-2021	There were **82 completed M&As** during Q3’21 in the Telecom industry (see figure below). More than $115B were generated in the first three quarters; North America and EU contributed to most part of it (60 deals).



No. of M&A deals completed in Q3’21 per region

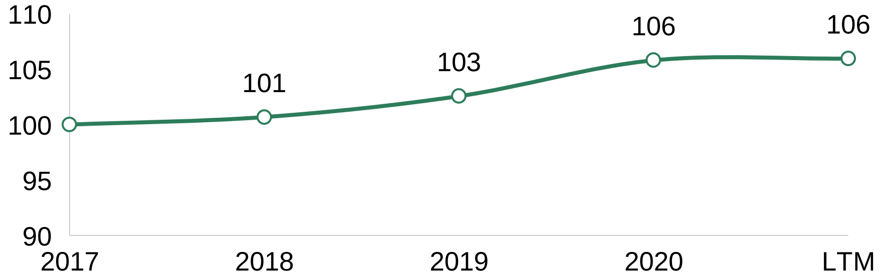
Source: Press & News, Applied Value Analysis.

Operator news

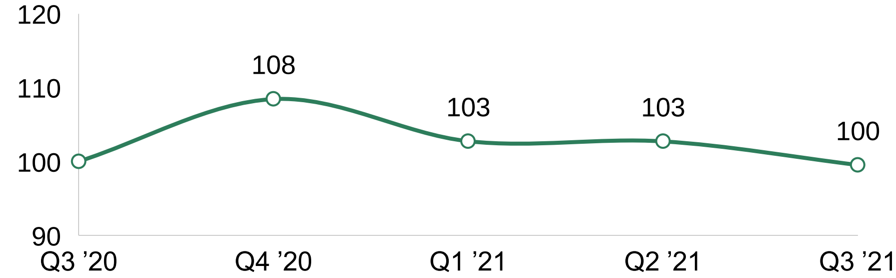
Sep-2021	**AT&T** was awarded as Nation’s Best 5G Network and America’s Most Reliable 5 Network in the US. The awards are backed by AT&T’s fast, stable, high coverage 5G network and its proactive network security teams. AT&T started to integrate its Cloud Voice with Microsoft Teams aiming to provide business-grade voice calls.
Sep-2021	**Vodacom Group Ltd.** decided to fund Safaricom Telecommunications Ethiopia Plc with the aim to expand its appealing in Africa and build world-class services in the region.
Aug-2021	**China Telecom** raised $8.4bn in Shanghai debut a few months after delisting from the NYSE. Proceeds will be used to further invest in 5G, develop services for industrial-internet uses and cloud infrastructure projects.
Jul-2021	The **Telia-Ericsson alliance** beats the Swedish 5G speed record, and the collaboration accelerates the 5G coverage and 4G capacity. They also partnered with Qualcomm Technologies to test the industry-first feature in Telia’s commercial 5G network: reducing smartphone battery consumption while boosting customers gaming experience as a result of shortened latency.
Sep-2021	**America Movil and Liberty Latin America** made an announcement that they will combine their Chilean operations into a joint venture, and the run-rate synergies are expected to achieve $180M.

Revenue showed strong seasonality on a quarterly basis in all regions except MEA, while LTM revenues remained at 2020 levels

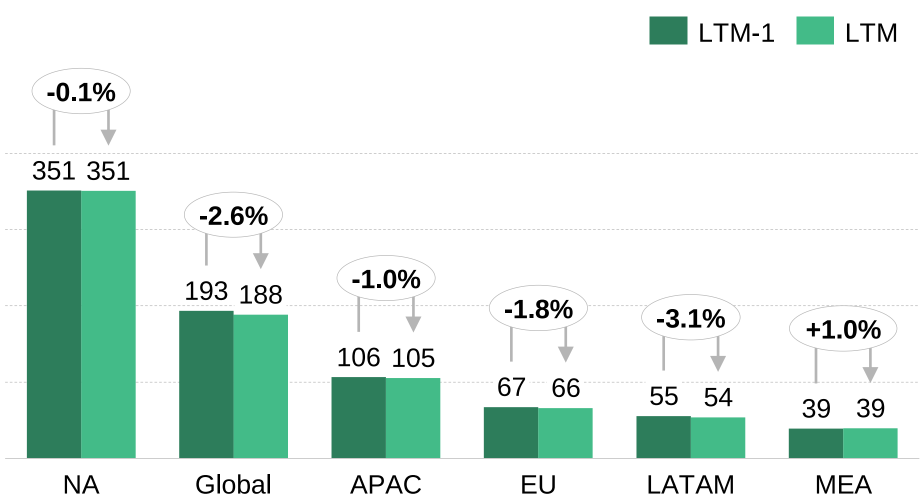
Indexed Yearly revenues
2017 - LTM (index 2017=100)



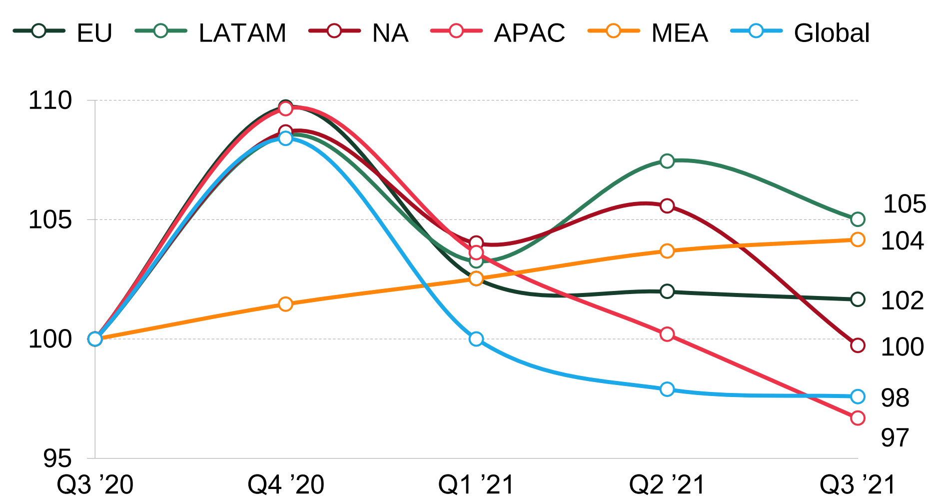
Indexed Quarterly revenues
Q3'20 – Q3'21 (index Q3'20=100)



Yearly revenues by region
LTM-1 (Q4'19 – Q3'20), to LTM (Q4'20 – Q3'21), BUSD



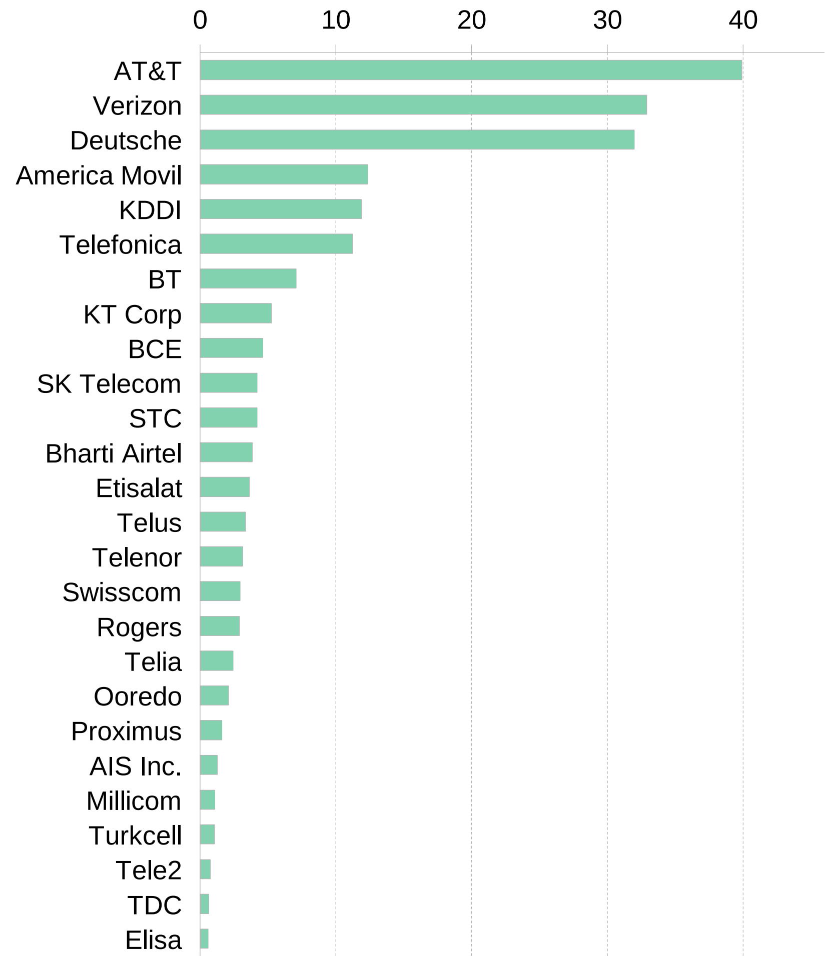
Indexed Quarterly revenues by region
Q3'20 – Q3'21 (index Q3'20=100)



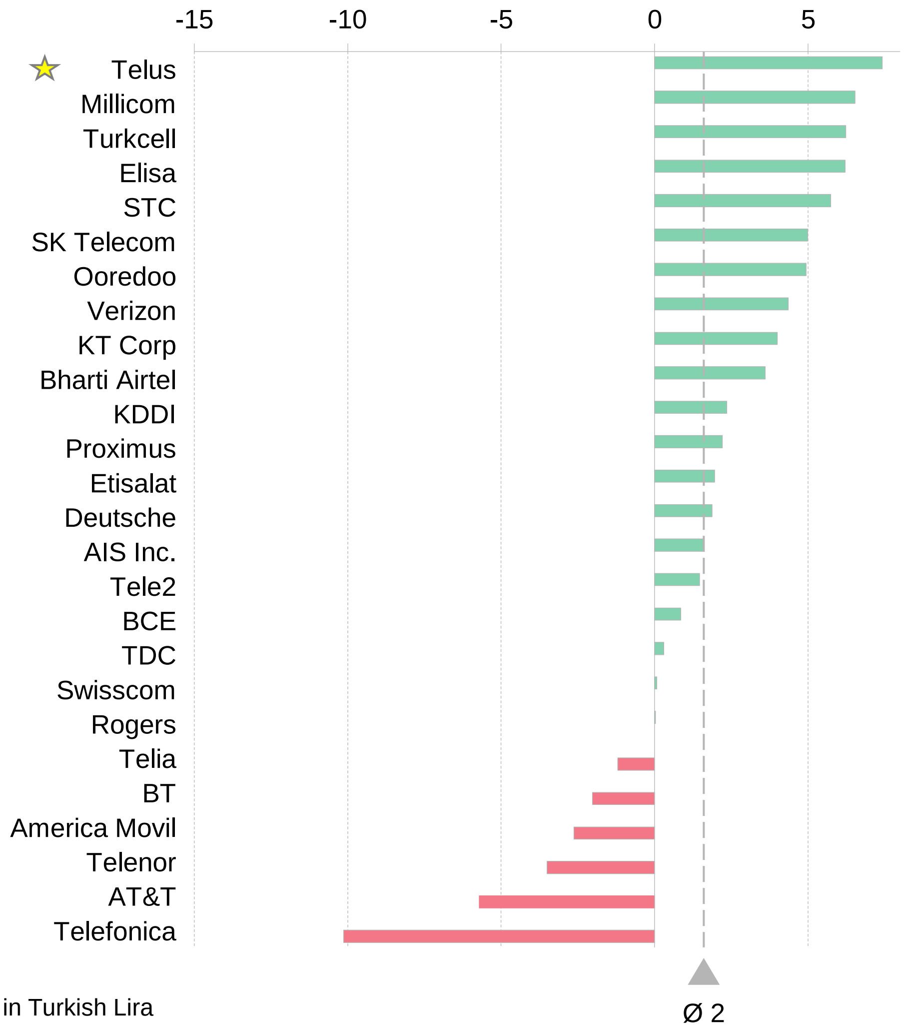
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Most operators reported positive YoY revenue development; Telus grew 7% from acquiring new clients and expanding its services for existing customers

Revenue by operator
Q3'21 BUSD



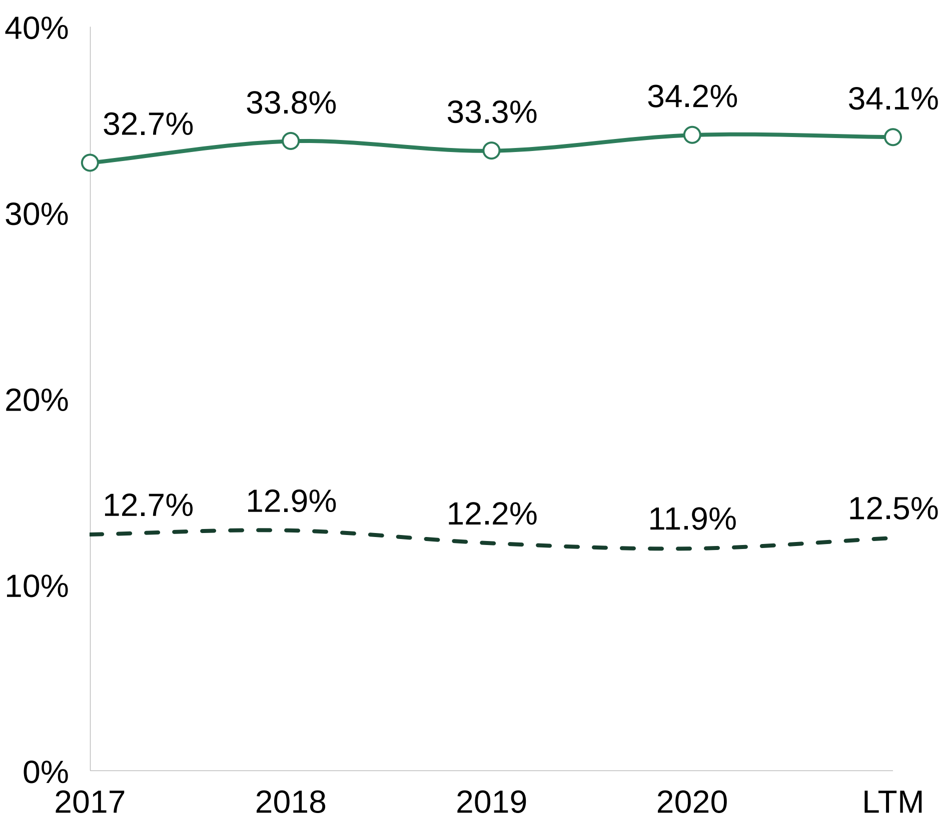
Revenue development by operator
Delta (Q3'21 vs. Q3'20), %, filing currency



