# Financial Performance and Trends in the Telecom Industry

Applied Value Q4 2020

**Applied Value**
Kungsgatan 2
111 43 Stockholm, Sweden
Phone: +46(0)8 562 787 00

**www.appliedvaluegroup.com**

## 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.

**Principal Contacts**

**Johan Lindqvist**
Global Telecom Practice Leader

Applied Value
Phone: +46 704 26 92 52
johan.lindqvist@appliedvalue.com

# 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, Elisa, Orange, Proximus, Swisscom, Tele2, Telefónica, TDC, Telenor, Rogers, Millicom Tigo, Turkcell, Veon, Telia Company, AIS, Verizon, Telus, Deutsche Telekom, Etisalat, KPN

## Infrastructure OEMs

Nokia, Ericsson, Huawei, ZTE

## Device OEMs

Apple, Samsung, Xiaomi, LG, Huawei, Lenovo, Motorola

# Contents



# Executive summary

## Key takeaways per segment

**Operators**

1. Yearly revenue of operators from all regions saw positive development in 2020 compared to 2019. LATAM operators' revenue improved the most by 9.1%
2. Profitability margins of most operators improved in Q4 quarter compared to last year, however, we saw negative QoQ EBITDA margin development by ~4%
3. LTM ROIC of operators spread from 5% to 16%, while averaging at 7.7%

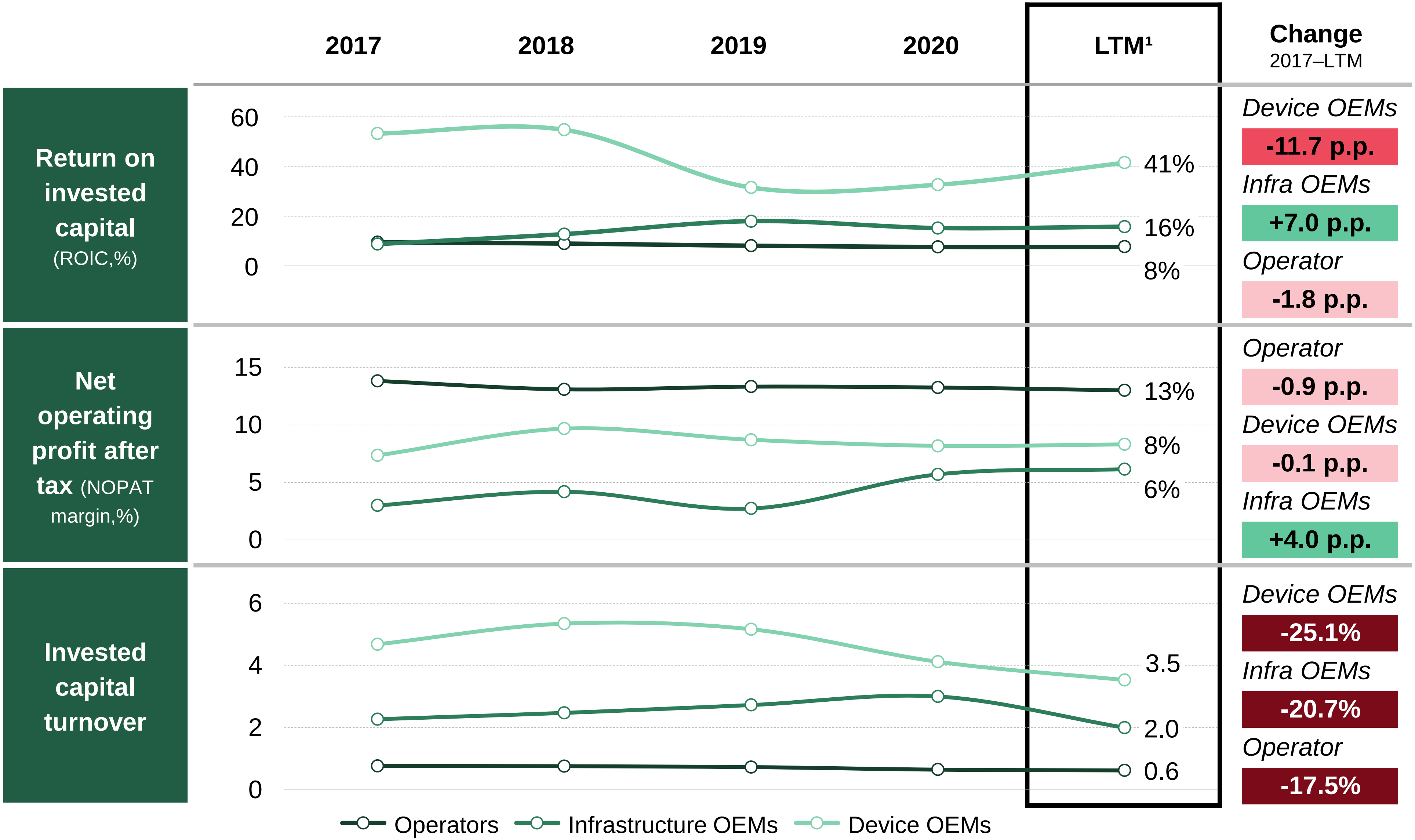
**Infrastructure OEMs**

1. Revenue of all infrastructure OEMs improved ~15% in 2020
2. Huawei maintained its lead in the telecom equipment market, taking up 31% of market share, Nokia and Ericsson at 15% and 14% respectively
3. Ericsson's NOPAT margin has been expanding continuously during the past four years, concluding 2020 at around 10% - best in class

**Device OEMs**

1. With the iPhone 12 series, Apple surpassed $100 billion of quarterly revenue, becoming the largest 5G smartphone vendor globally
2. Xiaomi enjoyed over 50% of revenue growth in 2020, faring exceptionally both in China and overseas
3. Growth momentum of wearables and tablet sustained until the end of the year; Apple dominants both markets with over 35% of market share

# Financial overview (1/2): Yearly performance




Note: 1. LTM refers to Q1 2020 – Q4 2020 for most companies included in the report. LTM analysis of Huawei, ZTE and Xiaomi based on the period of Q4'19 – Q3'20.
Note: 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 | Q4 '20 | Q3 '20 | Q2 '20 | Q1 '20 |
|---|---|---|---|---|---|
| Sales | Operators | 4.6% | 3.3% | -1.5% | -3.8% |
| Y-o-Y | Infrastructure OEMs | 12.3% | 10.1% | 12.6% | -4.1% |
| (% change) | Device OEMs | 18.7% | 8.0% | 3.3% | -1.7% |
| Net operating profit after tax (NOPAT) | Operators | 0.9 pp. | -0.5 pp. | -0.9 pp. | 0.2 pp. |
| Y-o-Y | Infrastructure OEMs | 1.4 pp. | 0.0 pp. | 0.6 pp. | 1.2 pp. |
| (p.p. change) | Device OEMs | 0.4 pp. | 0.1 pp. | -0.1 pp. | 0.2 pp. |
| EBITDA | Operators | 3.3 pp. | 0.8 pp. | 0.8 pp. | 0.8 pp. |
| Y-o-Y | Infrastructure OEMs | 1.6 pp. | -0.8 pp. | 0.1 pp. | 1.0 pp. |
| (p.p. change) | Device OEMs | 0.5 pp. | 0.2 pp. | 0.3 pp. | 0.4 pp. |

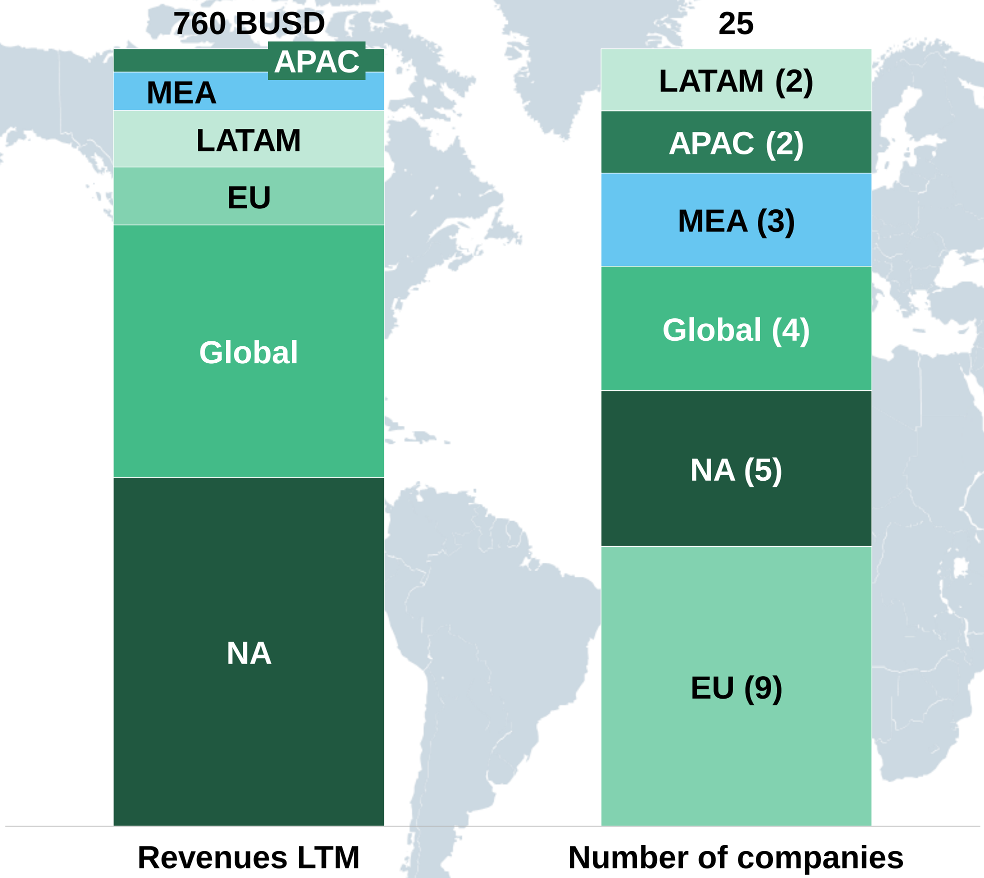
Notes: Telecom report data is based on fiscal years and calendar quarters.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# Contents