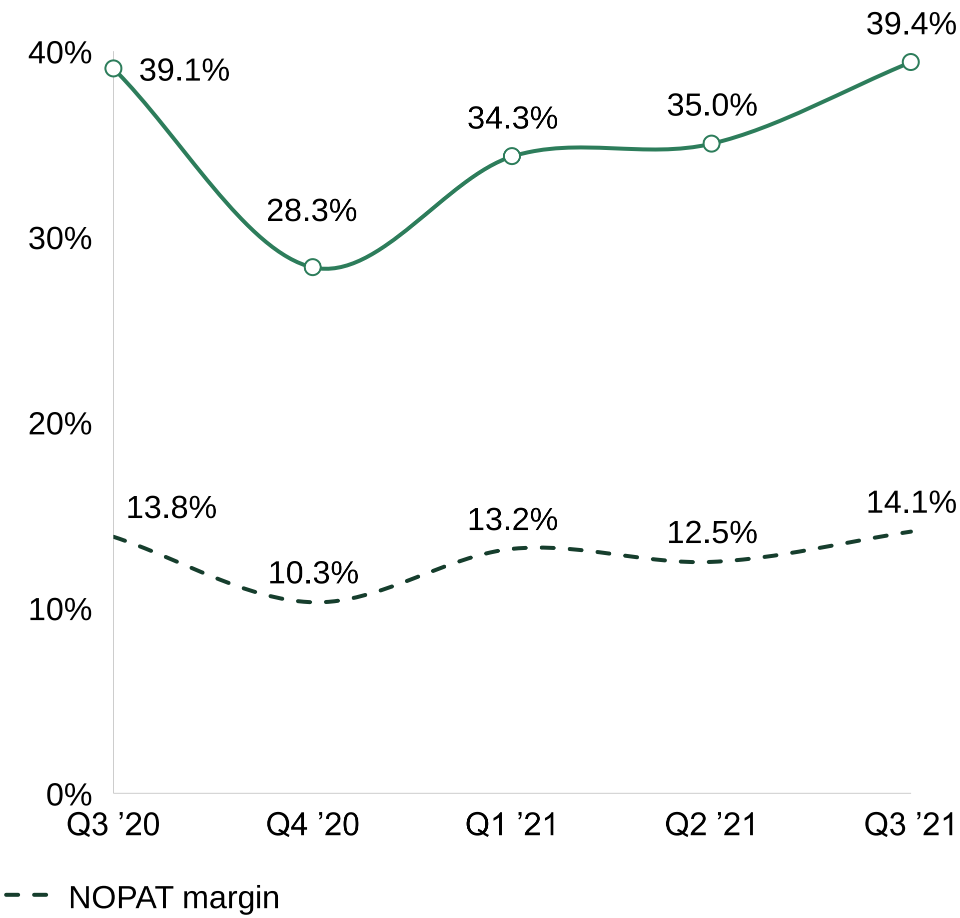
Note: Turkcell revenue development calculated in USD to equalize inflation in Turkish Lira
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Quarterly EBITDA margin recovered to the Q3'20 level; considerable EBITDA margin advancements are yet to be passed through to NOPAT

Yearly profitability development
2017 - LTM, %



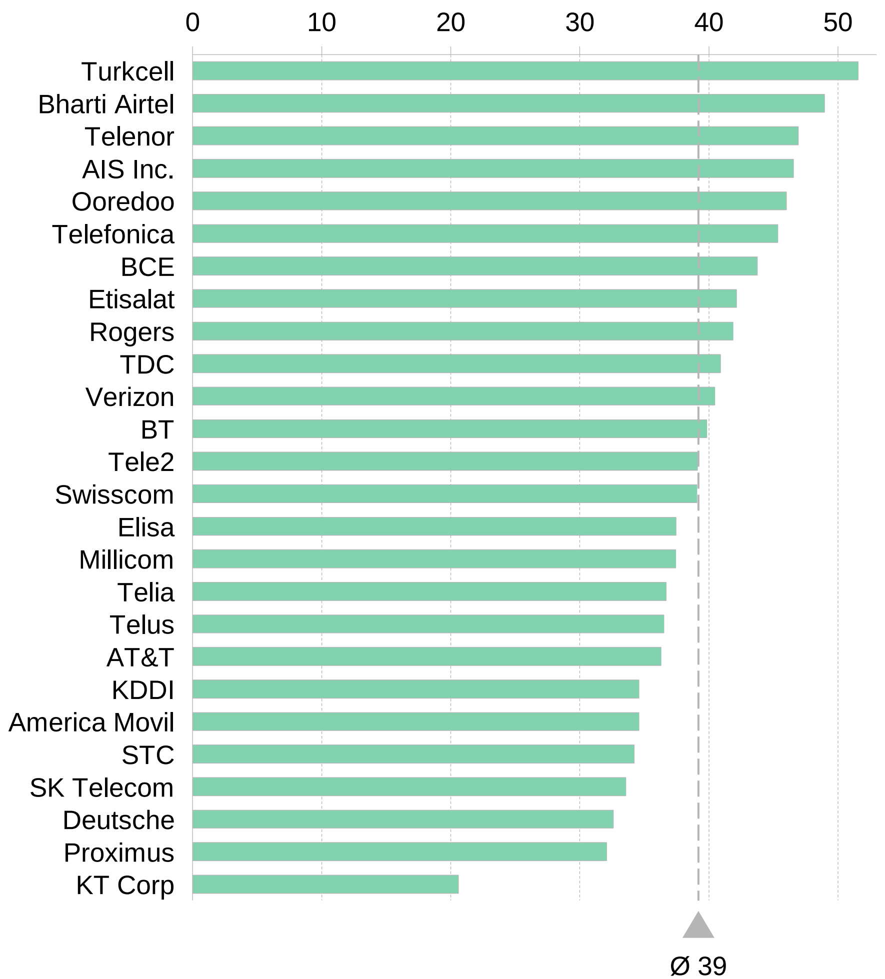
Quarterly profitability development
Q3'20 – Q3'21, %



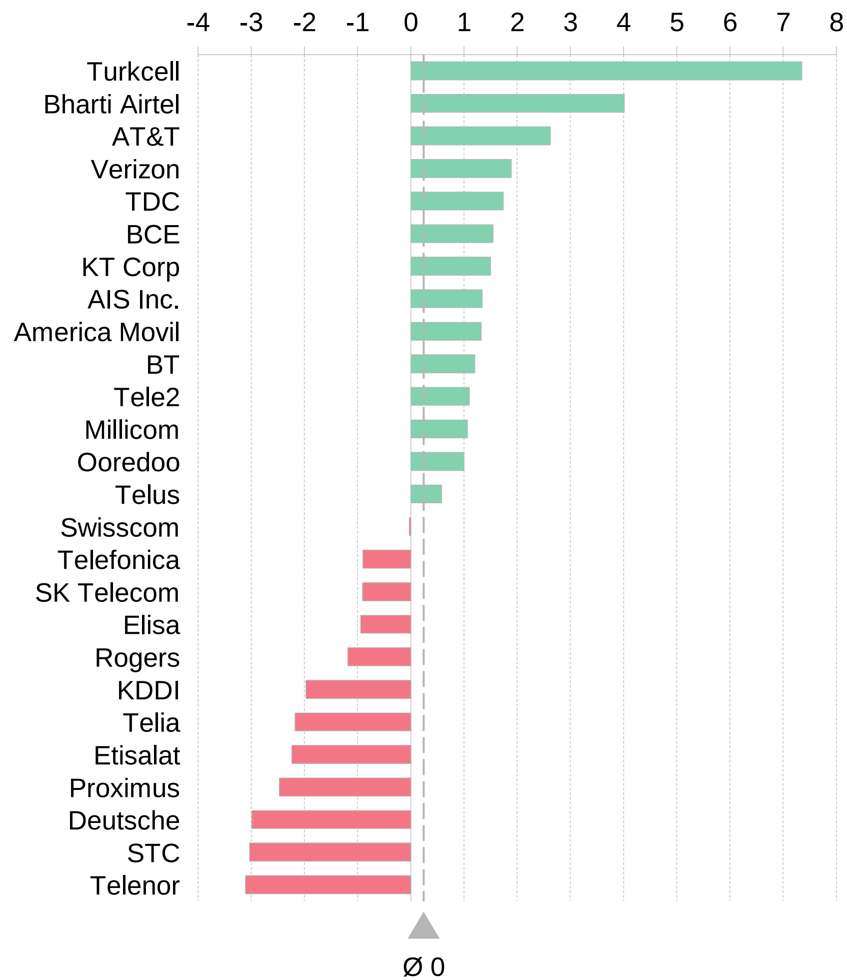
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

EBITDA margins averaged at 39.6% in Q3’21; 12 out of 25 analyzed operators achieved a YoY EBITDA margin improvement

EBITDA margin by operator
Q3’21, %



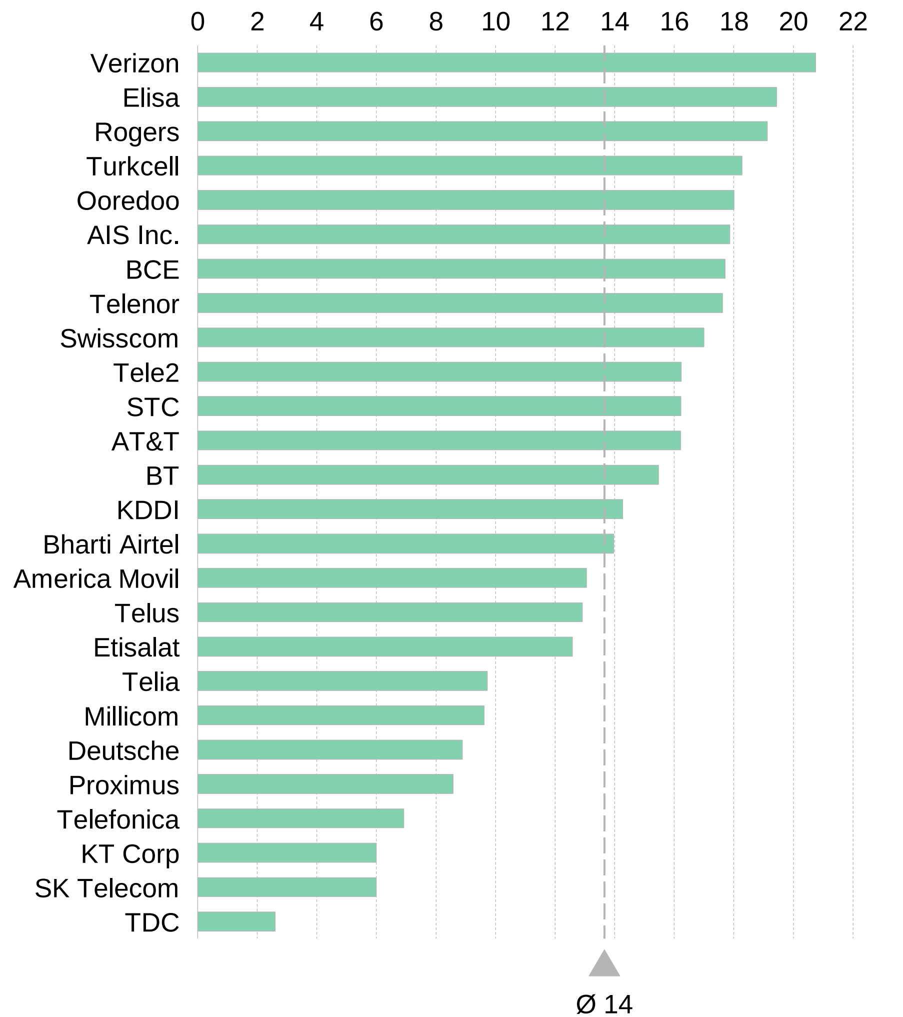
EBITDA margin development by operator
Delta (Q3’21 vs. Q3’20), p.p.



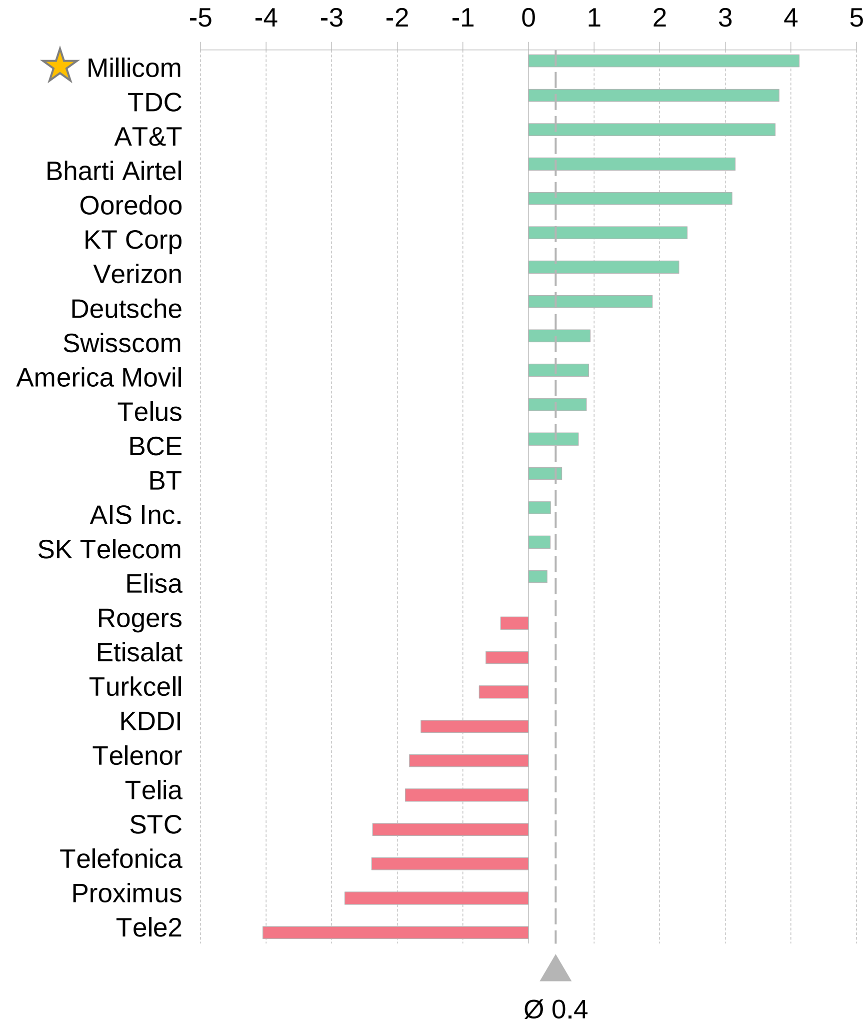
Note: KT Corp excluded from analysis due to missing data.
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

More than half of the operators presented positive YoY NOPAT development; Verizon recorded the highest NOPAT margin in the peer group at 20.8%

NOPAT margin by operator
Q3’21, %



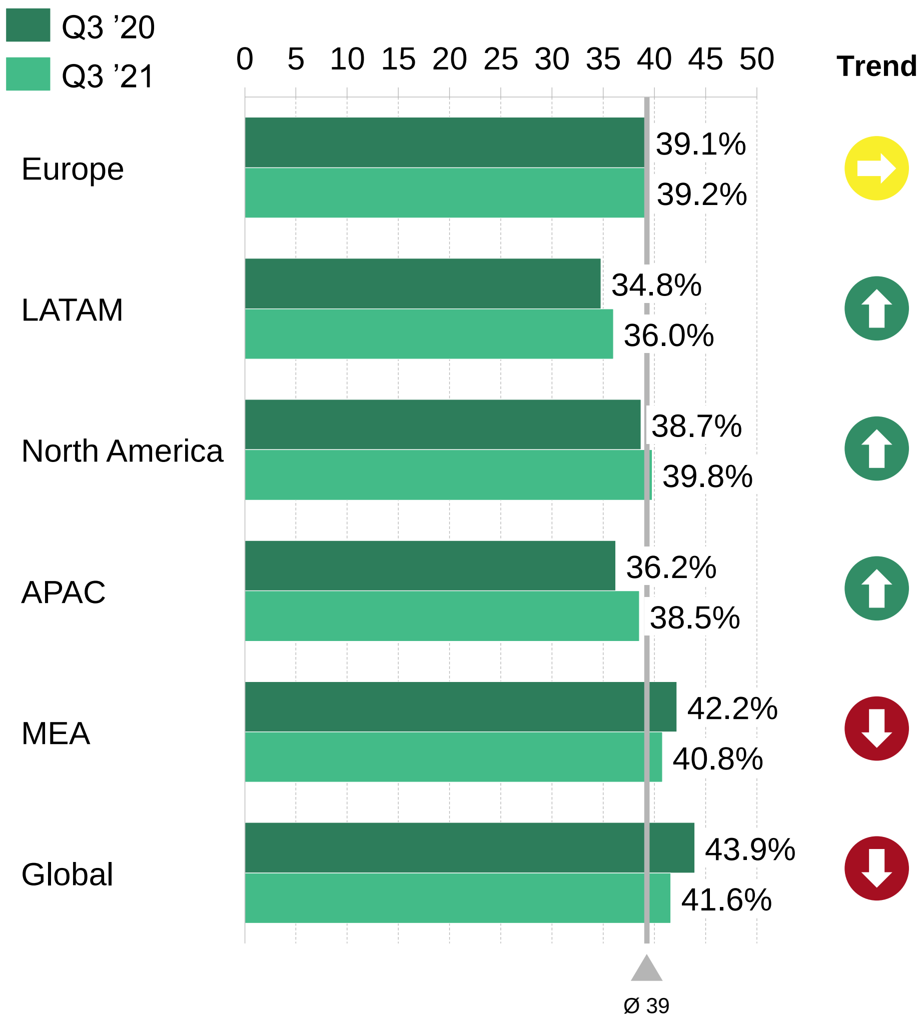
NOPAT margin development by operator
Delta (Q3’21 vs. Q3’20), pp.



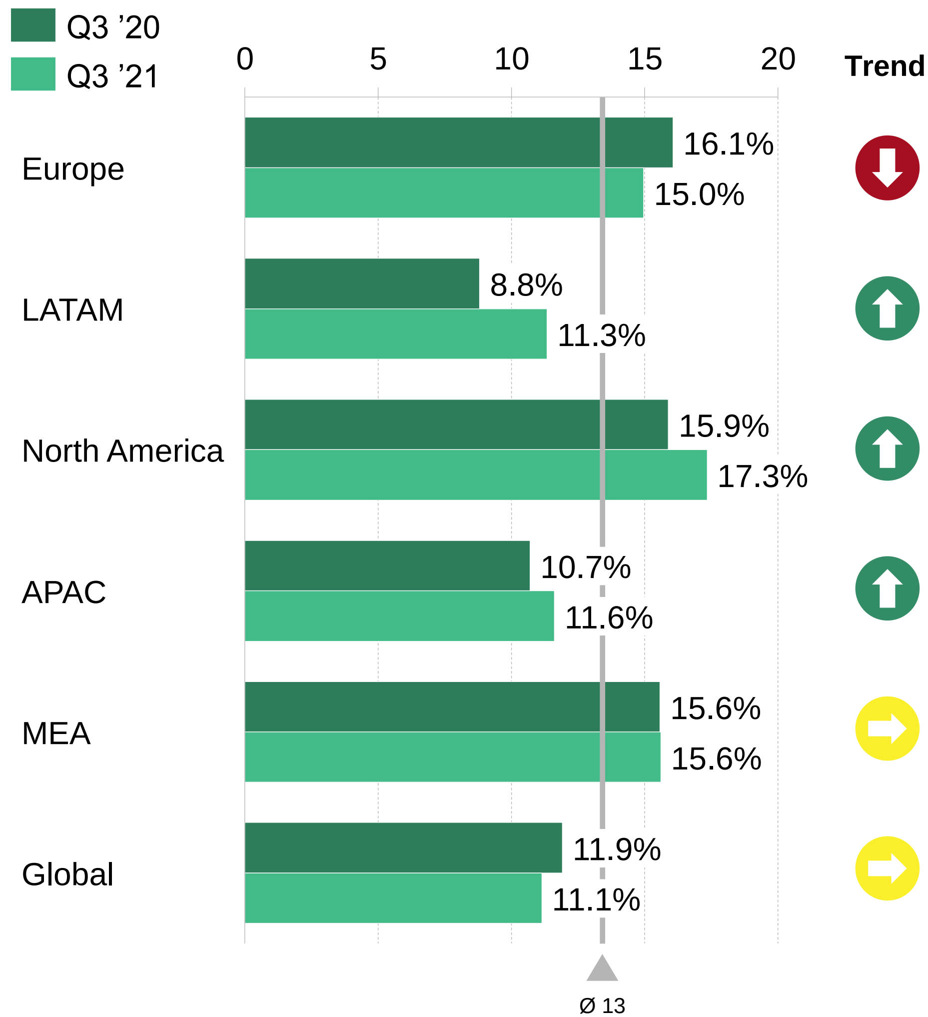
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

The NOPAT margin of LATAM operators increased considerably with ~3 pp. YoY, but is still falling behind the segment average NOPAT margin

Average EBITDA margin by region

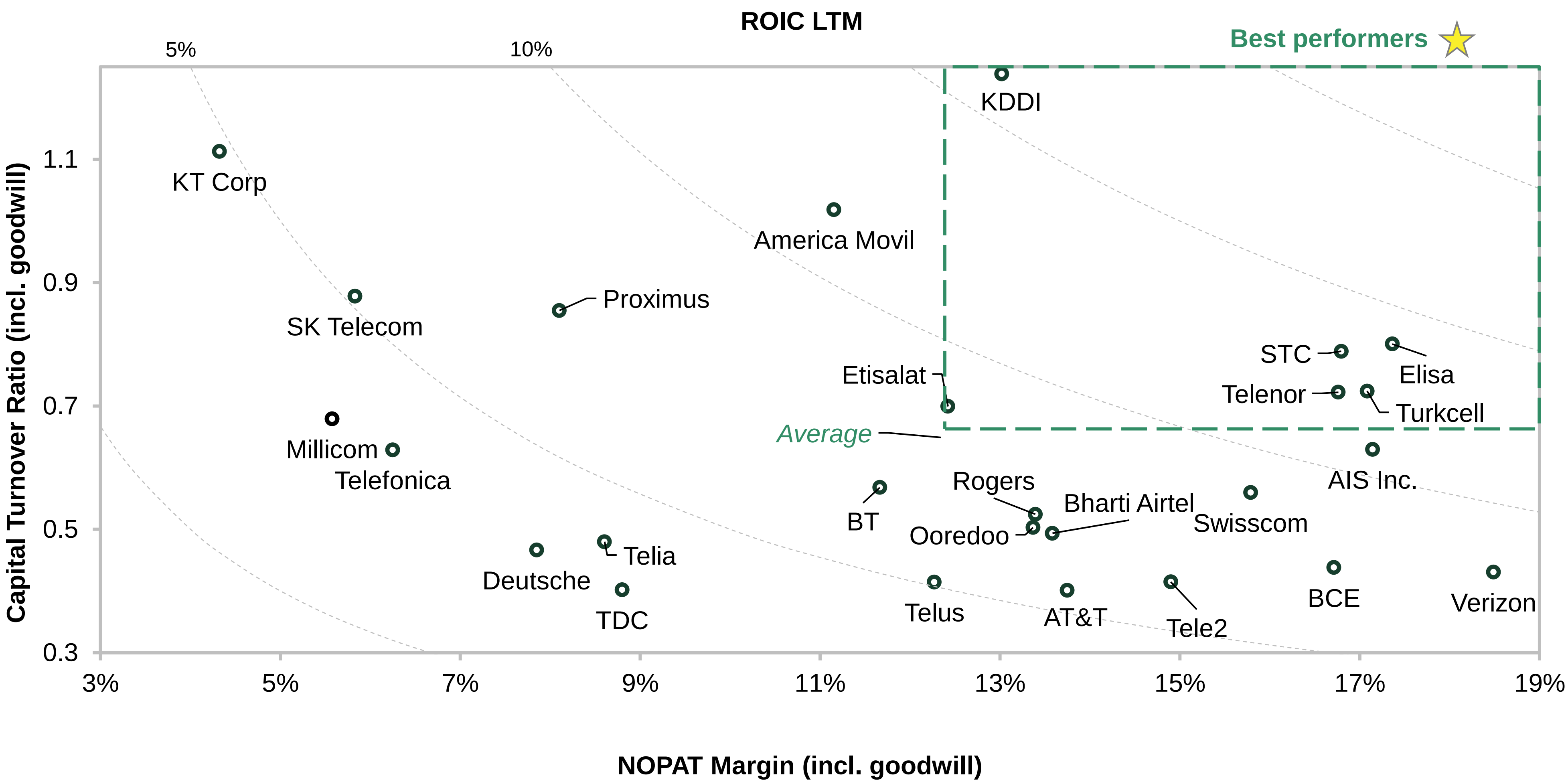


Average NOPAT margin by region



Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

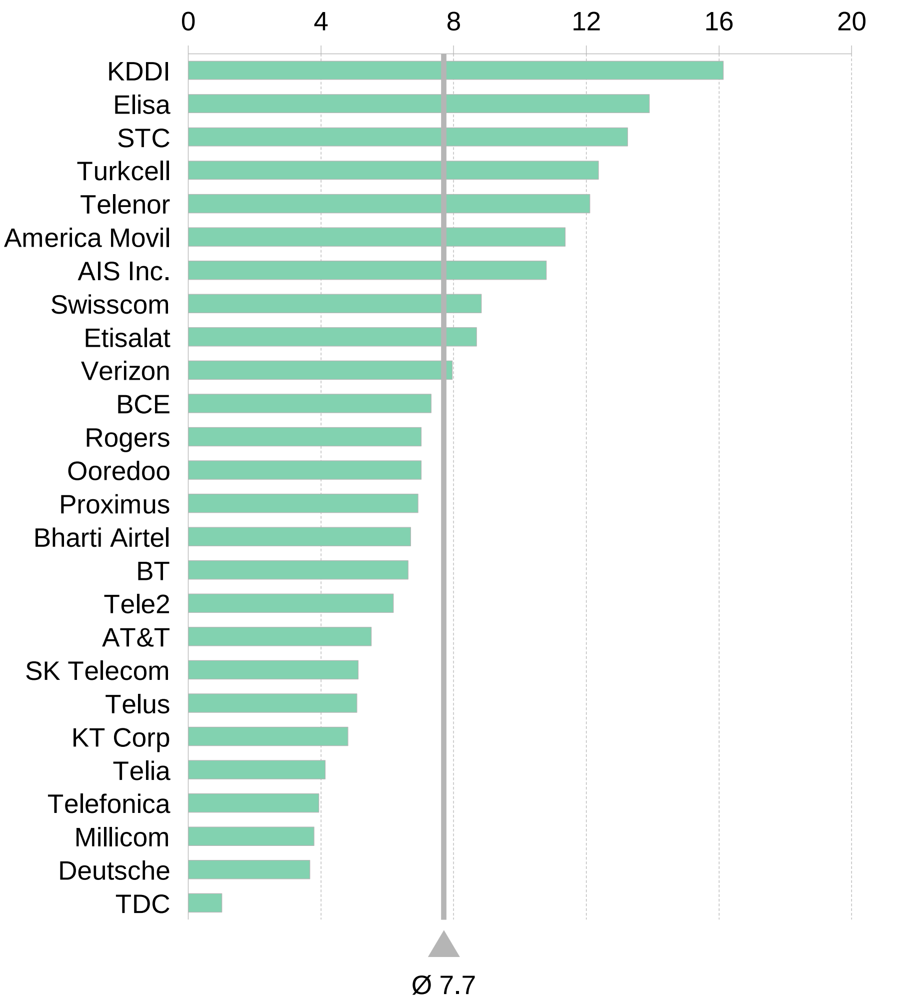
KDDI reached the highest CTR with higher-than-average NOPAT margin; STC, Elisa and Turkcell were also top performers with high NOPAT margins



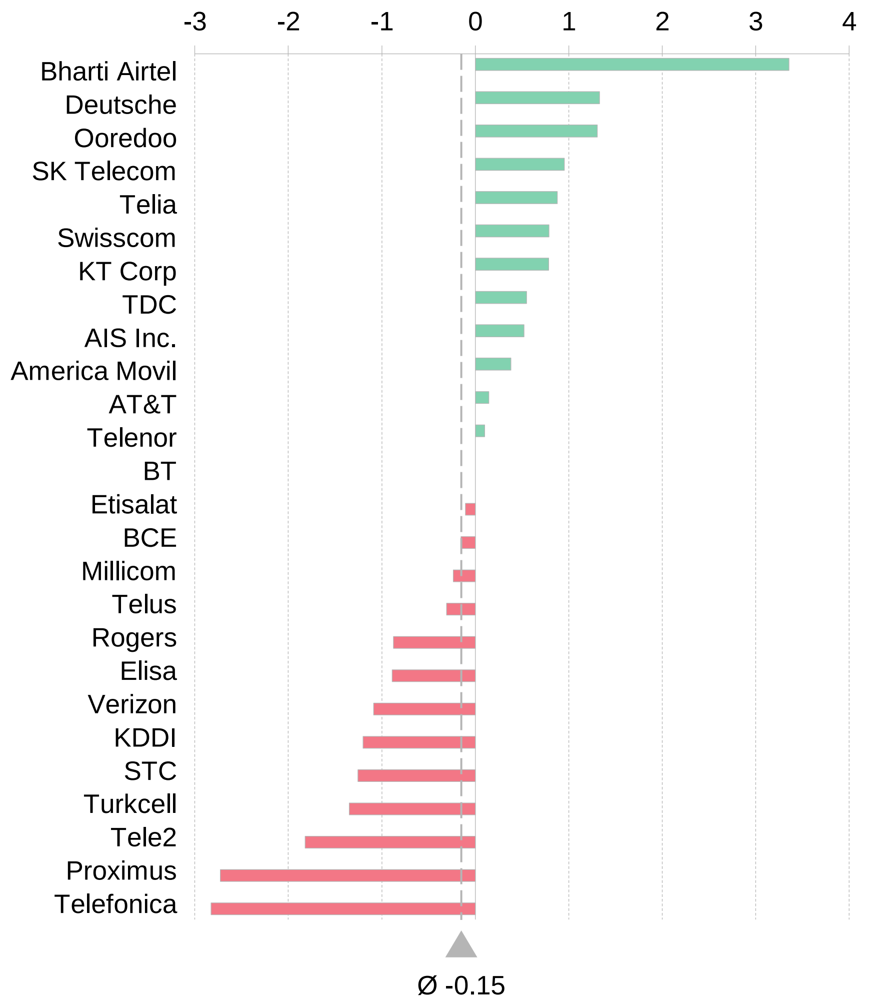
Note: ROIC = Return on Invested Capital (actual return that the company has generated after tax).
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

The segment average ROIC decreased YoY from 8.2% to 8.0% in LTM; Bharti Airtel stands out with an improvement of 3.4 pp.