# The Q4 ‘20 report covers 25 of the largest operators globally, accounting for 760 billion USD in revenues

**Report overview**
Revenue in BUSD, and company breakdown

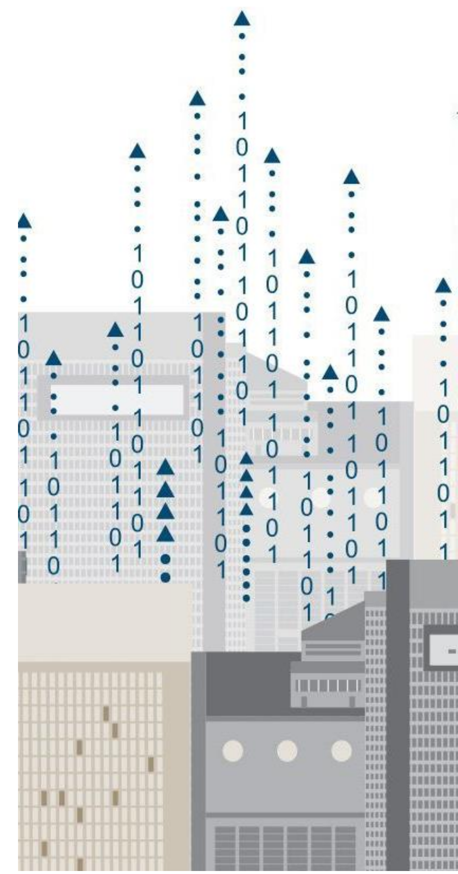



Note: The included companies differ from previous quarter. Global operator refers to those with transregional business establishments.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# Key takeaways from the operator segment

## Key takeaways

| | |
|---|---|
| **Creating Shareholder Value** | 1. ROIC of operators averaged at 7.7% in LTM<br>2. STC, Elisa and Turkcell outperformed their peers with 16%, 13% and 13% of LTM ROIC respectively |
| **Revenue Performance** | 1. As one of the better performing sectors through the pandemic, the telecom operator sector concluded 2020 with a 6% YoY revenue growth<br>2. Although significant recovery had taken place, LATAM operators' Q4 revenue still fell behind YoY |
| **Margin Performance** | 1. 2020 EBITDA margin of the operator segment was 36.6% and NOPAT margin was 12.7%, both margins leveled with the previous year<br>2. Profitability margins of most operators were enhanced in Q4'20, however, AT&T's margins were severely dampened by impairments from its video business unit |
| **Capital Expenditure** | 1. A ~17% CAPEX to revenue ratio has sustained throughout 2017 to 2020<br>2. Operators that have completed the initial stages of 5G network expansion are seeing notable reduction in CAPEX |



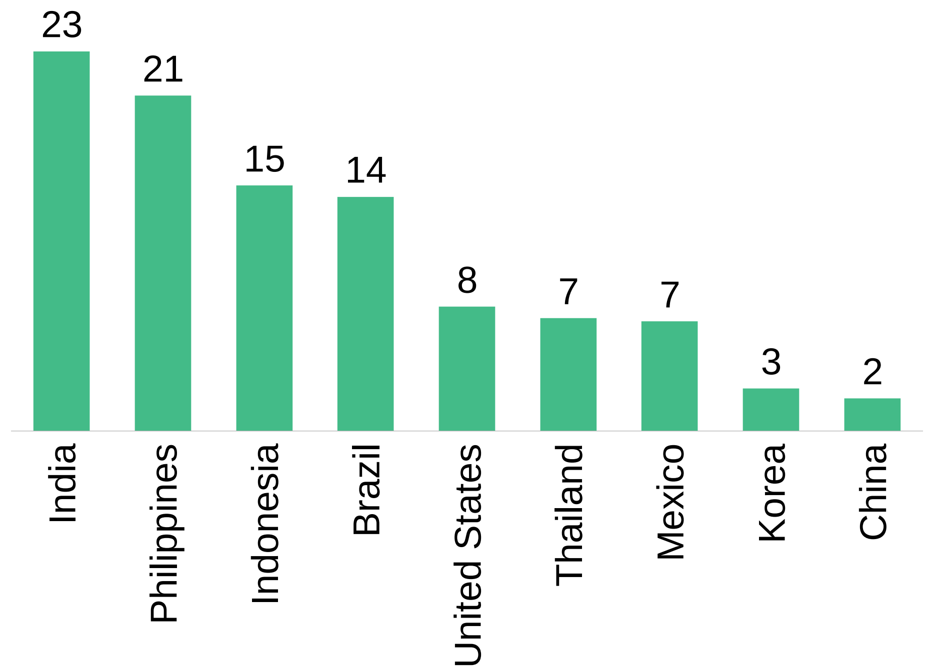
# Events across the Operator sector from the last 3 months

## News and happenings for operators

| | |
|---|---|
| **Oct-2020** | **T-Mobile** has announced another expansion of its 2.5GHz midband 5G network, which is now available in dozens of new cities, nearly doubling the coverage of its last major midband rollout. |
| **Oct-2020** | **SK Telecom** has outlined plans to split off its mobility business unite and bring it into a new joint venture with **Uber**. The business unit is currently valued at approximately $873 MUSD, and is expected to be worth $3.9BUSD by 2025. |
| **Nov-2020** | **Nokia**, **Elisa** and **Qualcomm Technologies** today announced that they have achieved the world's fastest 5G speeds on a commercial network in Finland by delivering 8 Gbps for the first time serving two 5G mmWave devices connected simultaneously. |
| **Nov-2020** | **AT&T** has selected **Amdocs**'s Openet 5G solution to monetize the next wave of network and business model innovation around cloud, edge computing and IoT while also increasing operational agility and service differentiation. |
| **Dec-2020** | Reliance Industries chairman Mukesh Ambani announced that **Reliance Jio** has plans to roll out commercial 5G networks during the latter half of 2021. Reliance Jio and **Qualcomm** have expanded their efforts to develop 5G solutions in India and have achieved a speed of 1Gbps. |
| **Dec-2020** | **Telecom Italia** has signed a preliminary agreement with BT to buy two of the **British Telecom** group's business units in Italy. The two units serve Italy's public administration and small and medium businesses. |

## Broadband Revenue CAGR 2020 - 2022

%

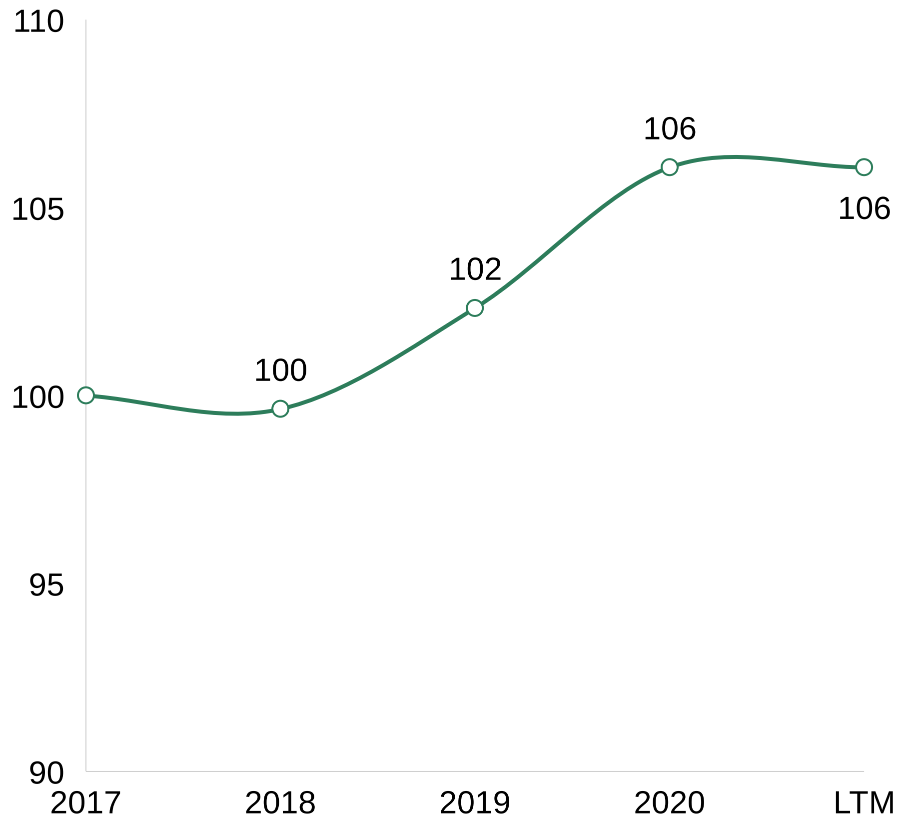



**Due to COVID-19, fixed broadband access has become a necessity for purposes including work from home. An acceleration in global broadband subscriber growth has been observed from 3.4% in FY19 to 5.3% in FY20.**

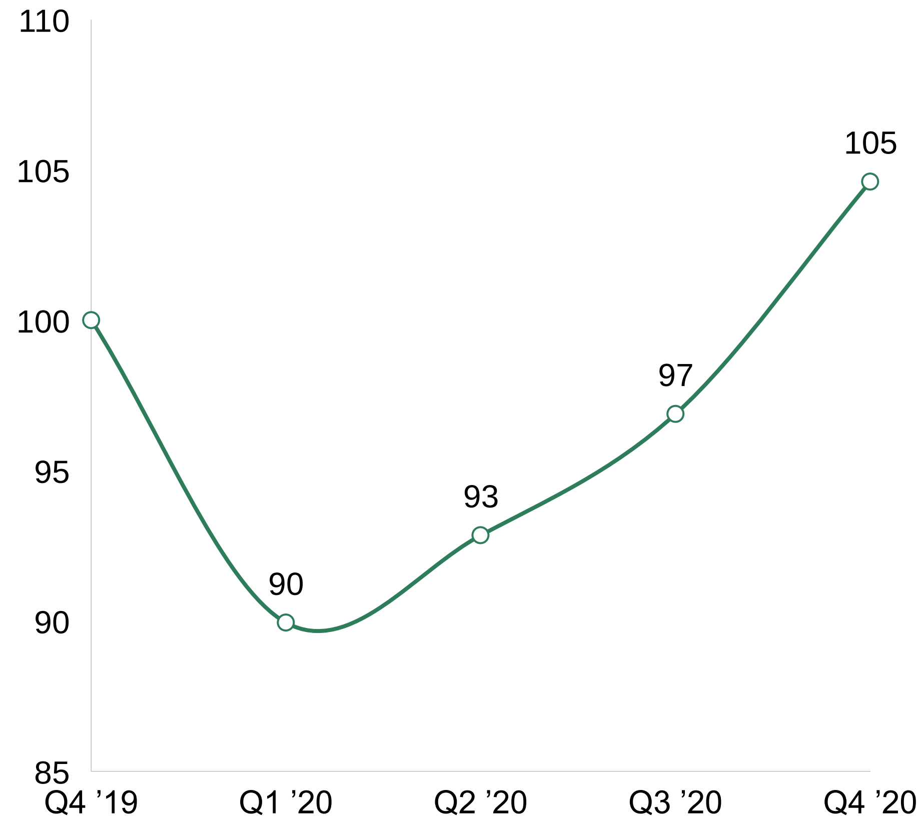
Source: Press & News, Credit Suisse, Applied Value Analysis.