ROIC by operator
LTM (Q4' 20 – Q3' 21), %



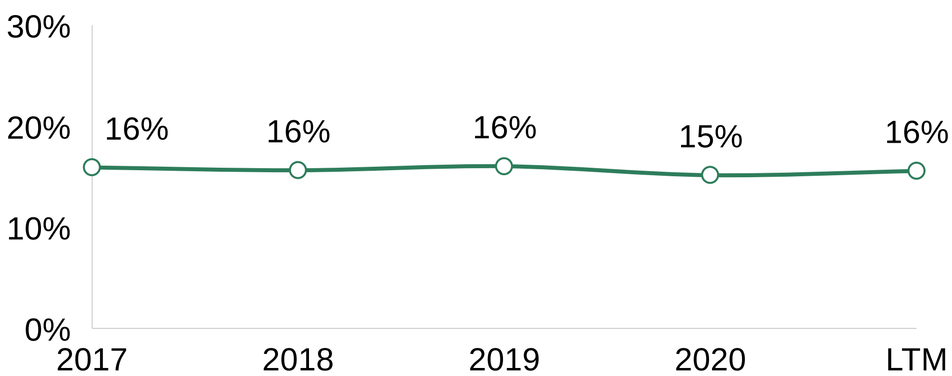
ROIC development by operator
Delta (LTM vs. LTM-1), p.p.



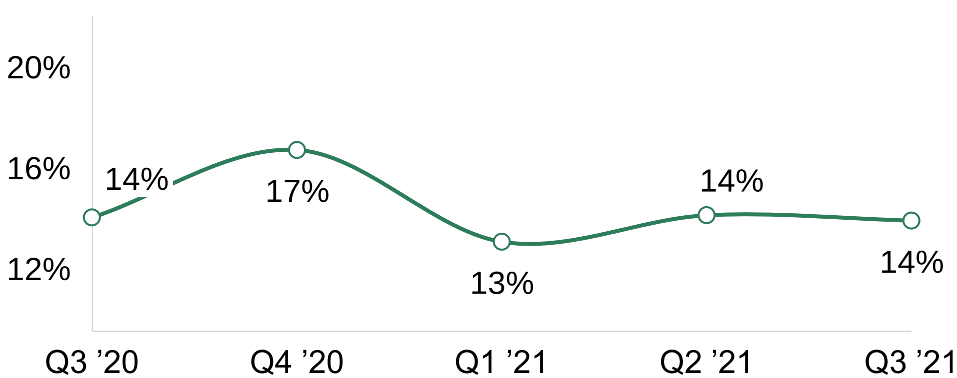
Note: British Telecom excluded from analysis due to missing data.
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Yearly CAPEX/Sales has remained virtually unchanged over the last 4 years

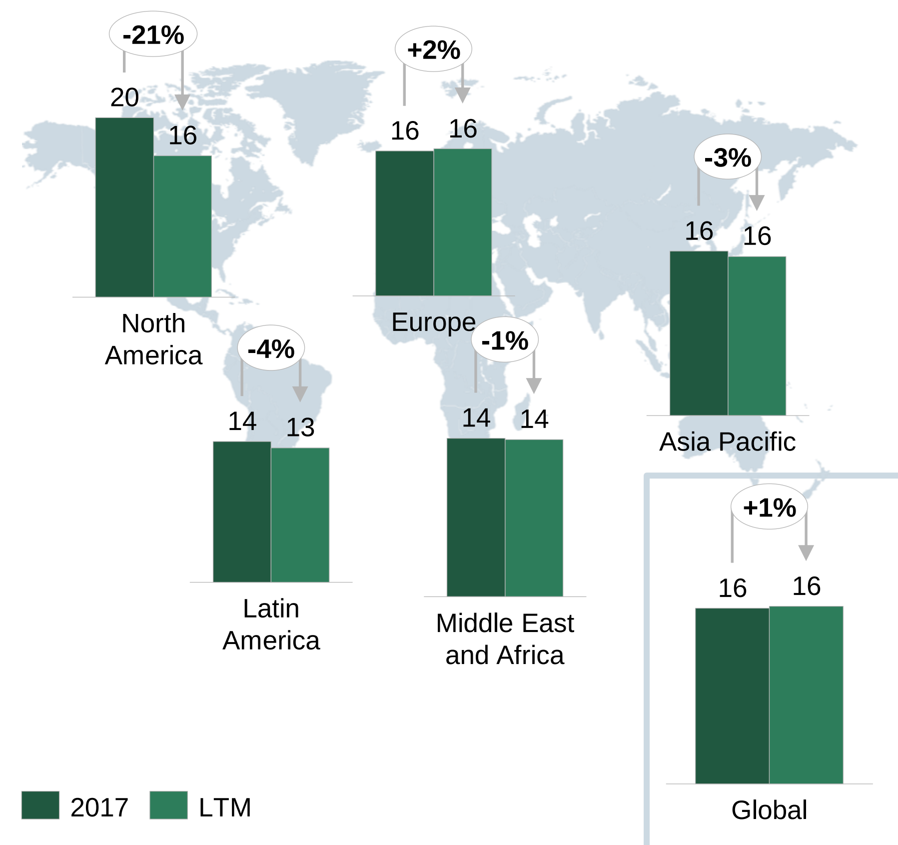
Yearly CAPEX over sales
2017 - LTM, %



Quarterly CAPEX over sales
Q3'20 – Q3'21, %



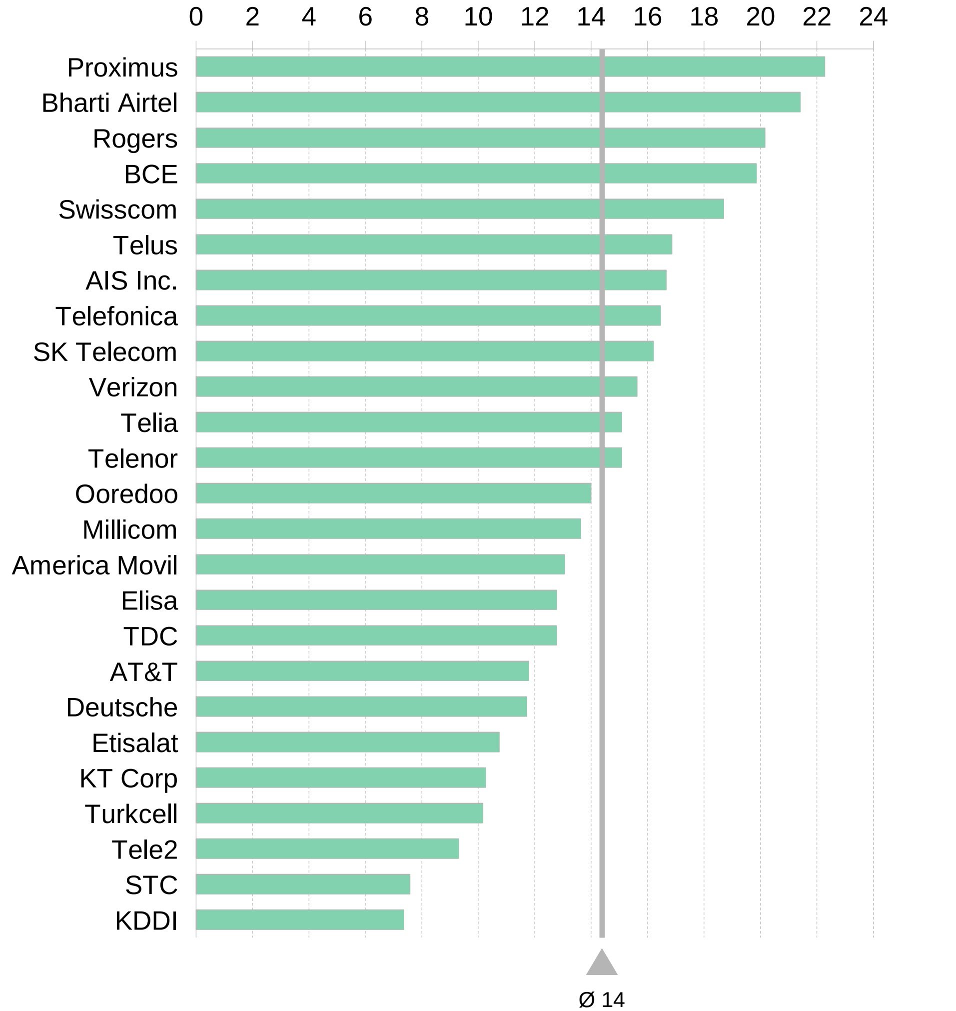
CAPEX over sales by region
2017 vs. LTM, %



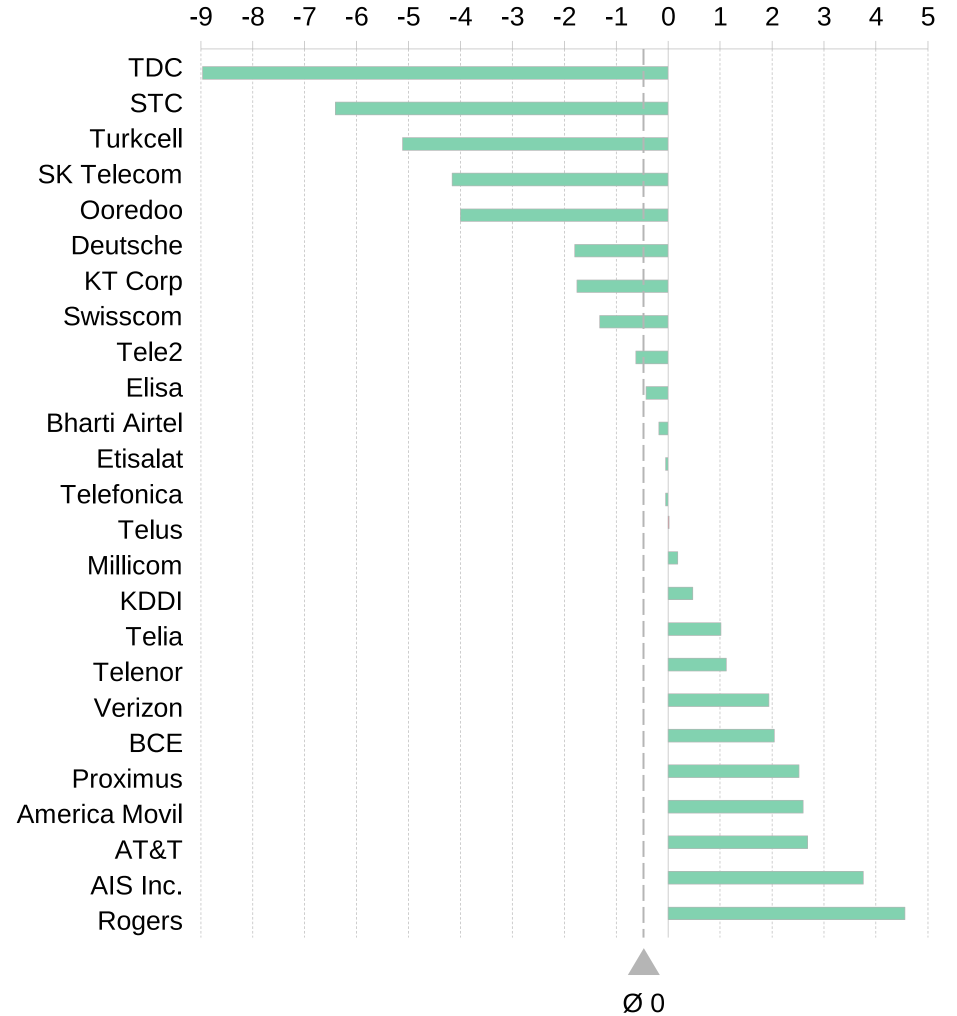
Source: Capital IQ, Annual & quarterly reports, GMT Research, Applied Value Analysis.

Rogers upgraded its wireless network in Q3'21, and the Wireless segment CAPEX increased by 60% to $365M compared with Q3'20

CAPEX over sales by operator
Q3'21, %



CAPEX over sales development by operator
Delta (Q3'21 vs. Q3'20), p.p.

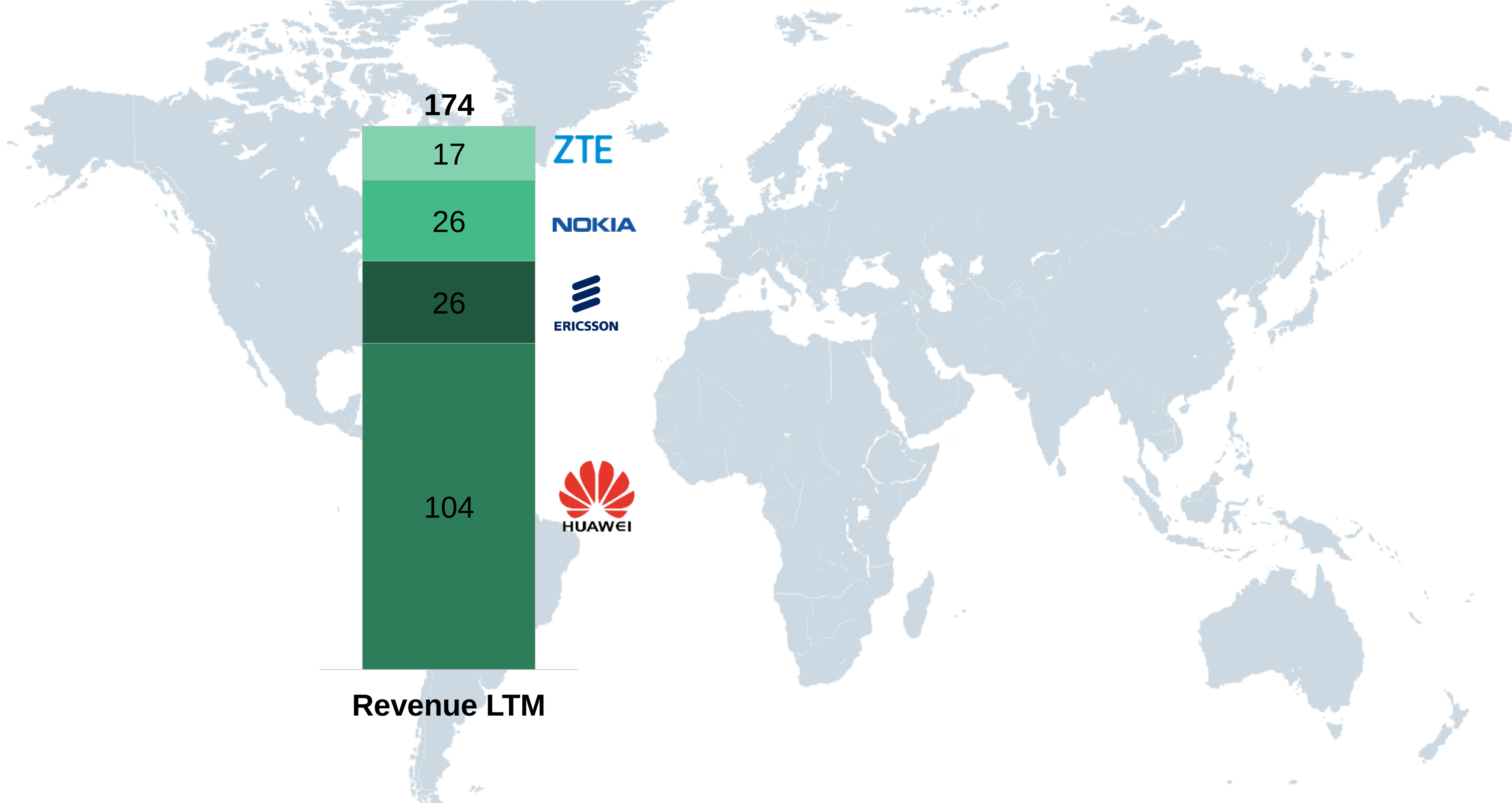


Note: British Telecom excluded from analysis due to missing data.
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Contents

The Q3 2021 Report includes the four major infrastructure players – ZTE, Ericsson, Nokia and Huawei

Report overview
Revenue in BUSD



Notes: Revenue based on group revenue; Huawei LTM revenue data based on market projections.
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Key takeaways from the Infrastructure OEM segment

Key takeaways

Industry News	1. 'All-optical' network is the cornerstone of the digital economy transformation – it increases bandwidths, which results in reduced wireless traffic, and supports ecosystems via greener transmissions 2. Many telcos started implementing pay-as-you-go cloud services with Infrastructure as a Service, Platform as a Service and Software as a Service models – which required large amounts of capital
Creating Shareholder Value	1. Ericsson achieved the highest ROE (24.6%) among the four companies. It's LTM ROIC increased by 1.9pp. YoY, driven by an increase of 0.9pp. in NOPAT margin 2. Huawei's ROIC suffered for the third consecutive year, mainly due to a sharp reduction in capital turnover rate
Revenue Performance	1. All companies except ZTE experienced revenue reduction over LTM relative to FY2020 2. Nokia was the only company with negative yearly revenue growth (-6.8%) from FY2017 to LTM
Margin Performance	1. Ericsson recorded the highest NOPAT margin (11.0%) in the peer group. ZTE had the lowest NOPAT margin at 4.4%, but reported a positive NOPAT margin growth rate 2. Despite a fall in revenue in LTM, Huawei managed to maintain its NOPAT margin at 6.2%
Capital Efficiency	1. Huawei's invested capital was less efficiently managed with CTR dropping from 3.9 in FY2020 to 1.4 LTM 2. Ericsson outperformed its peer infrastructure OEMs with a CTR of 2.4 – the other companies have CTRs clustered around 1.5

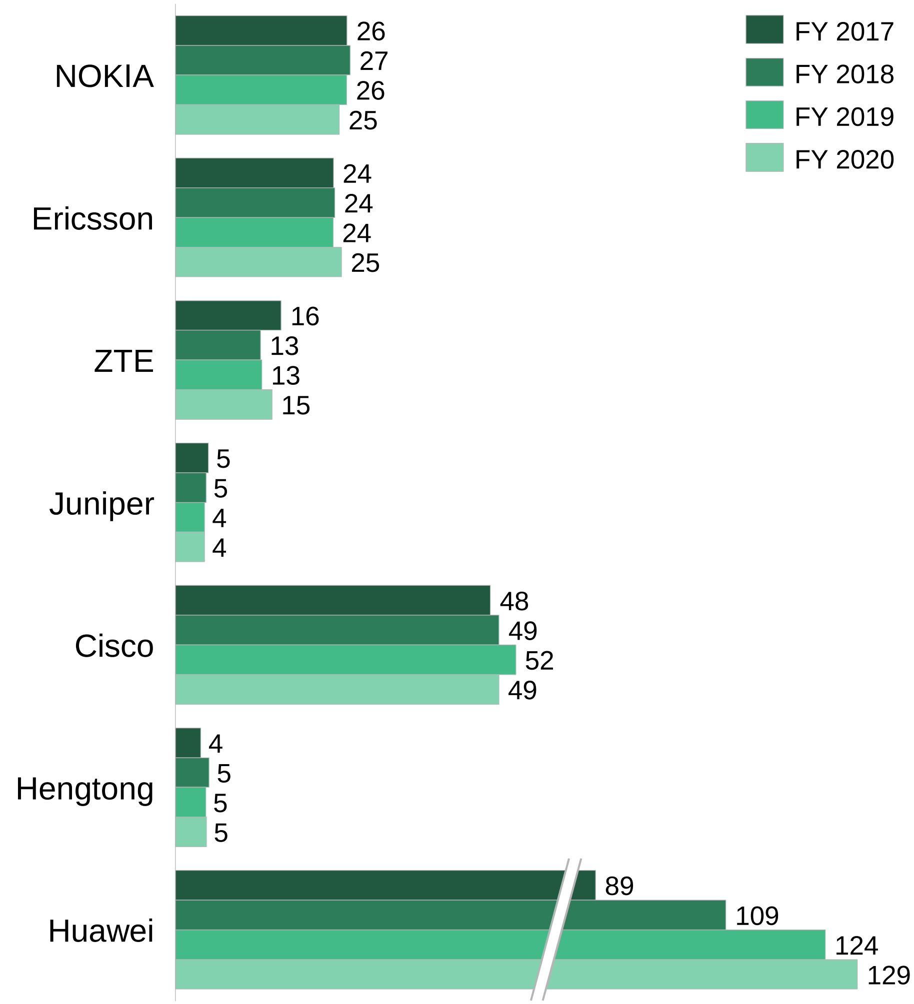
Note: Comprehensive Huawei and ZTE LTM data missing.
Source: Press & News, Economic Times, S&P Capital IQ, Applied Value Analysis

Events across the Infrastructure OEMs sector from the quarter

News and happenings for infrastructure OEMs

Jul-2021	**Nokia** entered a three-year partnership with EDC (Export Development Canada) to boost Canadian 5G development. EDC funds and provides insurance to Nokia, while Nokia provides network infrastructure with better broadband access.
Aug-2021	**Huawei**, together with China Mobile and other industry partners, published the *5G-Advanced Technology Evolution* white paper with the goal of promoting 5G in a sustainable environment.
Sep-2021	Digitalization is starting to shift from offices to production lines which requires a higher level of digital infrastructure. **Huawei** launched 4 optical products to accelerate digital transformation in a secure and reliable manner.
Sep-2021	**Ericsson** and Qualcomm successfully completed the first over-the-air 5G New Radio call on CBRS Service spectrum. This innovative combination expands private networks further into Industry 4.0 evolution.
Sep-2021	The U.S. regional telecom company Viaero Wireless replaced its network equipment provider LTE with **Ericsson**, aiming to upgrade end-to-end 5G-ready products and solutions so subscriber experience can be improved through better mobility and broadband services.
Sep-2021	**ZTE**, China Mobile and NR Electric launched the first end-to-to 5G TSN deterministic network which solves network latency caused by traffic conflicts. The network incorporates renewable energy to accelerate green grid industrial ecosphere implementation.

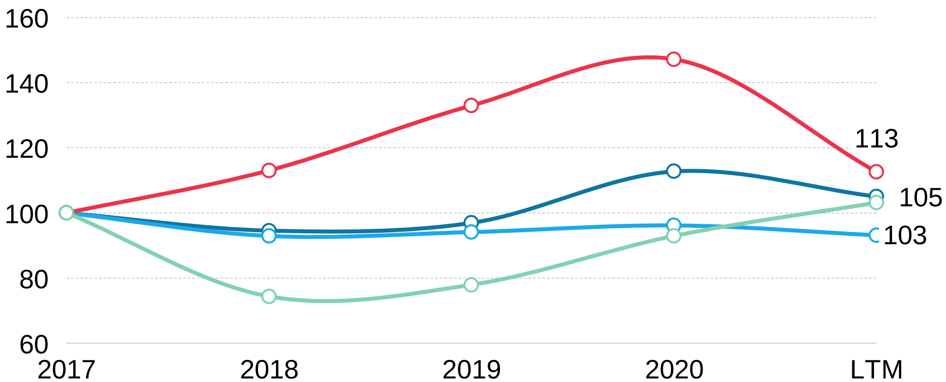
Top telecommunication infrastructure OEMs revenues
FY2017 – FY2021 (BUSD)



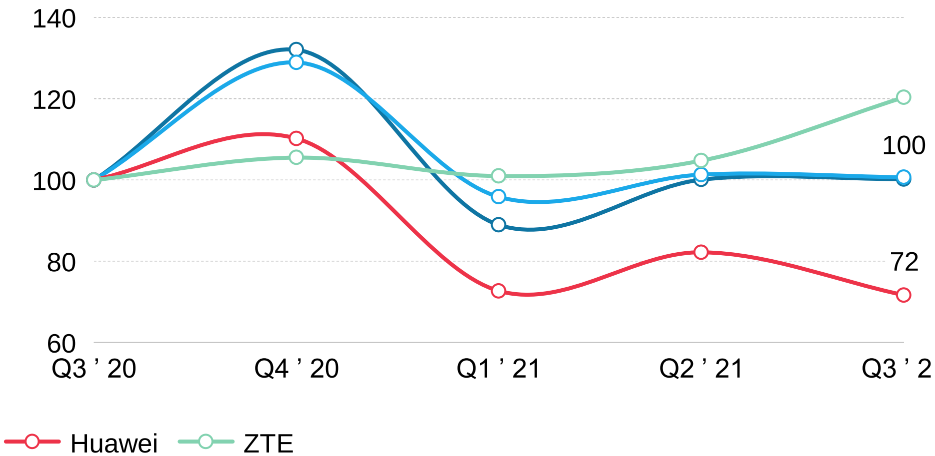
Source: Press &, News, S&P Capital IQ, Applied Value Analysis

All companies except ZTE displayed clear seasonality trends during the past year – increasing sales volume in Q4 followed by lower sales in Q1

Indexed Yearly Group Revenues
2017 – LTM (index 2017=100)



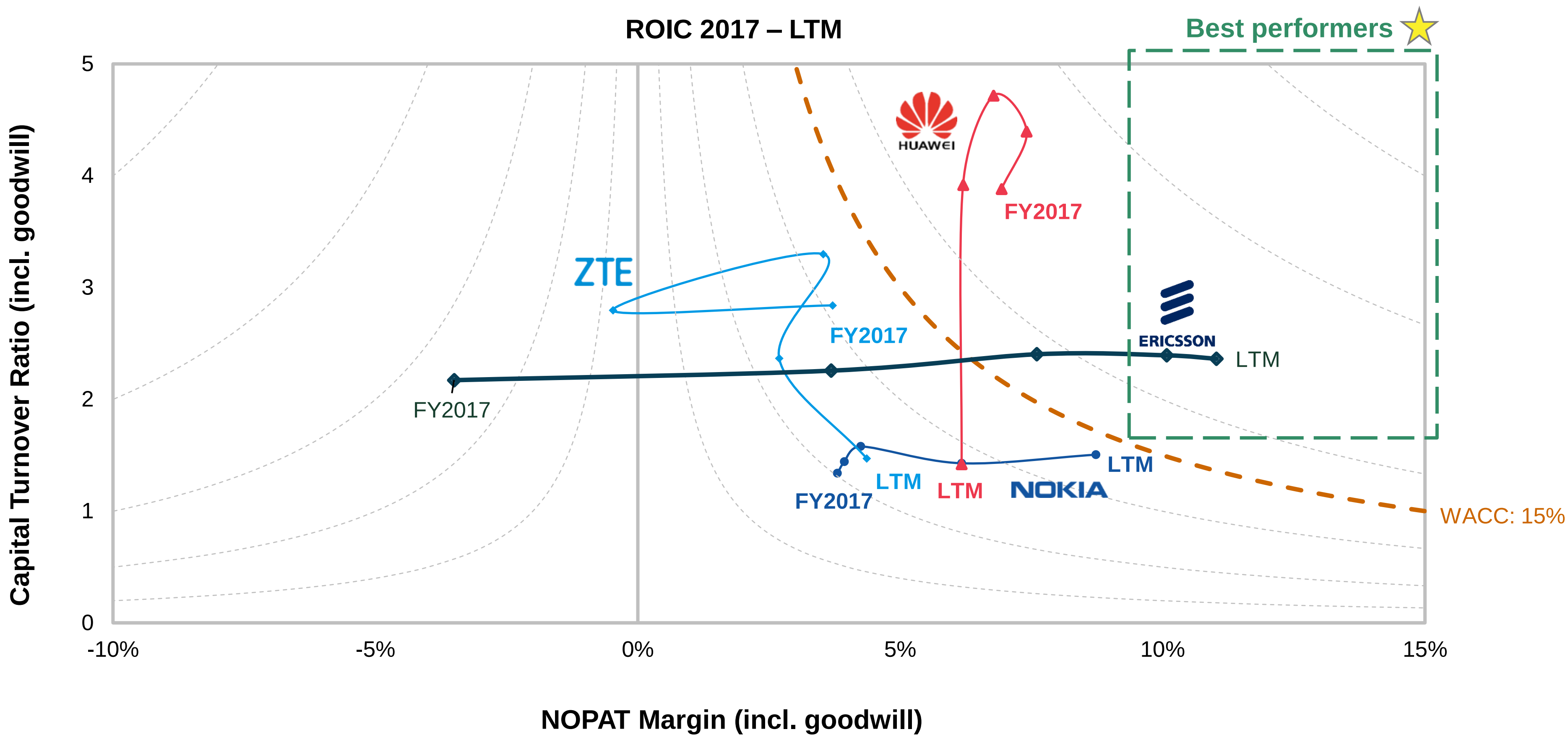
Indexed Quarterly Group revenues
Q3'20– Q3'21 (index Q4'19=100)



- Revenues for Huawei in LTM were down by over 23% compared to FY2020. External factors including trade restrictions from the U.S. led to significant decrease in consumer business segment
- ZTE achieved its highest single quarter revenues in the last three years (a 20.3% increase compared with Q3'20), and the 9-month net profit increased by 115.8% YoY
- Nokia experienced strong sales in Network Infrastructure (increased by 6% YoY) and Cloud & Network Services (increased by 12% YoY)
- Ericsson had stable YoY sales development in all regions except for Mainland China where it suffered a loss in market share. To overcome the reduction in sales, Ericsson planned to resize the sales and delivery organization in China – expected to start in Q4
- The semiconductor shortage disrupted the network equipment supply chain, slowing down the expansion of 5G. Nokia noted that as the uncertainty around global semiconductor markets continues, they would work closely with suppliers to ensure availability of components and mitigate associated cost inflations

Note: Fiscal years are used in the yearly analysis.
Source: S&P Capital IQ, Annual & quarterly reports, Press Release, Economic Times, Applied Value Analysis.