# The telecom operator sector concluded 2020 achieving three consecutive years of revenue growth

**Indexed Yearly revenues**
2017 - LTM (index 2016=100)



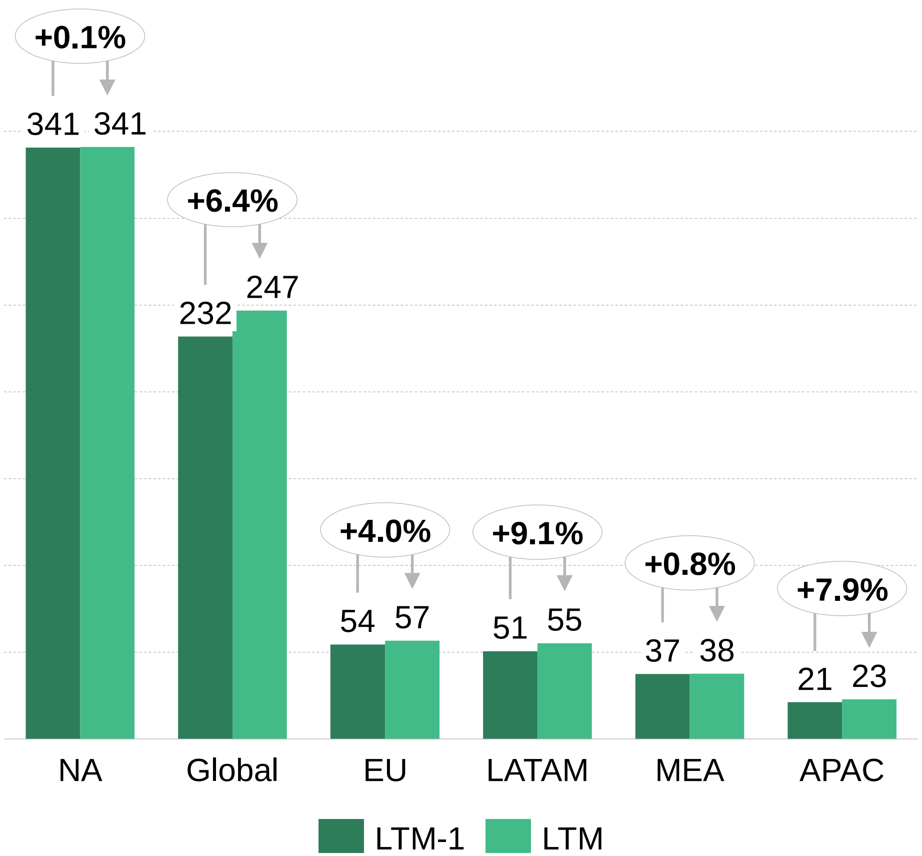

**Indexed Quarterly revenues**
Q4’19 – Q4’20 (index Q4’19=100)



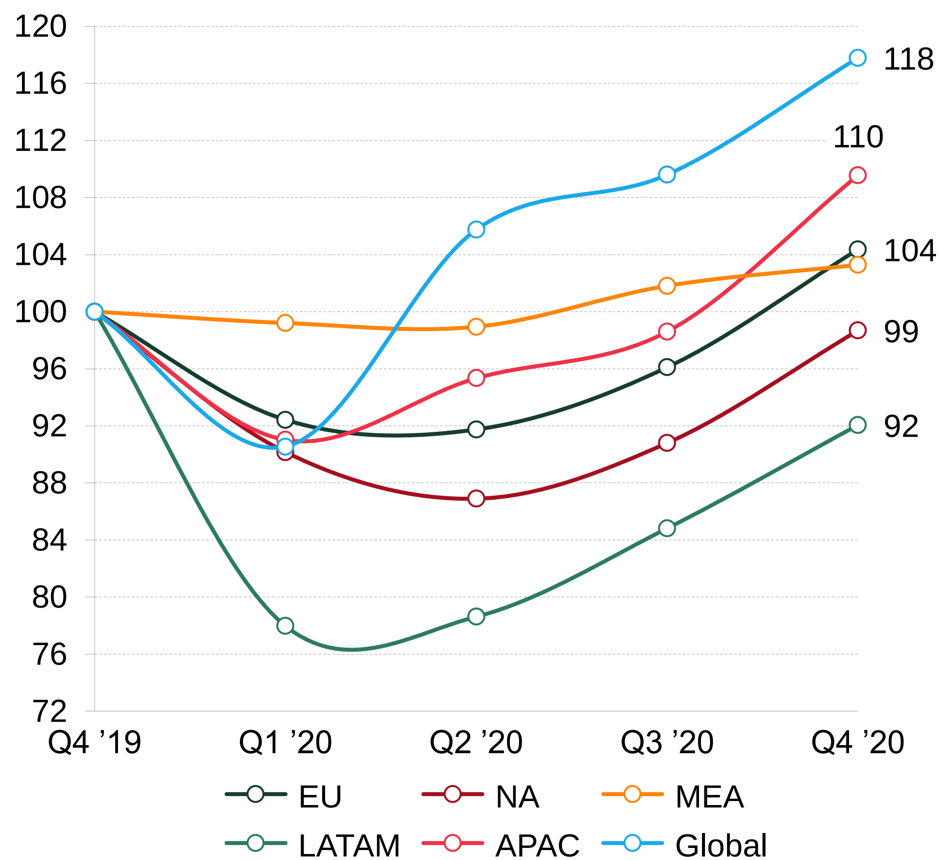

Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# Revenue of operators in all regions improved over 5% QoQ except for MEA operators, whose revenue has been flat in LTM

**Yearly revenues by region**
LTM-1 (Q1'19 – Q4'19), to LTM (Q1'20 – Q4'20), BUSD




**Indexed Quarterly revenues by region**
Q4'19 to Q4'20 (index Q4'19=100)

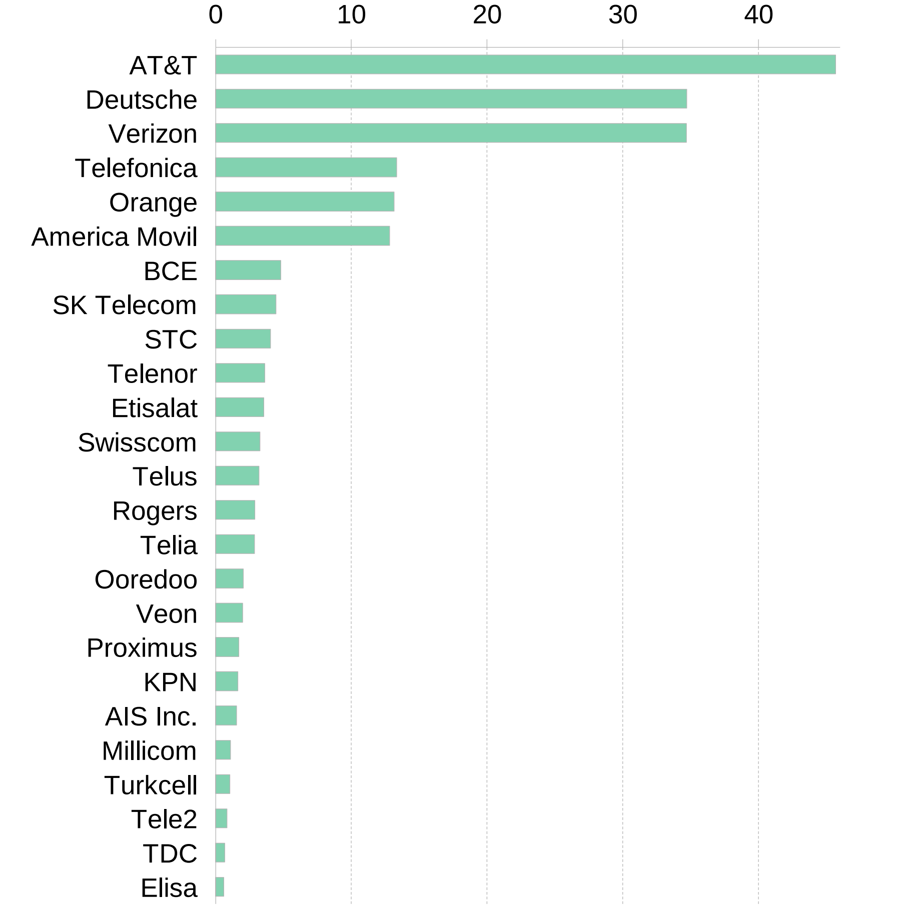



**Global operators' revenue skewed by Deutsche Telekom's acquisition of Sprint*

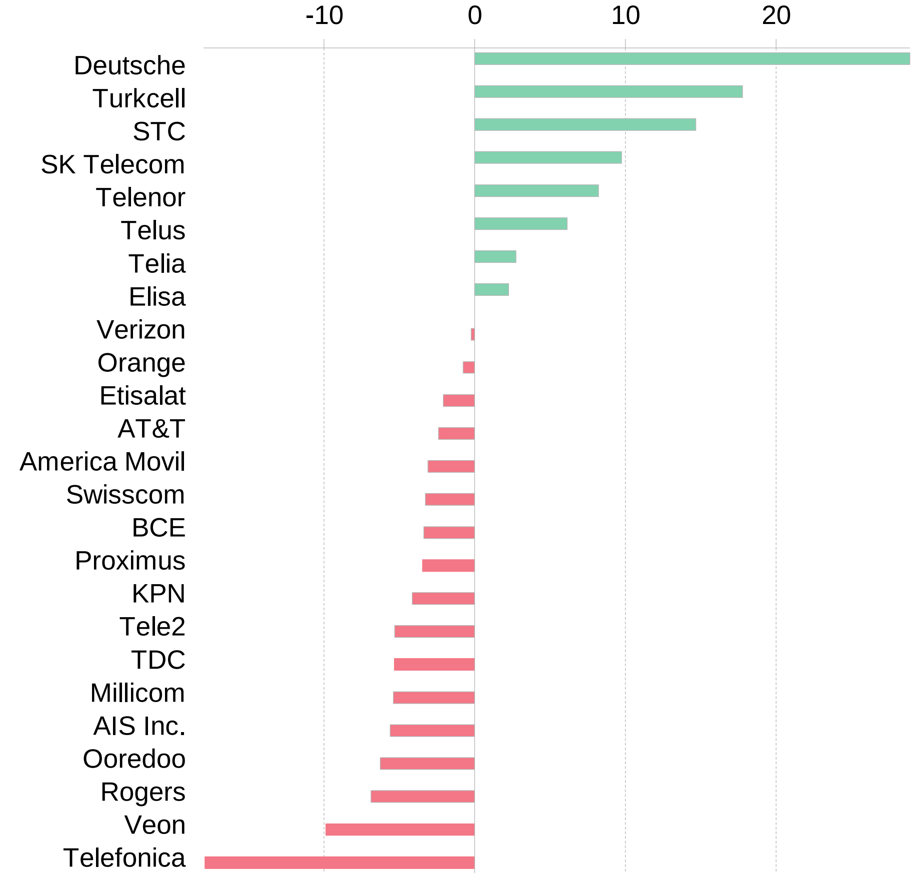
Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# Pending substantial recovery from the pandemic and impacted by currency devaluation, Telefonica suffered negative YoY revenue growth in Q4