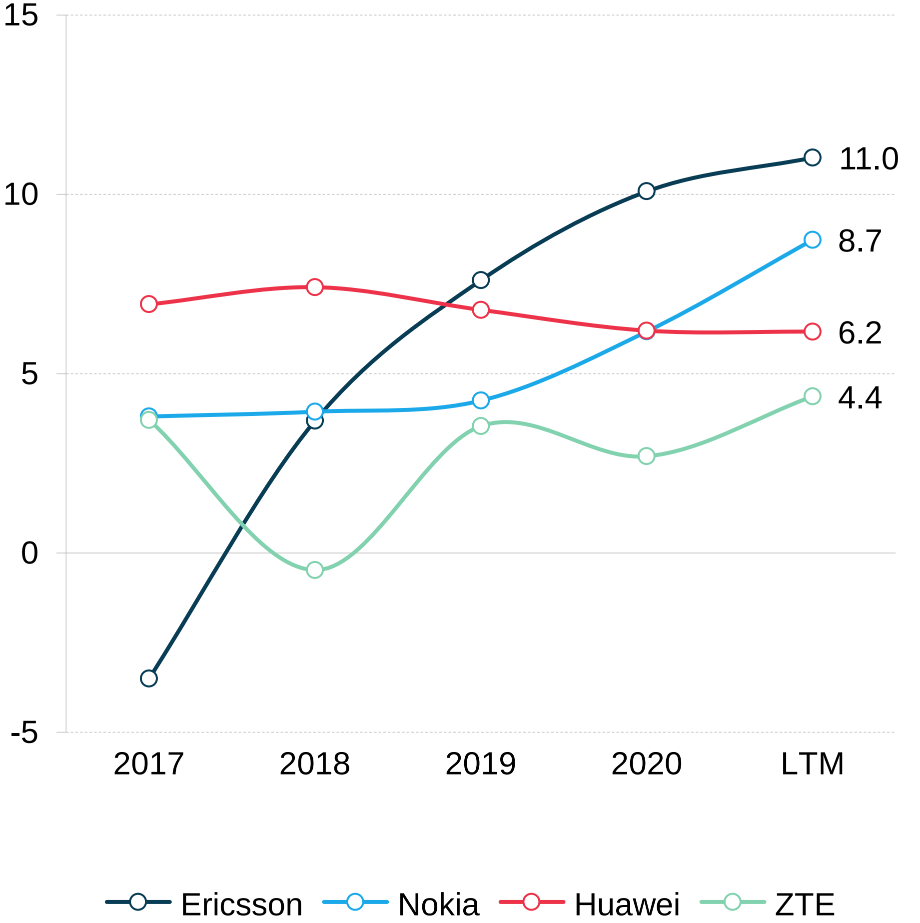
Within the peer group, only Ericsson managed to achieve a ROIC above the industry average WACC of 15%; Huawei's CTR dropped significantly

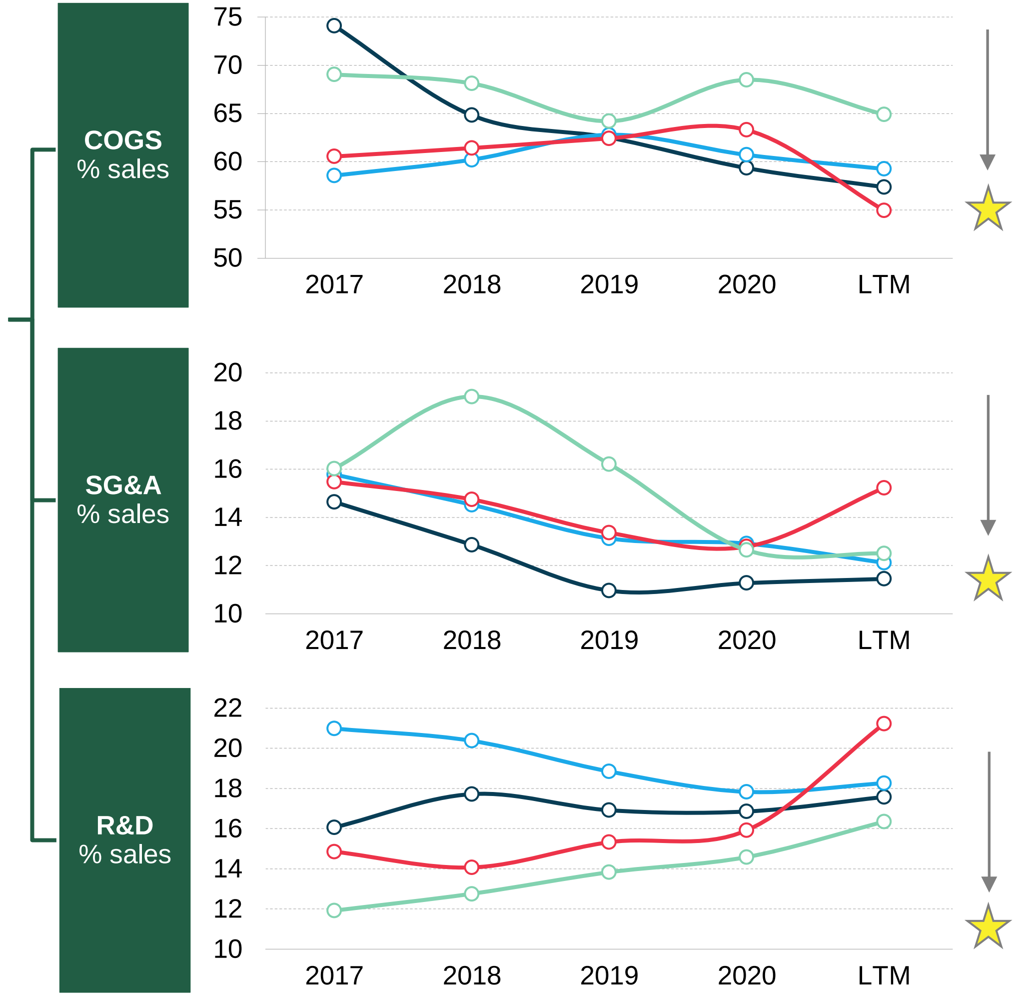


Note: Fiscal years are used in the yearly analysis. Huawei reports annually. LTM ROIC analysis of Huawei and ZTE is based on data from Q4'21 – Q3'21.
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Ericsson continues to record the highest NOPAT margin in the peer group, while all analyzed companies decreased its COGS over sales ratio in LTM

NOPAT margin, %

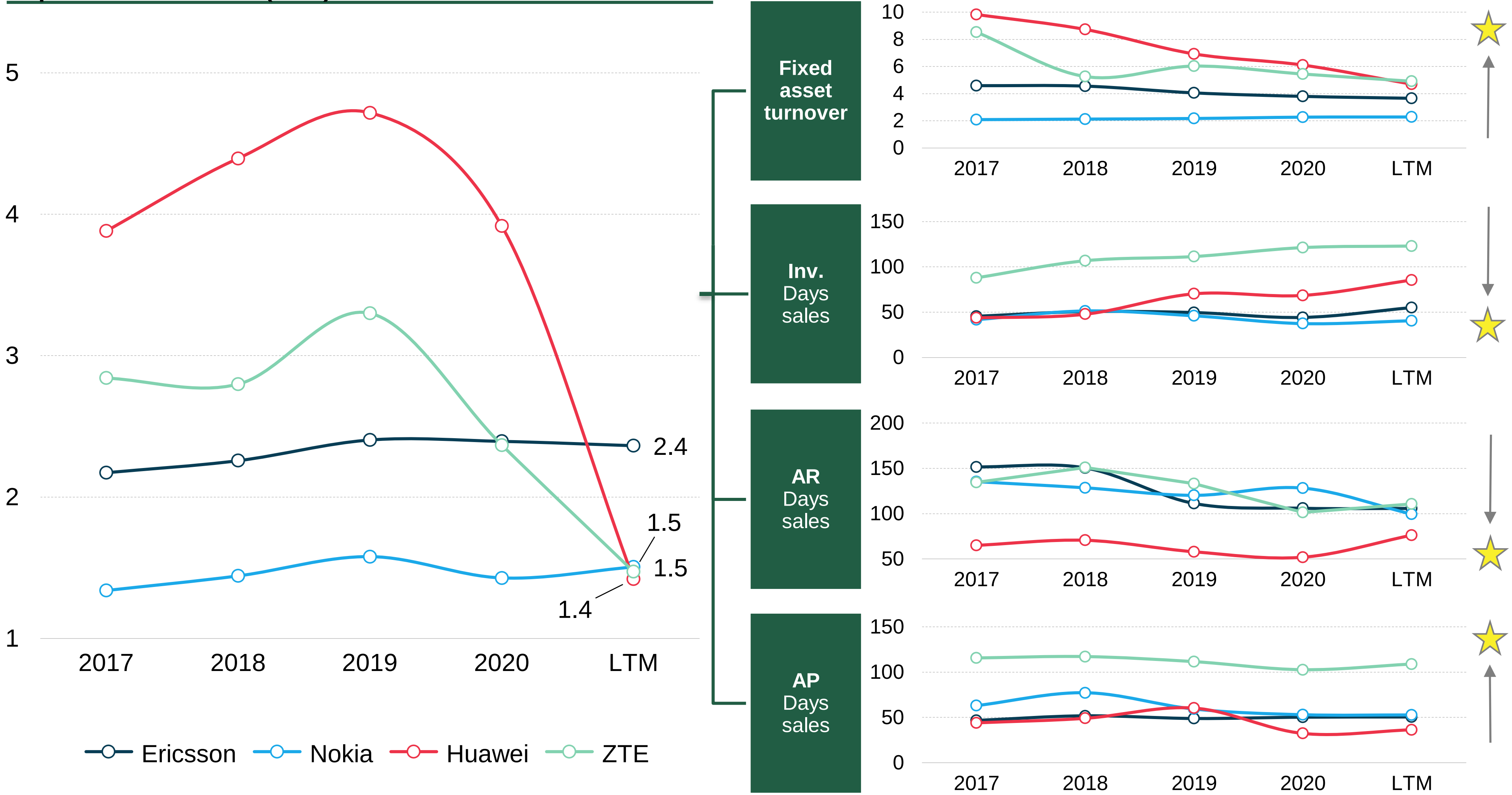




Note: Fiscal years are used in the yearly analysis. LTM analysis of Huawei is based on data from Q3’20 – Q2’21.
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Ericsson has had a stable CTR at 2.4 in the past 3 years, while CTR for the other firms converged at 1.5 in LTM – Huawei dropped significantly

Capital turnover ratio (CTR)



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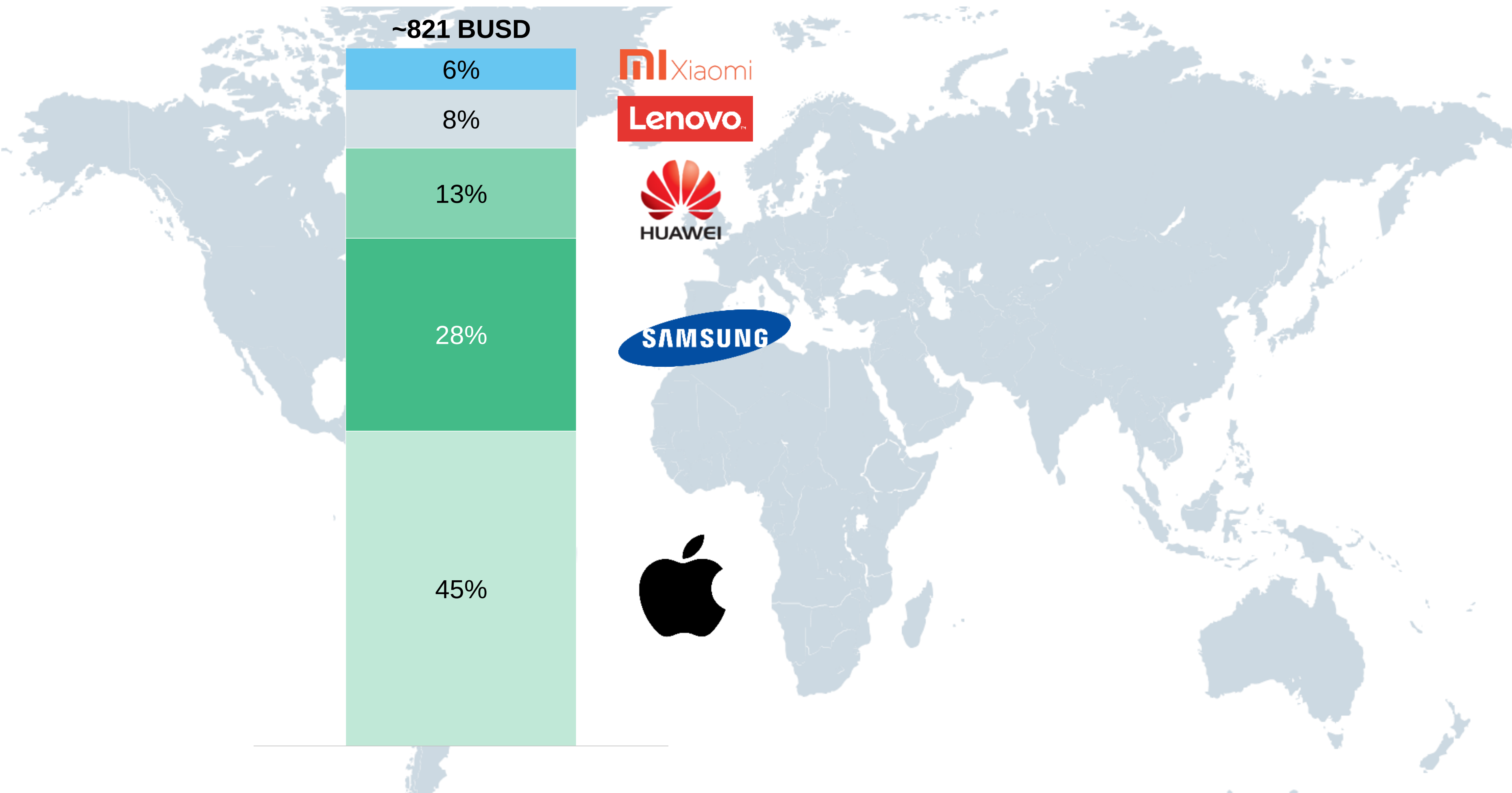
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Contents

The Q3 2021 report includes five major device manufacturers

Report overview
Revenue in BUSD, LTM



Note: Revenue based on group revenue
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Key takeaways from the Device OEM segment

Key takeaways

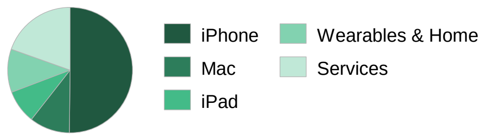
Creating Shareholder Value	1. Apple's ROIC increased by 84.9pp. in LTM compared to FY2020, reaching 187.9%, driven by an increase in both CTR and NOPAT (by 2.8 and 4.1pp. respectively) 2. Huawei's ROIC was over 18 pp., behind its 2017 ROIC, largely due to a 2.5x decrease in CTR – which left Huawei with the lowest LTM ROIC in the peer group
Revenue Performance	1. Apple had the highest YoY revenue growth (28.8%) during Q3'21, whereas Huawei's quarterly revenue shrunk by 33.6%. Apple's launch of M1-powered Macs and iPhone 13 lineup drove new revenue records in all geographic segments and product categories 2. Apple, Xiaomi and Lenovo achieved YoY revenue growth during Q3'21 (increased by 29%, 21% and 14% respectively), while Samsung IM dropped by ~6.5%
Margin Performance	1. All companies managed to increase their EBIT margins in LTM – Apple improved the most with an EBIT margin of 29.8% in LTM compared to 24.1% in FY2020 2. Apple recorded the highest NOPAT margin of 21.7% in LTM (+5.7pp. YoY), while Samsung experienced a drop of 4.2pp. In the same period
Capital Efficiency	1. Lenovo reached its highest CTR in LTM (10.1x), while Apple's LTM CTR was only 8.6x compared to 16.1x in FY2017 2. Xiaomi's fixed asset turnover improved significantly by 8.8 from FY2020 to LTM, which contributed to the 0.9 increase in Xiaomi's CTR

Note: Apple's quarterly data ended on 25/Sep.

Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Business Segments of Device OEMs

Company | **Business segments and revenue shares over LTM, (Q4'20 – Q3'21) %** | **Description**



- iPhone: Mobile Phones
- Services: iTunes Store, iCloud, Apple Pay, other services
- Mac: Laptops & Personal Computers
- iPad: Tablets
- Wearables & Home: Apple Watch, Apple branded accessories for Apple products

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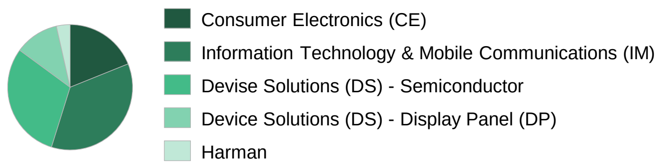
SAMSUNG



- Information Technology & Mobile Communications: Mobile Phones, Communication systems and computers
- Device Solutions: Semiconductor Business and display panels
- Consumer Electronics: TVs, monitors, printers, air conditioners and refrigerators
- Harman: Infotainment, connected solutions for automakers, and consumers

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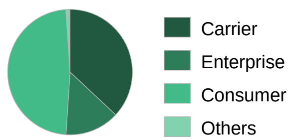
HUAWEI



- Carrier: Building telecommunications networks and services
- Enterprise: Equipment, software and services to enterprise customers
- Consumer: Manufacturing of electronic communication services (e.g. phones)
- Others: Communication services not applicable to above descriptions

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Lenovo

- IDG: Personal computer and smart devices, and mobile businesses
- DCG: Provide data center solutions
- SSG: Deliver enhanced services capabilities and new solutions

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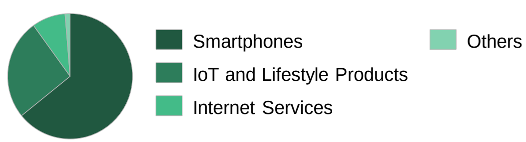
Xiaomi

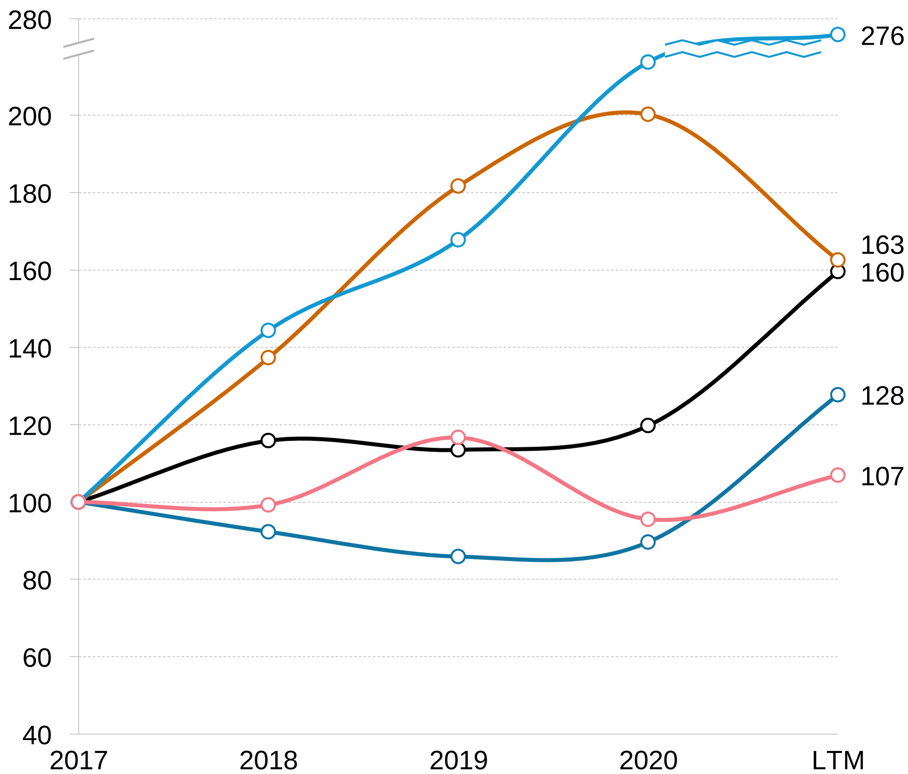


- Smartphones: Mobile devices, Smartphone, Tablet
- IoT & Lifestyle products: Smart TVs, scoters, vacuum cleaners, cameras, etc.
- Internet Services: Preloaded apps, services and advertisements
- Other: Miscellaneous additional services and products

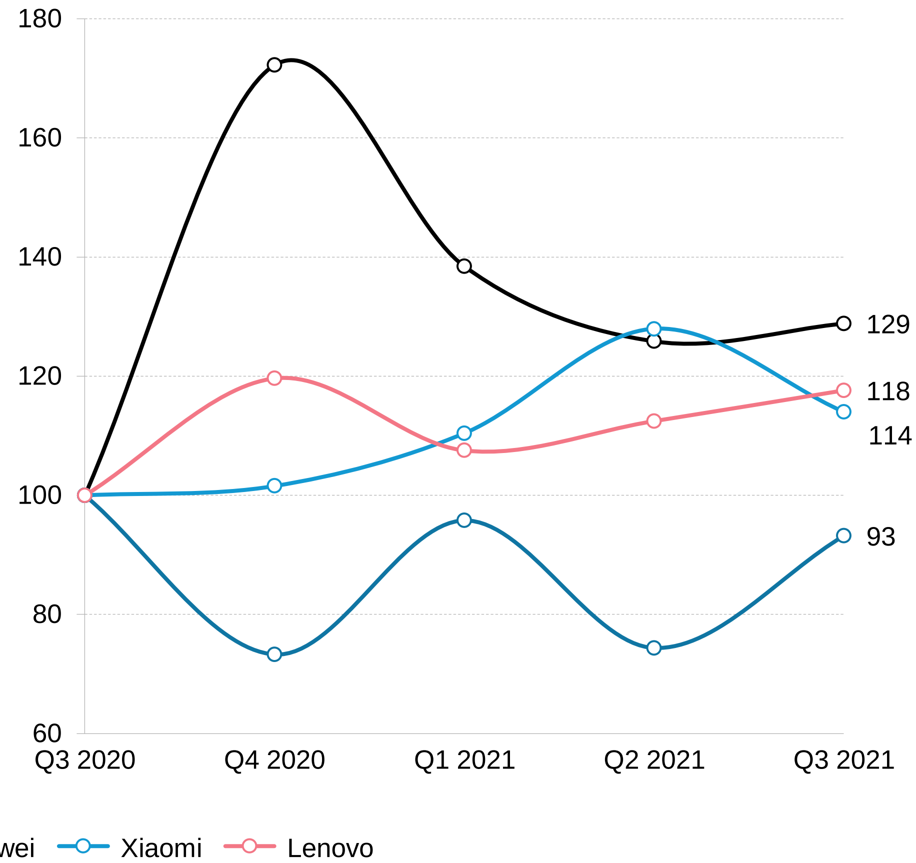
Note: Apple (for the fiscal year ended 25/Sep/2021); Huawei (Q3'20 – Q2'21); Xiaomi, Samsung) and Lenovo (Q4'20-Q3'21).
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Xiaomi's segment revenue grew by 29% over LTM compared to FY2020, whereas Huawei recorded a yearly revenue decrease of 19%

Segment Yearly revenue development
2017 - LTM (index 2017=100)



Segment quarterly revenue development
Q3'20 – Q3'21 (index Q3'20=100)



Note: Included segments per company: Huawei (Consumer business), Samsung (Information technology and mobile communication), Apple (All segments), Xiaomi (All segments), Lenovo (Intelligent Devices Group).

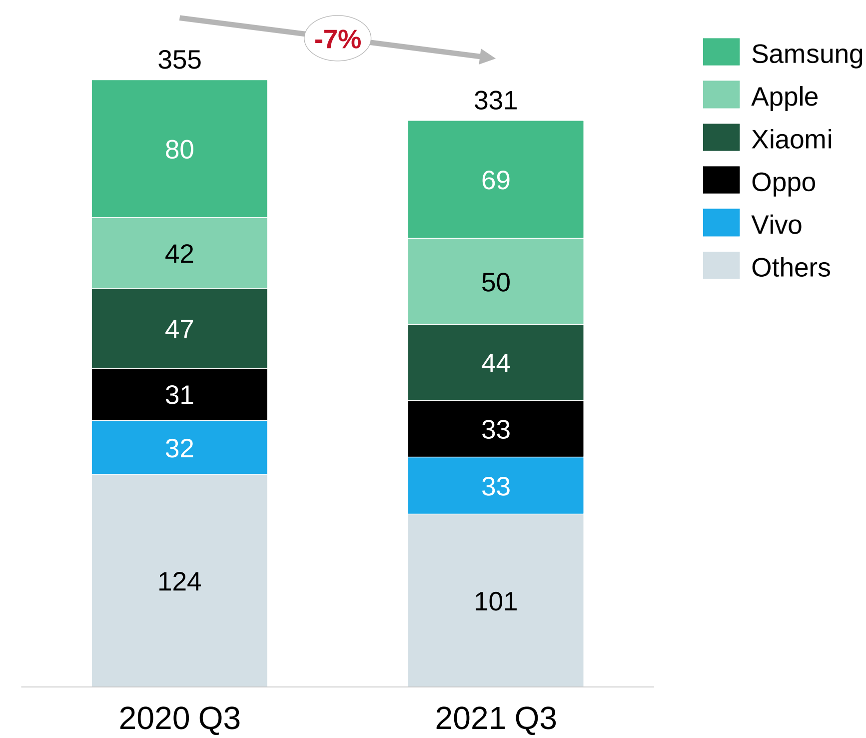
Source: S&P Capital IQ, Annual/Quarterly/Half Year Reports.

Events across the Device OEMs sector from the last quarter

News and happenings for Device OEMs

Aug-2021	Under **Vivo**'s 'More Local, More Global' strategy, Vivo expanded its production bases in Pakistan and Turkey. The expansion created additional production capacities and enabled Vivo to deepen its roots in the international market.
Aug-2021	**Lenovo** expanded its in-country manufacturing in India which created new capacities for PCs, notebooks and smartphones. IDC expected India's PC market size to grow to 15M units by 2022.
Aug-2021	**Xiaomi** launched Redmi 10 with full suite of major upgrades. Xiaomi held its leading position in India with 22% of shipment share (driven by Redmi 9 and Redmi Note10) during Q3'21. India's YoY shipment volume declined by 2% in Q3'21 due to the pent-up demand last year caused by COVID-19. However, online channels reached its highest-ever shipments in Q3.
Sep-2021	**Samsung** introduced the industry's first 200-megapixel image sensor, ISOCELL HP1 and ISOCELL GN5 – a sensor that can adopt all-directional focusing Dual Pixel Pro technology. The two imaging technologies enhanced Samsung's leading position.
Sep-2021	**Apple**'s U.S. market share increased from 40% in Q3'20 to 47% in Q3'21 due to the launch of iPhone 13, new iPad mini, and 9th-generation iPad. iOS15 focused on providing new ways to stay connected and introduced Focus – aiming to help users keep focus by filtering distractive notifications.