**Revenue by operator**
Q4'20, BUSD



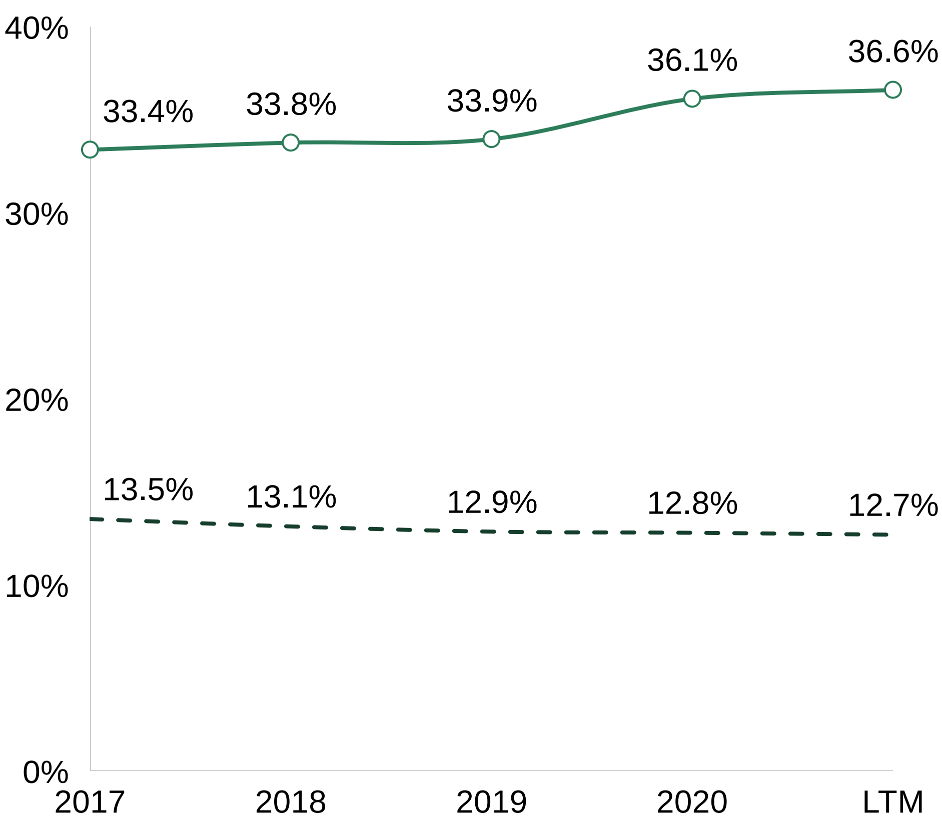

**Revenue development by operator**
Delta (Q4'20 vs. Q4'19), %



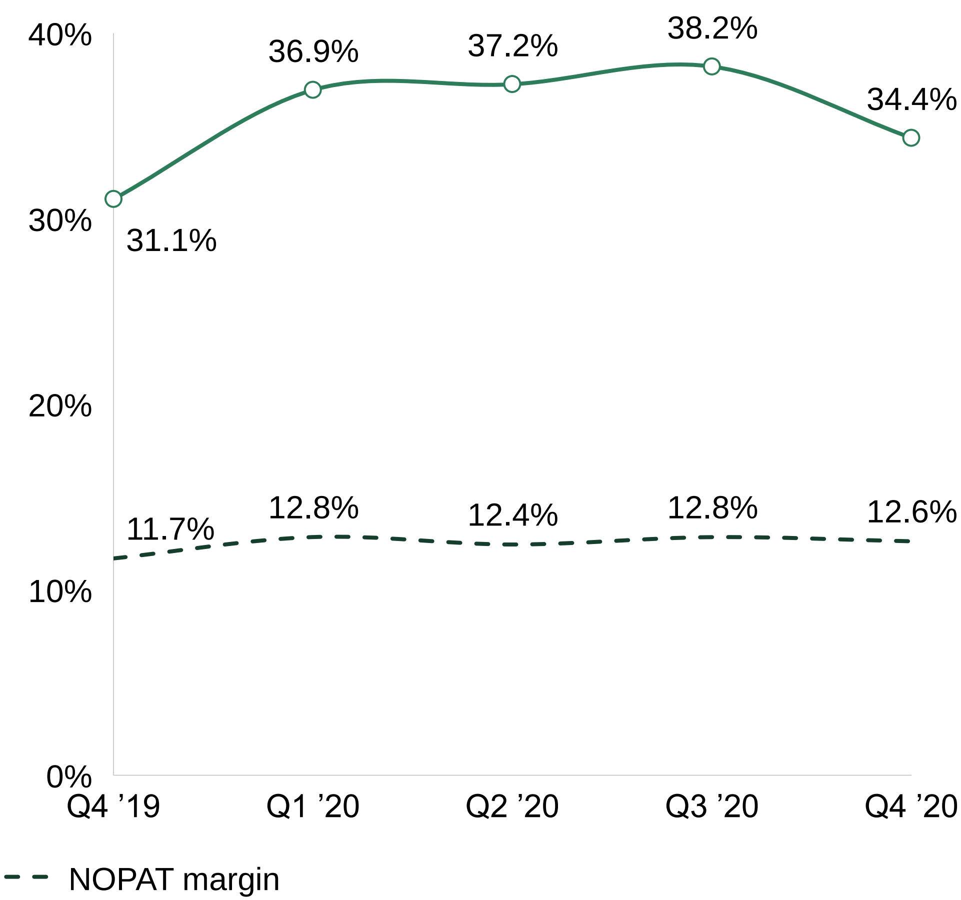

Note: The included companies differ from previous quarter. Revenue development of Deutsche Telekom is skewed by the acquisition of Sprint.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# EBITDA margin of the operator segment contracted ~4 pp. QoQ; NOPAT margin stabilized around 13% from 2017 to LTM

**Yearly profitability development**
2017 - LTM, %



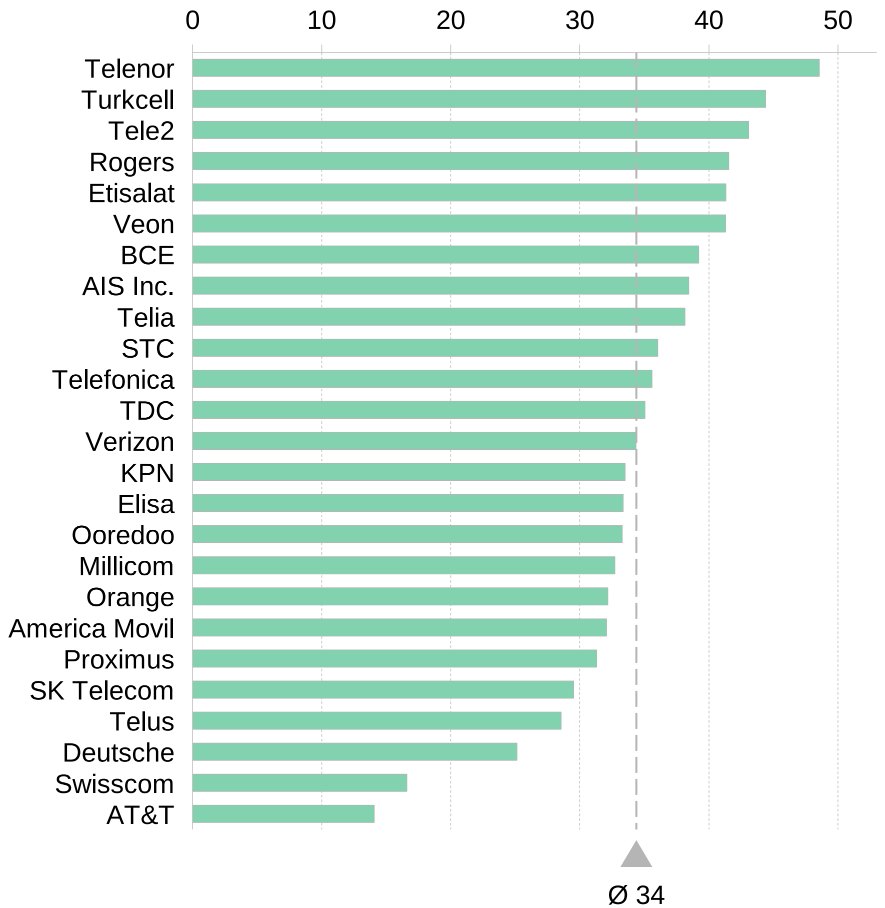

**Quarterly profitability development**
Q4'19 – Q4'20, %



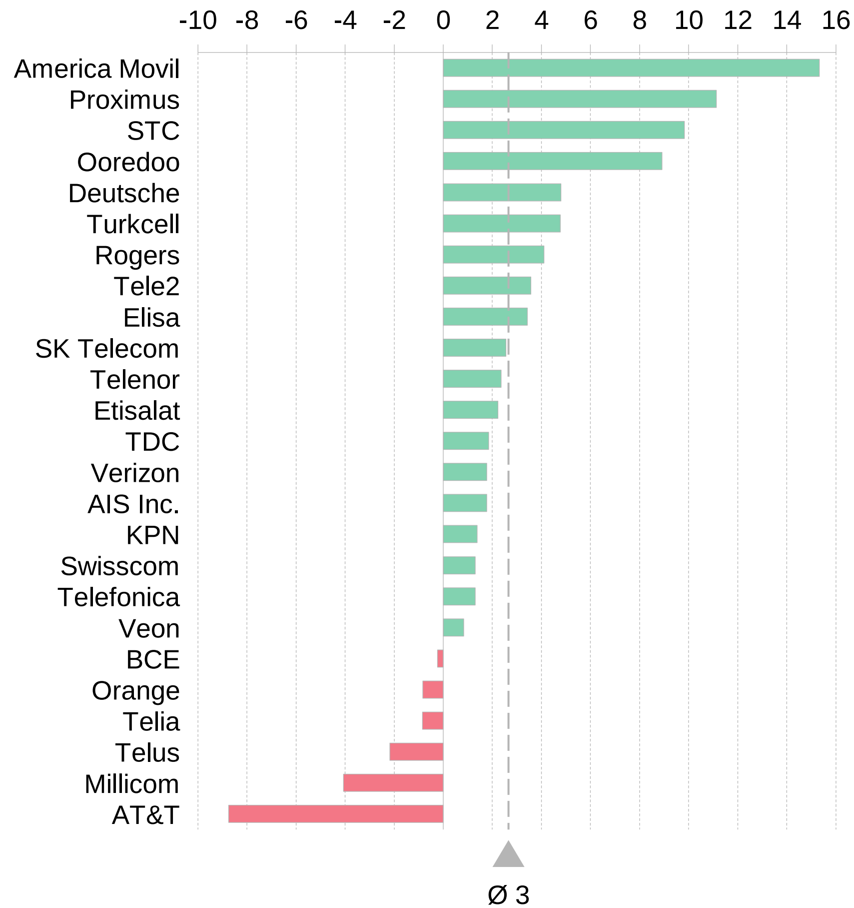

Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# Most operators witnessed YoY EBITDA margin expansion; AT&T's video business unit posted significant non-cash impairments