Global smartphone shipments
Million units

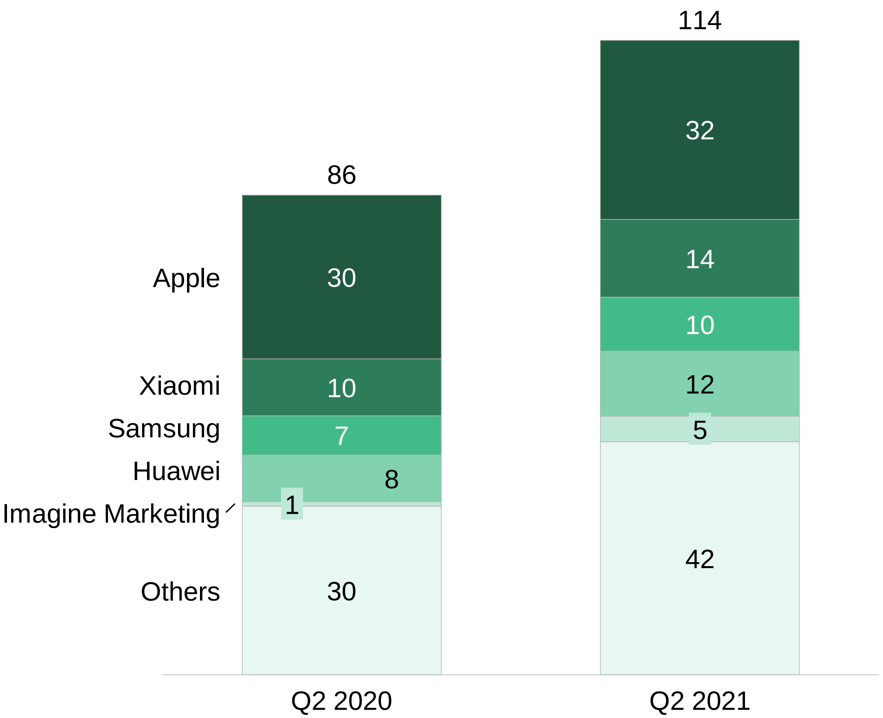


Global smartphone shipments declined by 6.6% YoY in Q3'21. **Samsung** held its leading position with 69.3M units in the quarter, whereas **Xiaomi** was largely impacted by the component shortage – QoQ shipments fell by 15%

Source: Counterpoint Research, IDC, S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

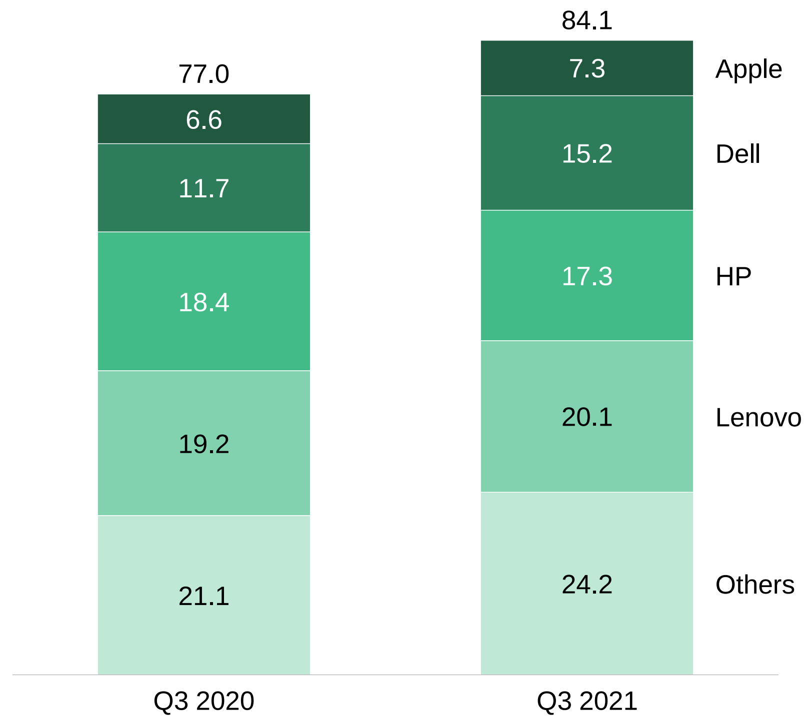
Global PC shipments increased for the 6th consecutive quarter and recorded a growth rate of 9.2% YoY

Global wearables shipments
Million units



Apple was positioned as no.1 in shipment volume even though its market share decreased to 28.2% YoY. Apple's aging product lineup and surge in sales contributed to reduction on shipment growth. Imagine Marketing started with hearables business, and expanded into watches and wristbands, but only operating in India puts constraints on its shipment volume

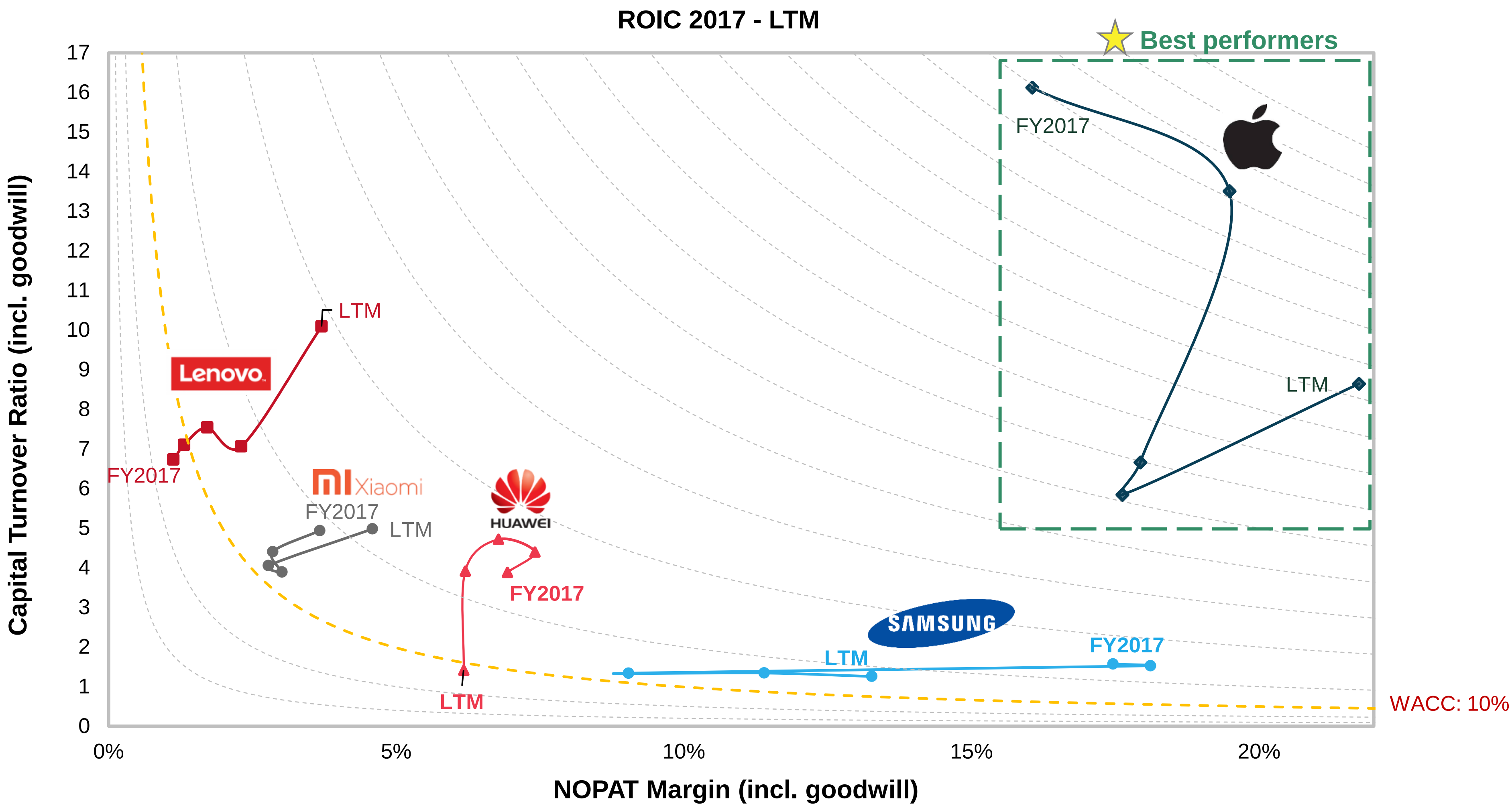
Global PC shipments
Million units



While ongoing component shortage and other supply constraints did exist, the double-digit YoY growth in the last four quarters provided momentum for PC shipments to grow in Q3'21. Demand for PC is moving towards to commercial PC, while consumer PC momentum is decelerating. Lenovo increased its operational flexibility in Q3, which resulted in a market share of 23.9%

Note: Global wearables shipments Q3'21 data is missing.
Source: IDC, Counterpoint Research and Applied Value Analysis.

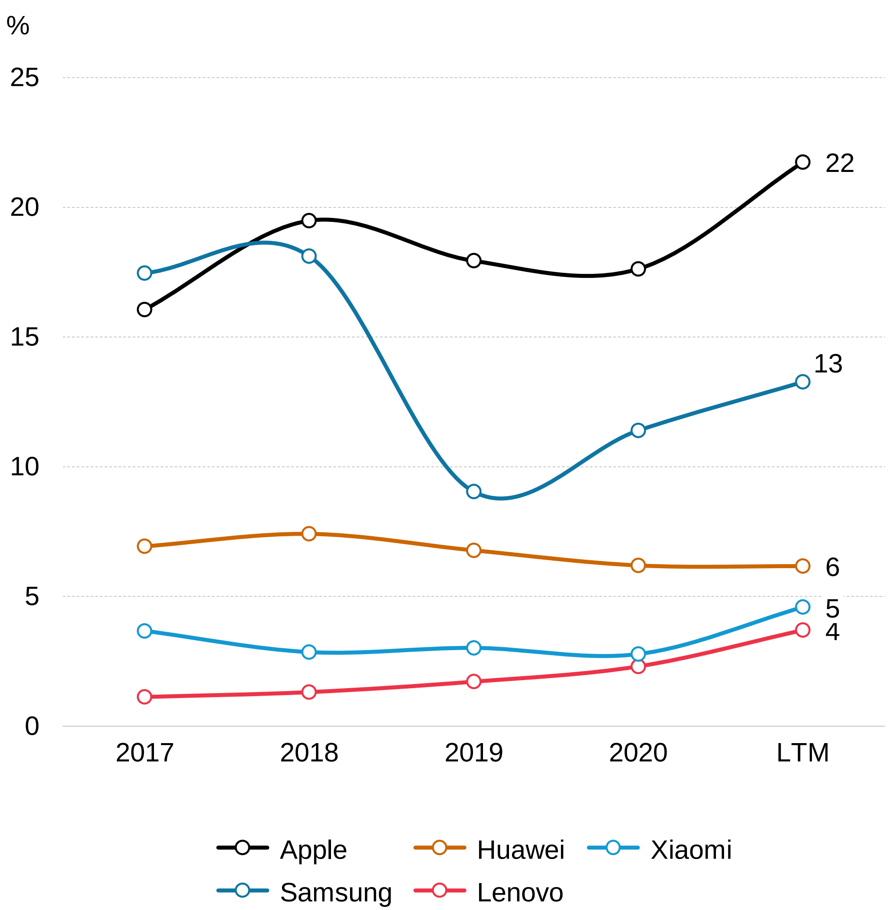
Lenovo's ROIC recovered in LTM, mainly driven by improvements in capital turnover (+3.4 compared to FY2017)



Note: Fiscal years are used in the yearly analysis. LTM analysis of Huawei is based on data from Q3'20 – Q2'21.
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Apple has recorded the highest NOPAT margin in the peer group since 2018; the significant increase in LTM is driven by improved SG&A efficiency

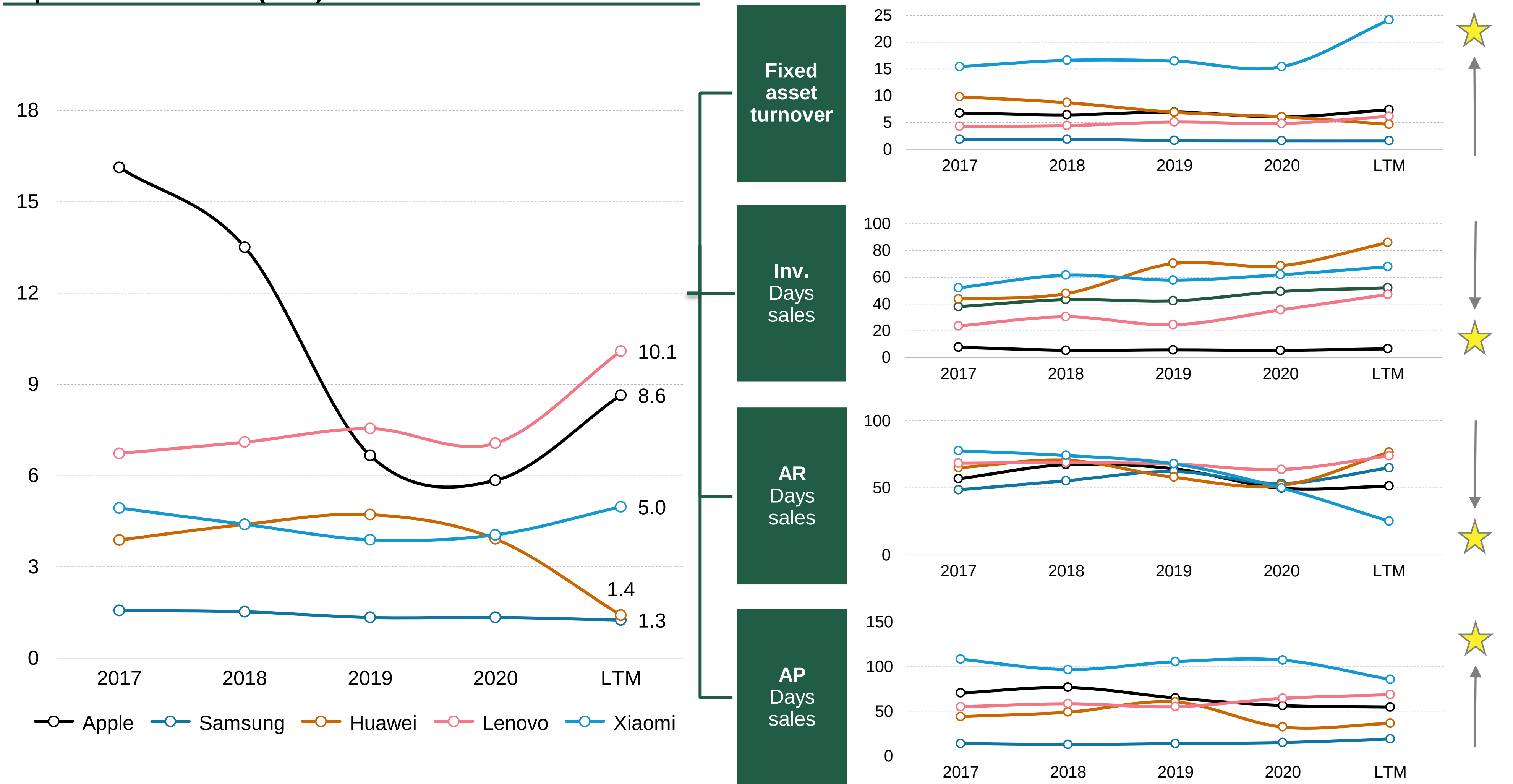
NOPAT margin, %



Note: Fiscal years are used in the yearly analysis. LTM analysis of Huawei is based on data from Q3'20 – Q2'21.
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Lenovo's CTR recovered from 2020 and reached its highest level ever, and Apple's CTR continued to improve as a result of higher fixed asset turnover

Capital turnover ratio (CTR)



Note: Fiscal years are used in the yearly analysis. LTM analysis of Huawei is based on data from 3Q'20 – 1Q'21.
Source: S&P Capital IQ, Annual & quarterly reports, Applied Value Analysis.

Contents

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