**EBITDA margin by operator**
Q4'20, %



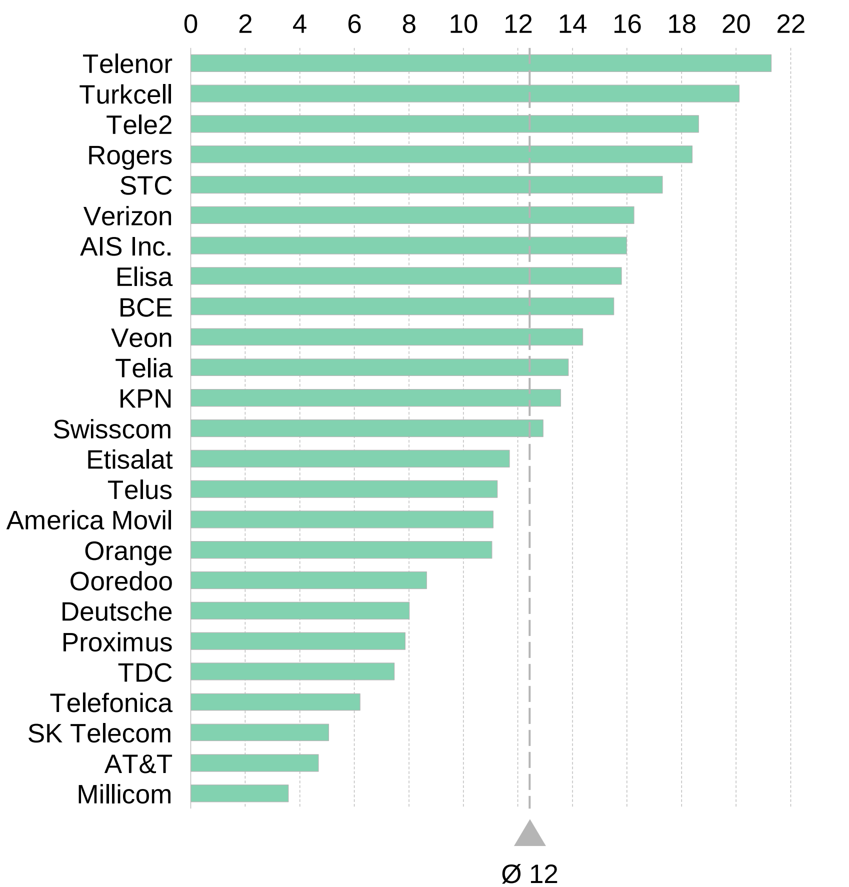

**EBITDA margin development by operator**
Delta (Q4'20 vs. Q4'19), p.p.



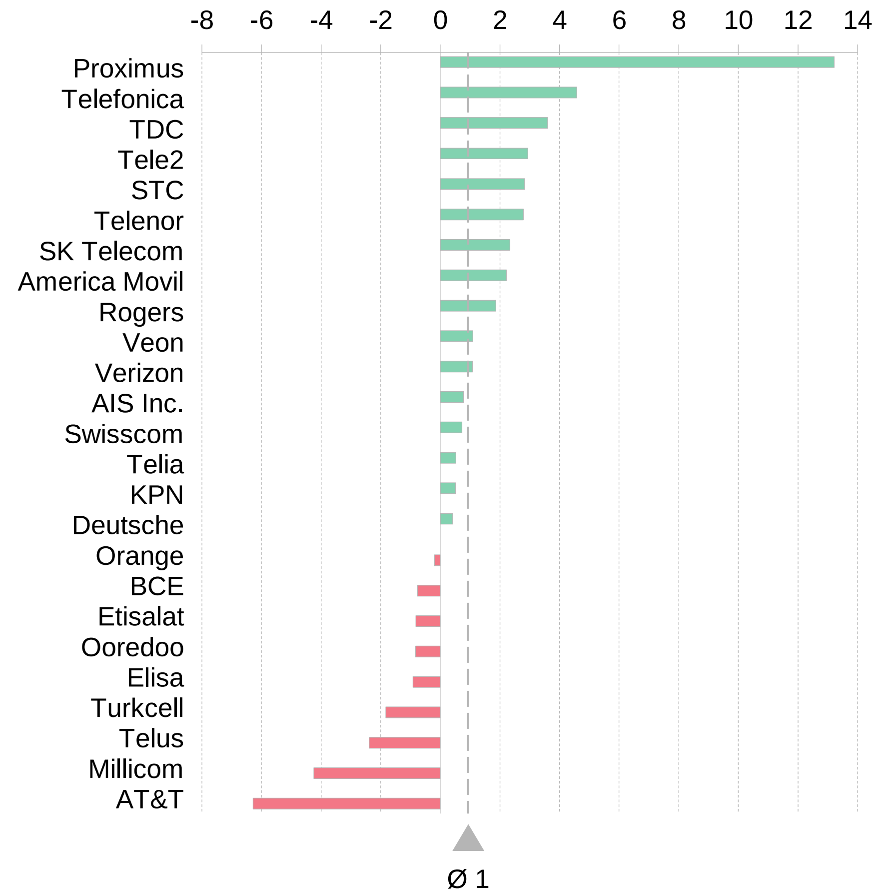

Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# Proximus boosted its YoY profitability margins with a voluntary employee early leave plan

**NOPAT margin by operator**
Q4'20, %



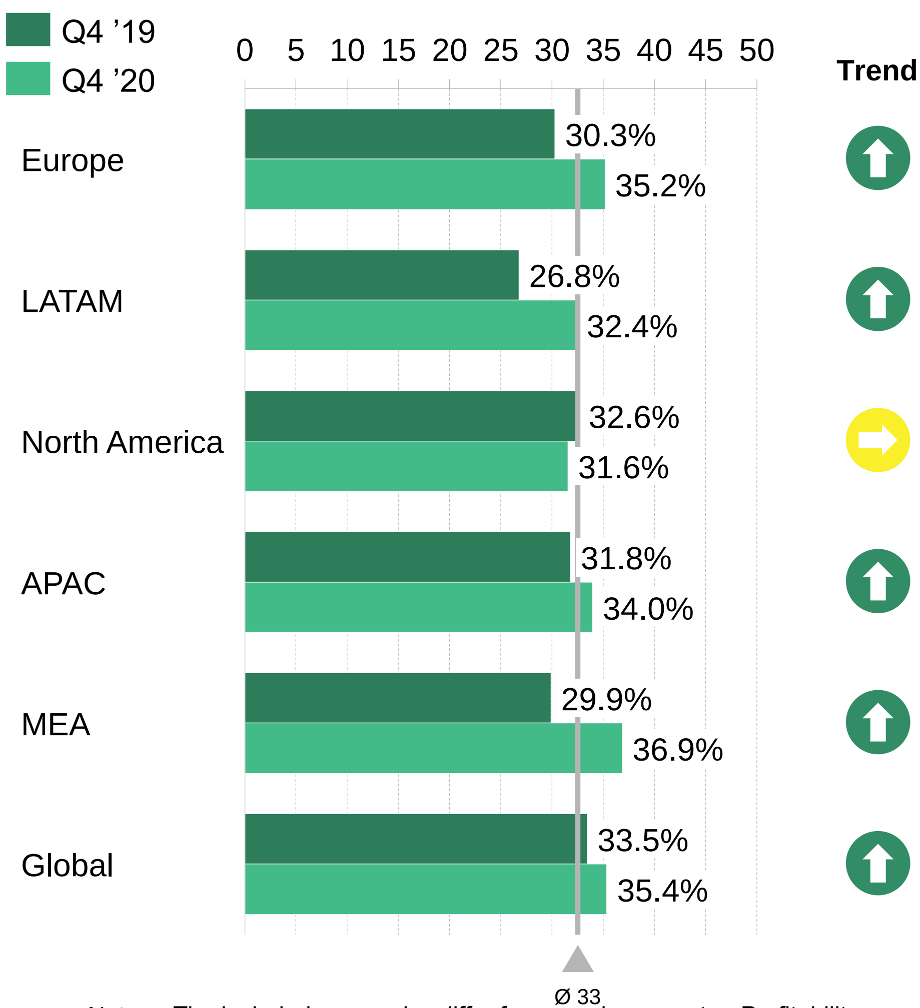

**NOPAT margin development by operator**
Delta (Q4'20 vs. Q4'19), p.p.



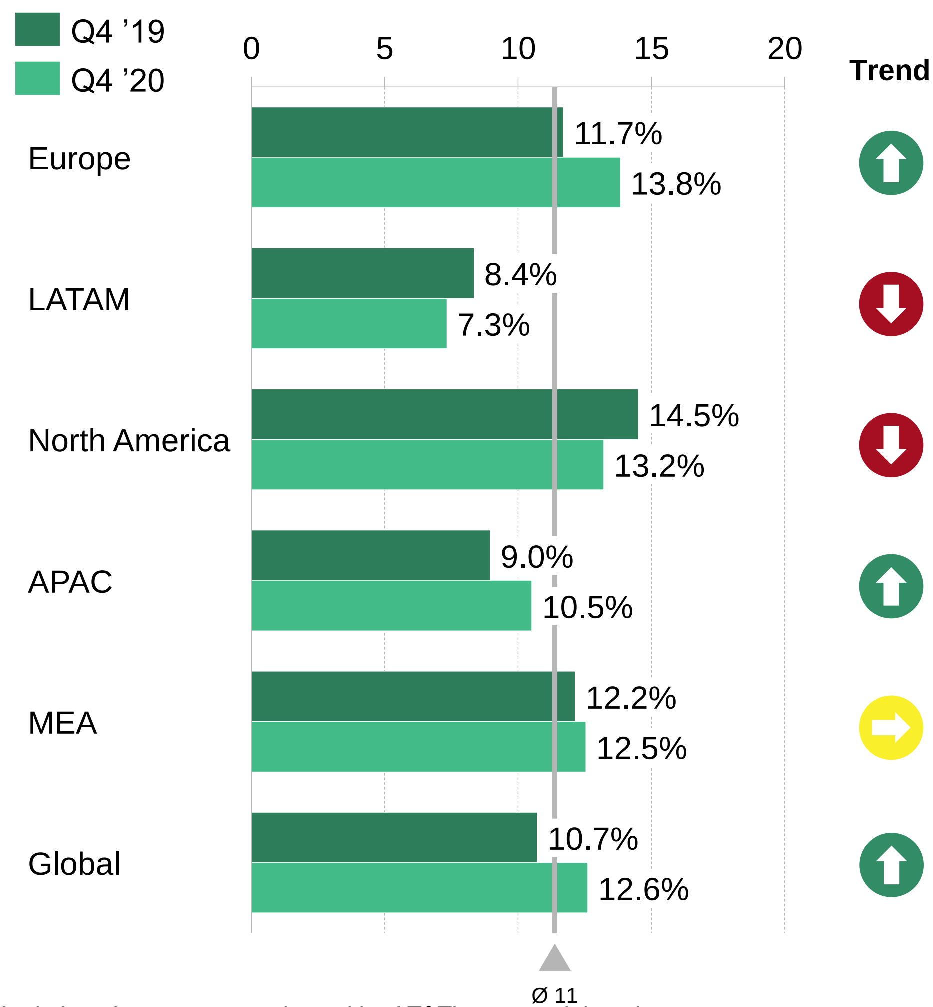

Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# European, Global, and APAC operators all managed to achieve a NOPAT margin improvement of ~2 p.p.

## Average EBITDA margin by region



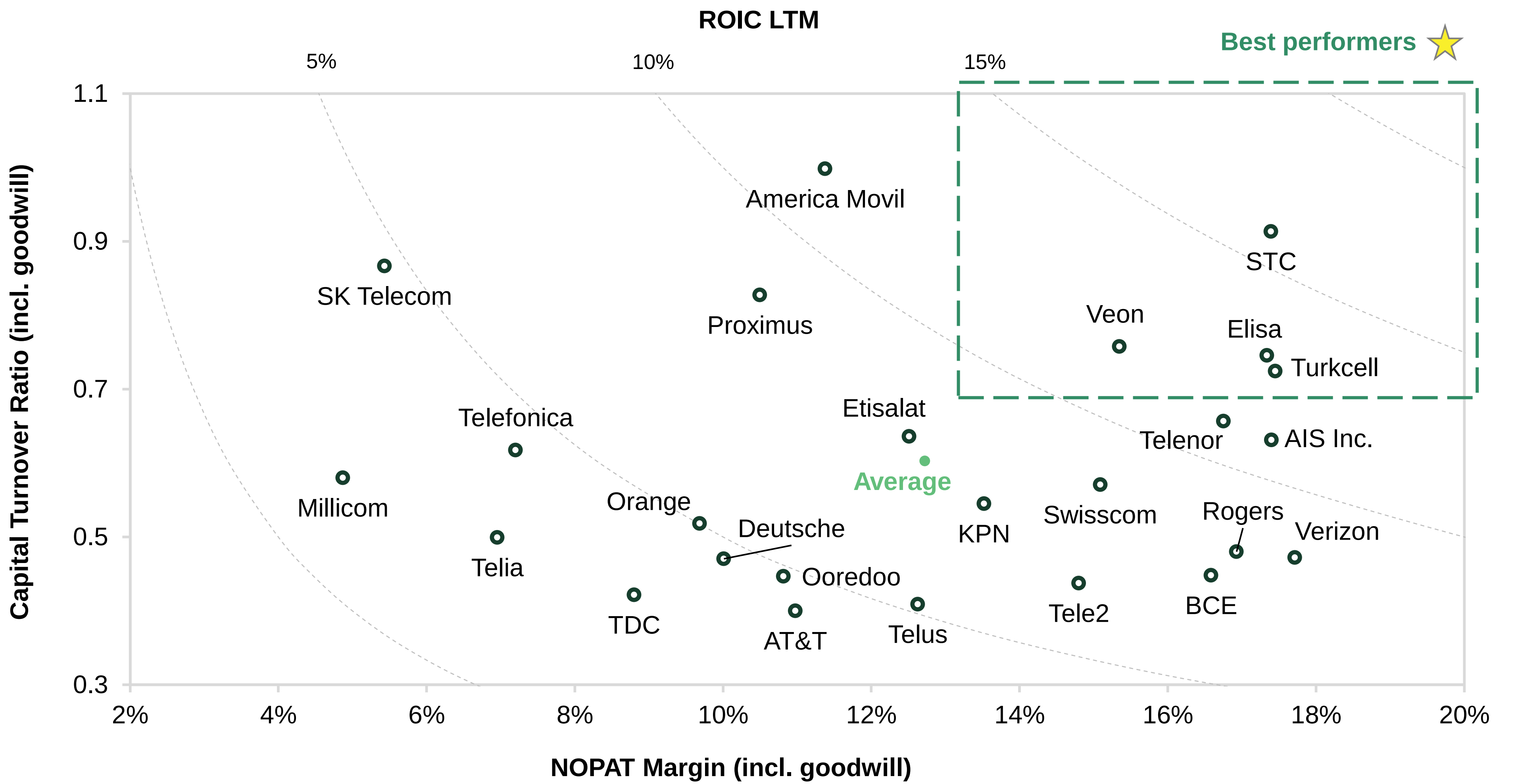

## Average NOPAT margin by region




Note: The included companies differ from previous quarter. Profitability margins of North American operators skewed by AT&T's non-cash impairment.

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

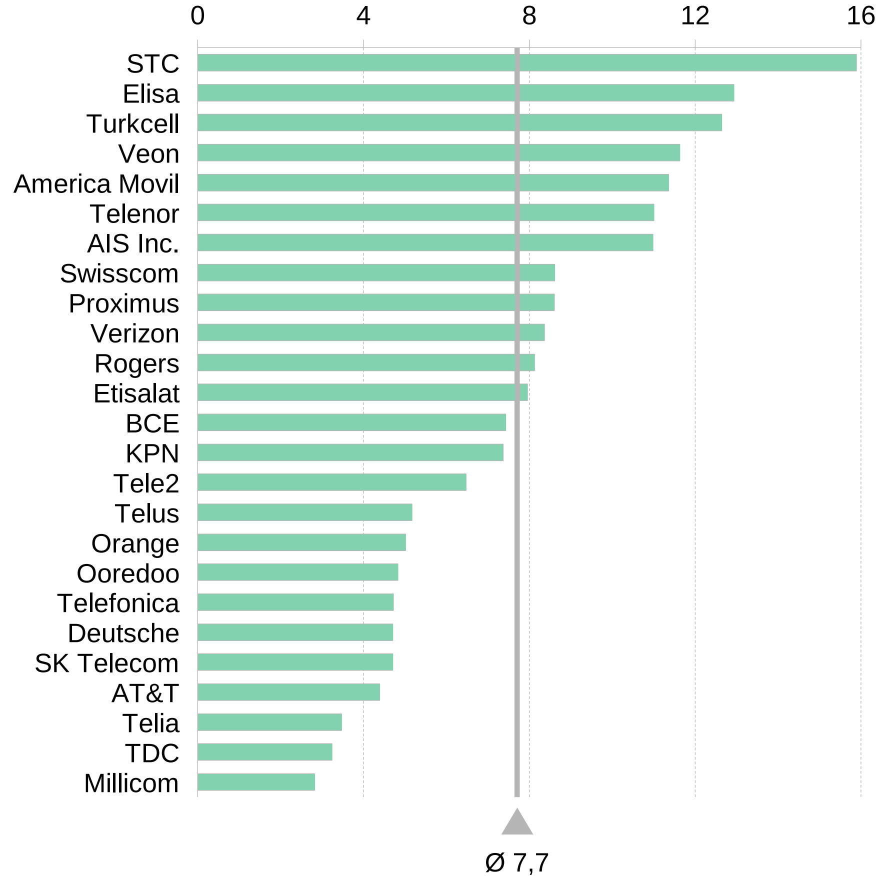
# ROIC of the operator segment averaged at 7.7% in LTM, STC leads the segment with a ROIC of 16%



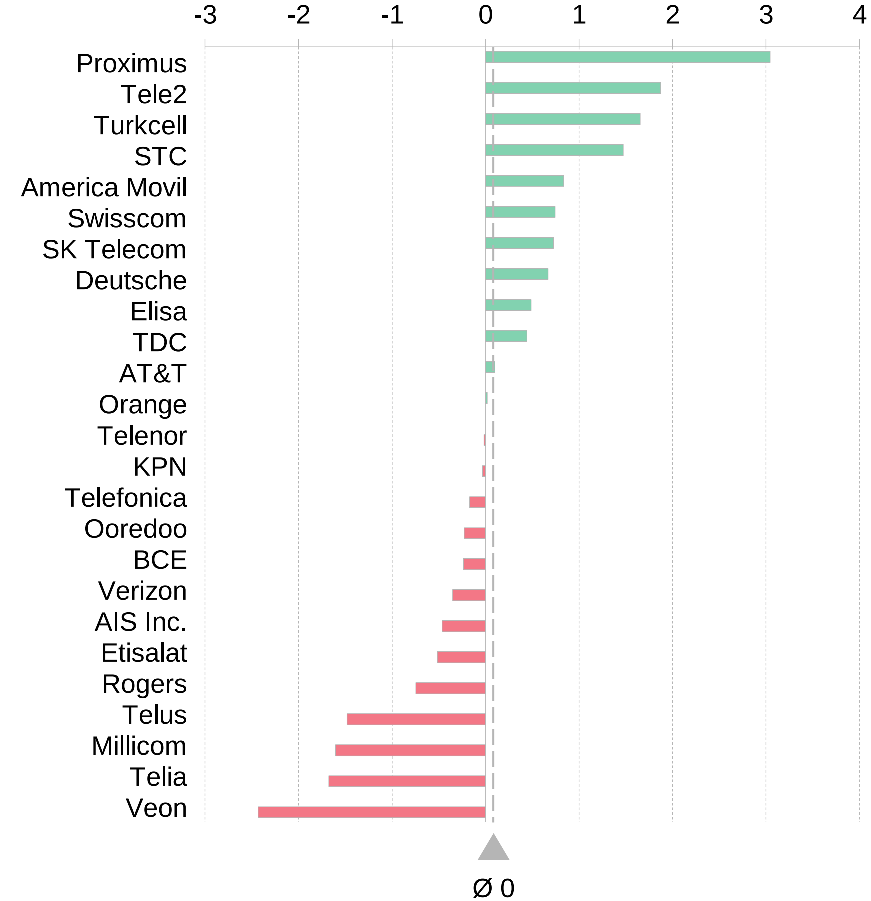

Notes: ROIC = Return on Invested Capital (actual return that the company has generated after tax). The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# Proximus, Tele2 and Turkcell leads the segment with respect to ROIC improvement in LTM at 3.0, 1.9 and 1.7 p.p. respectively

**ROIC by operator**
LTM (Q1' 20 – Q4' 20), %



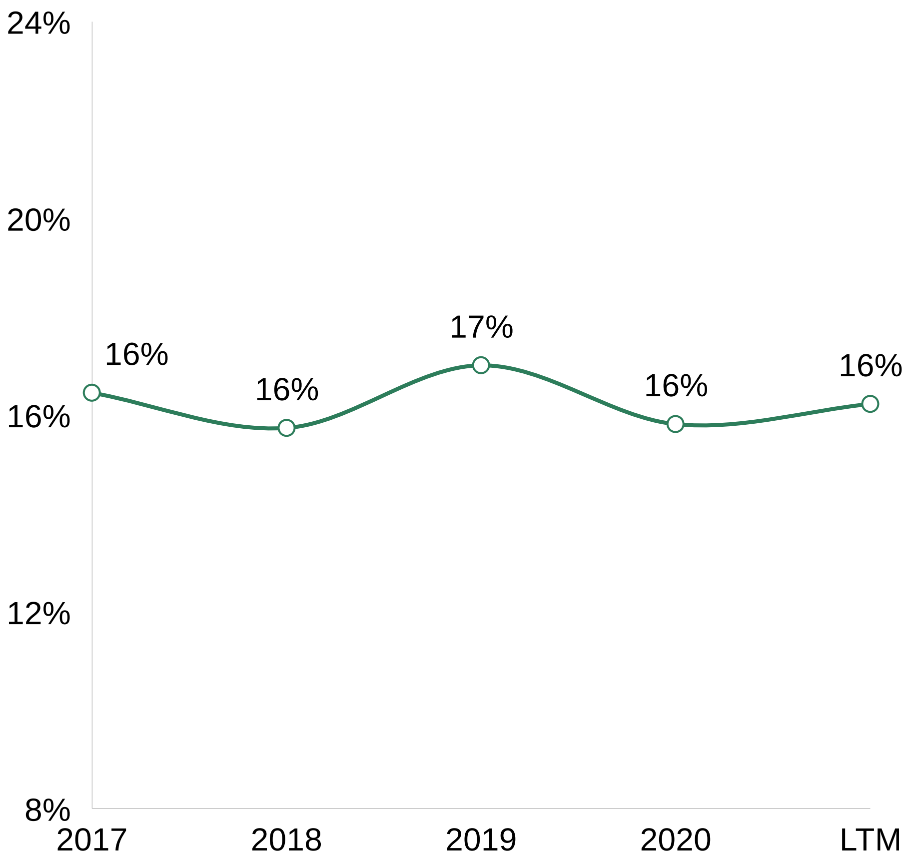

**ROIC development by operator**
Delta (LTM vs. LTM-1), p.p.



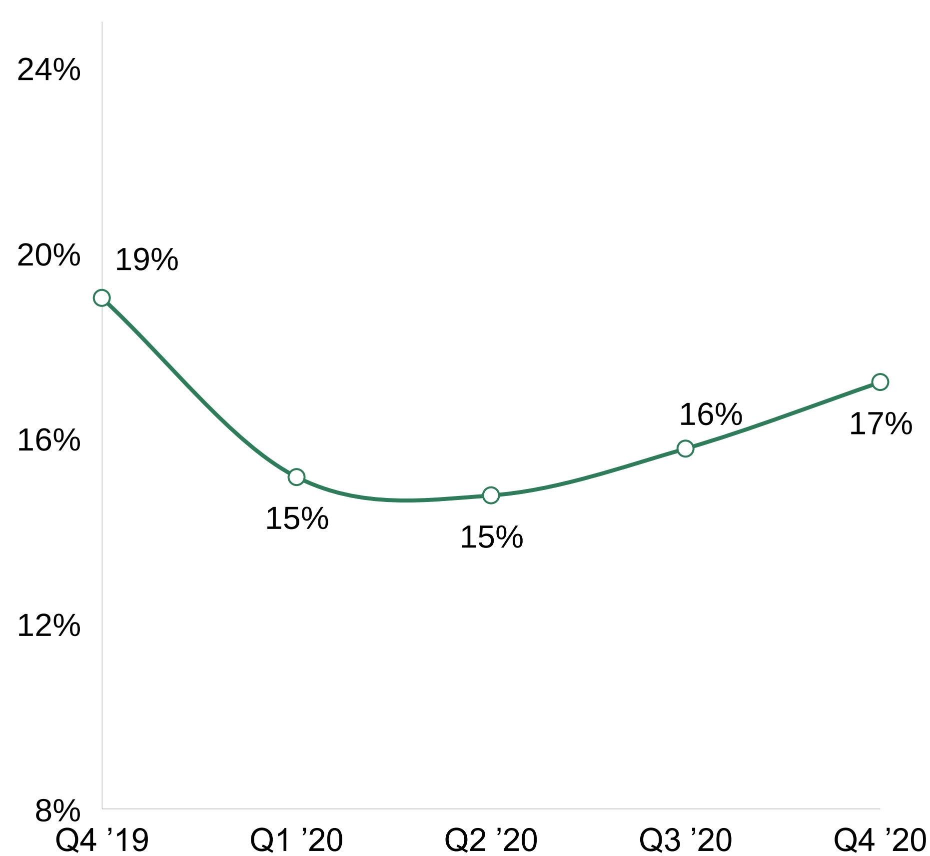

Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# CAPEX over sales ratio is tilting upwards, and spectrum purchases are expected to be sustained

**Yearly CAPEX over sales development**
2017 - LTM, %



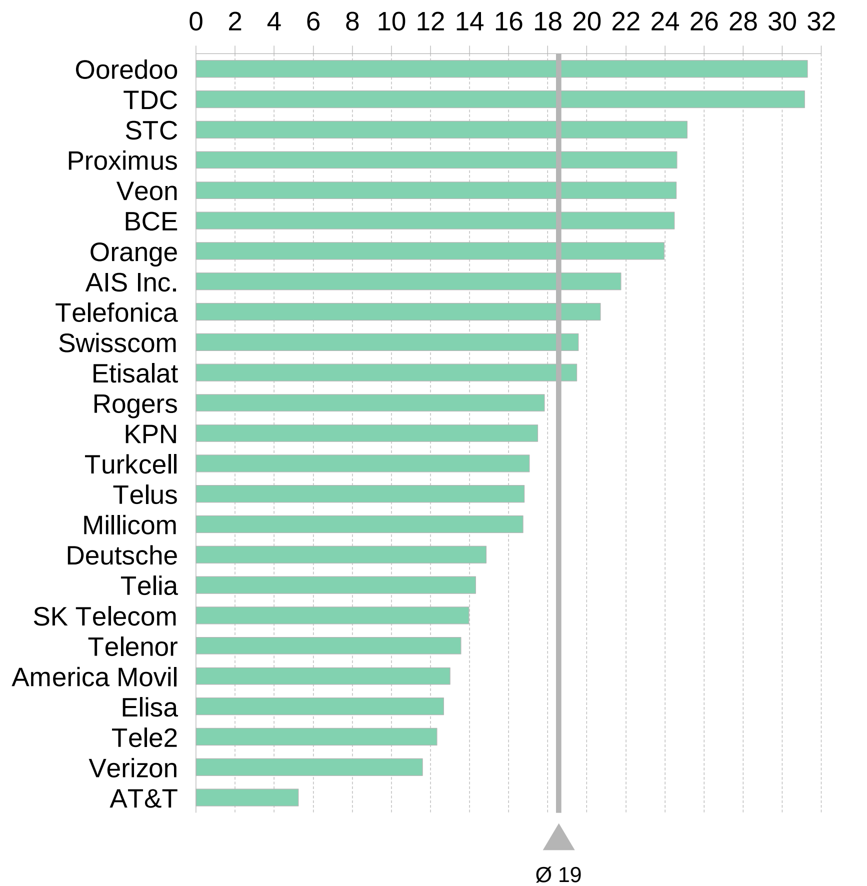

**Quarterly CAPEX over sales development**
Q4’19 – Q4’20, %



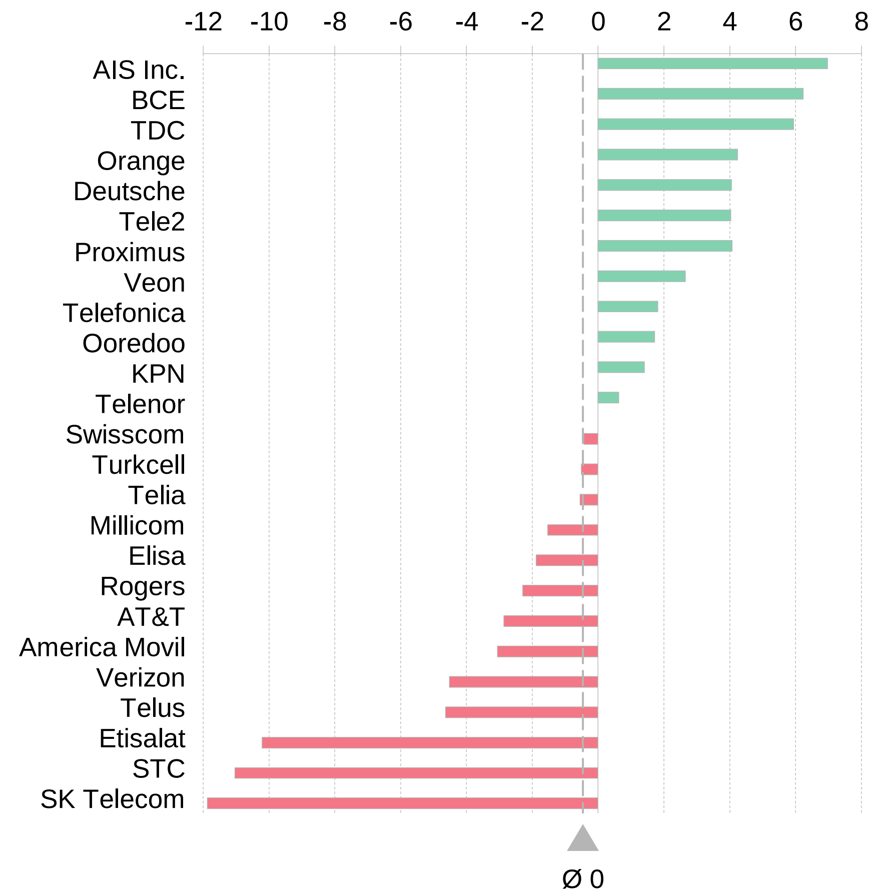

Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# CAPEX of operators that have completed initial 5G network expansion is seeing notable reduction

**CAPEX over sales by operator**
Q4'20, %



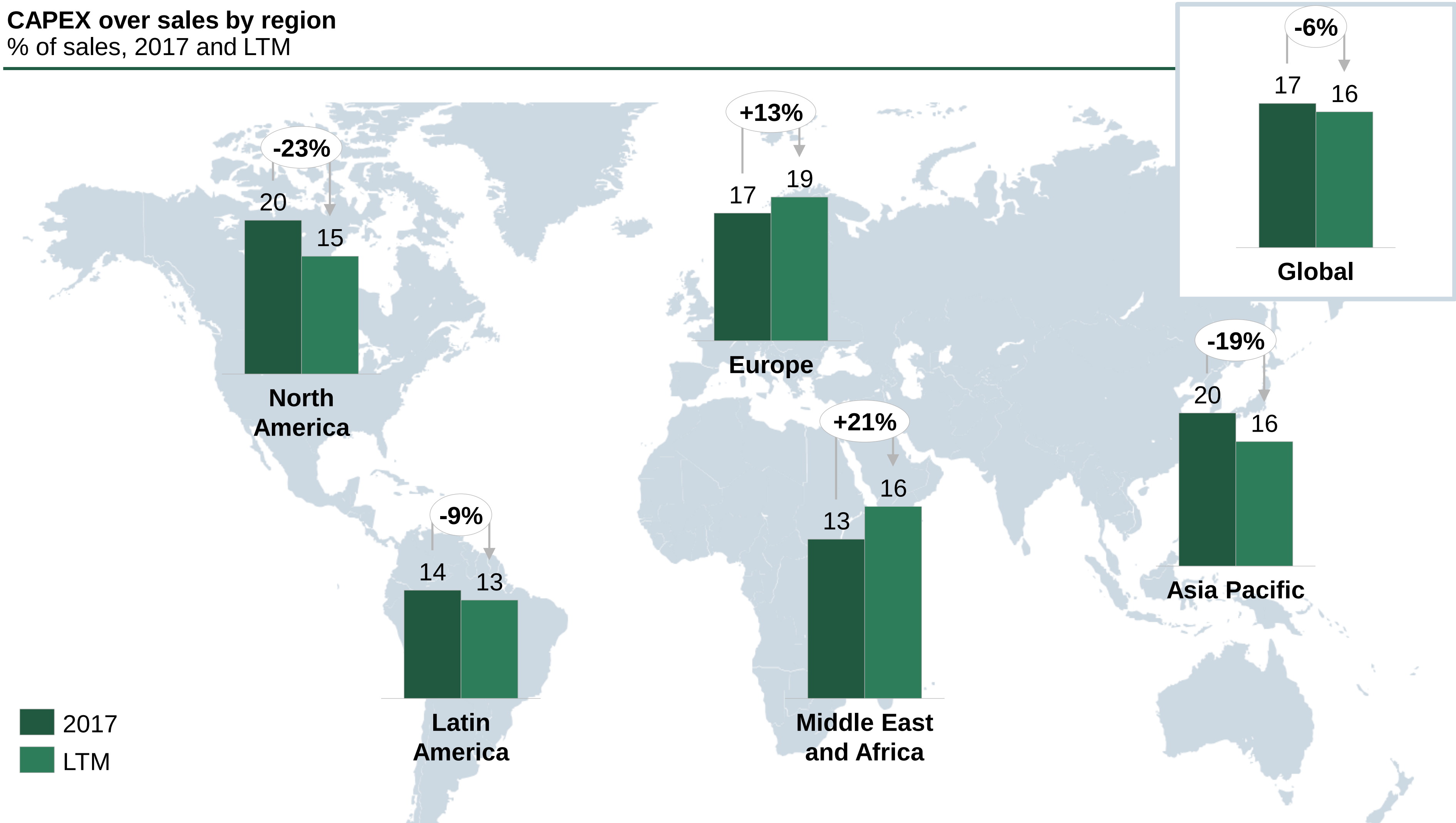

**CAPEX over sales development by operator**
Delta (Q4'20 vs. Q4'19), p.p.




Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# While MEA operators’ CAPEX grew by 21% from 2017 to LTM, that of North American operators fell by 23%

**CAPEX over sales by region**
% of sales, 2017 and LTM



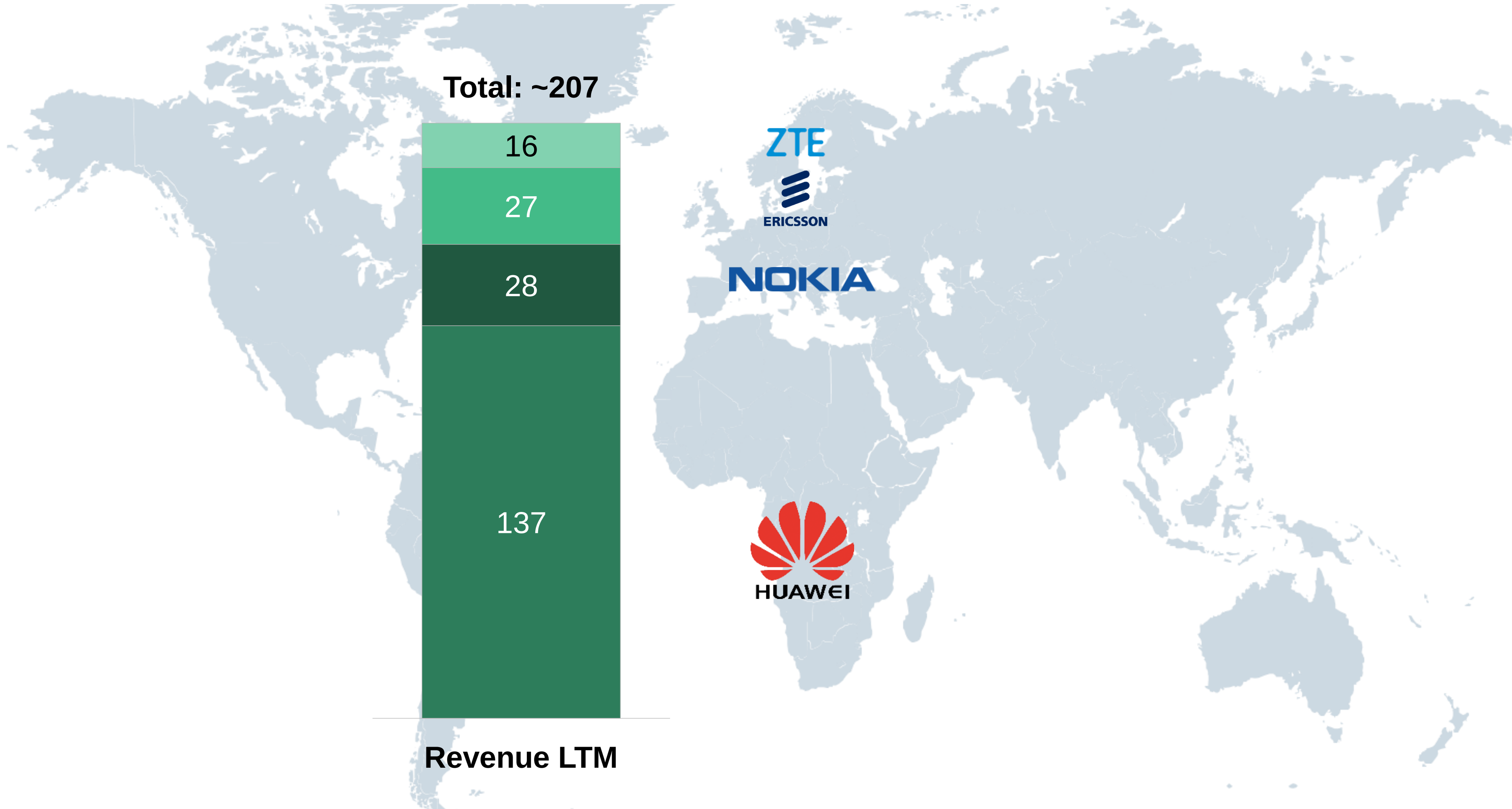

Note: The included companies differ from previous quarter.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# Contents



# The Q4 2020 report includes the four major infrastructure players

**Report overview**
Revenue in BUSD




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

# Key takeaways from the Infrastructure OEM segment

## Key takeaways

| | |
|---|---|
| **Creating Shareholder Value** | 1. ROIC of Ericsson further improved in 2020, reaching 23.5%; Nokia also enhanced its ROIC by 3.4 p.p.<br>2. Huawei suffered a ROIC reduction of 17.5 p.p. in LTM due to the sanctions imposed |
| **Revenue Performance** | 1. Ericsson, Nokia and Huawei achieved over 20% QoQ revenue growth, while ZTE lagged with 5% growth<br>2. Annual revenue of Nokia stagnated in 2020, meanwhile its peers' revenue enhanced by ~15% |
| **Margin Performance** | 1. NOPAT margin of Nokia and Ericsson improved by approximately 3 p.p. and 2 p.p. respectively in LTM<br>2. Ericsson realized 6 p.p. YoY expansion of EBITDA margin in Q4'20 mainly driven by its Networks segment |
| **Capital Efficiency** | 1. CTR of the infrastructure OEMs spread from 3.2 (ZTE) to 1.4 (Nokia) in 2020<br>2. Huawei led the segment with a fixed asset turnover rate of 6.8%, Nokia fell behind at 2.3% |

Note: Comprehensive Huawei and ZTE LTM data missing.

# Events across the Infrastructure OEMs sector from the last 3 months

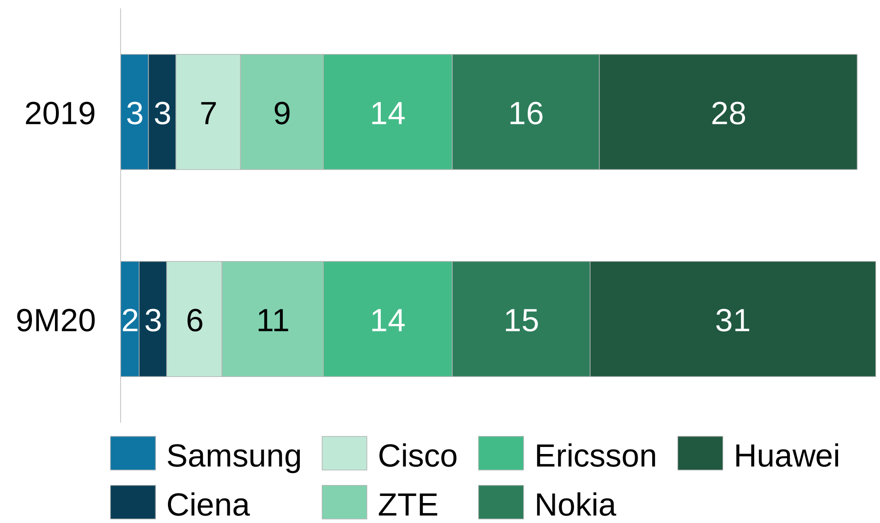
## News and happenings for infrastructure OEMs

| | |
|---|---|
| **Oct-2020** | **Nokia** has been tapped by NASA to build the first cellular communications network on the moon for $14.1 million. Nokia's network will provide critical communications capabilities for tasks astronauts will need to carry out. |
| **Oct-2020** | **Proximus** collaborates with **Ericsson** in Belgium for 5G Core implementation and 4G Core modernization. Ericsson currently has 111 commercial 5G agreements or contracts, 65 live networks. |
| **Oct-2020** | Swedish regulators banned the used of telecom equipment from China's **Huawei** and **ZTE** in its 5G network ahead of the spectrum auction scheduled for November. |
| **Oct-2020** | **Ericsson** and **China Telecom** have successfully completed China's first 5G Standalone Ericsson Spectrum Sharing data call on a commercial network. The successful demo shows that Ericsson Spectrum Sharing can be deployed on a dual mode 5G Core-enabling Standalone 5G network. |
| **Nov-2020** | **Ericsson** has completed its acquisition of **Cradlepoint**, the US-based market leader in Wireless WAN Edge 4G and 5G solutions for the enterprise market. The investment is key to Ericsson's ongoing strategy of capturing market share in the rapidly expanding 5G enterprise space. |
| **Jan-2020** | **Nokia** and **Google Cloud** have entered a global strategic partnership aimed at supporting telecom providers' compute needs for 5G in both the core and the network edge. Nokia will bring its voice core, cloud packet core, network exposure function, data management and etc. to the partnership. |

Source: Press & News, Statista, Dell'oro Group, Applied Value Analysis

## Telcom Equipment Market Share by Revenue

%

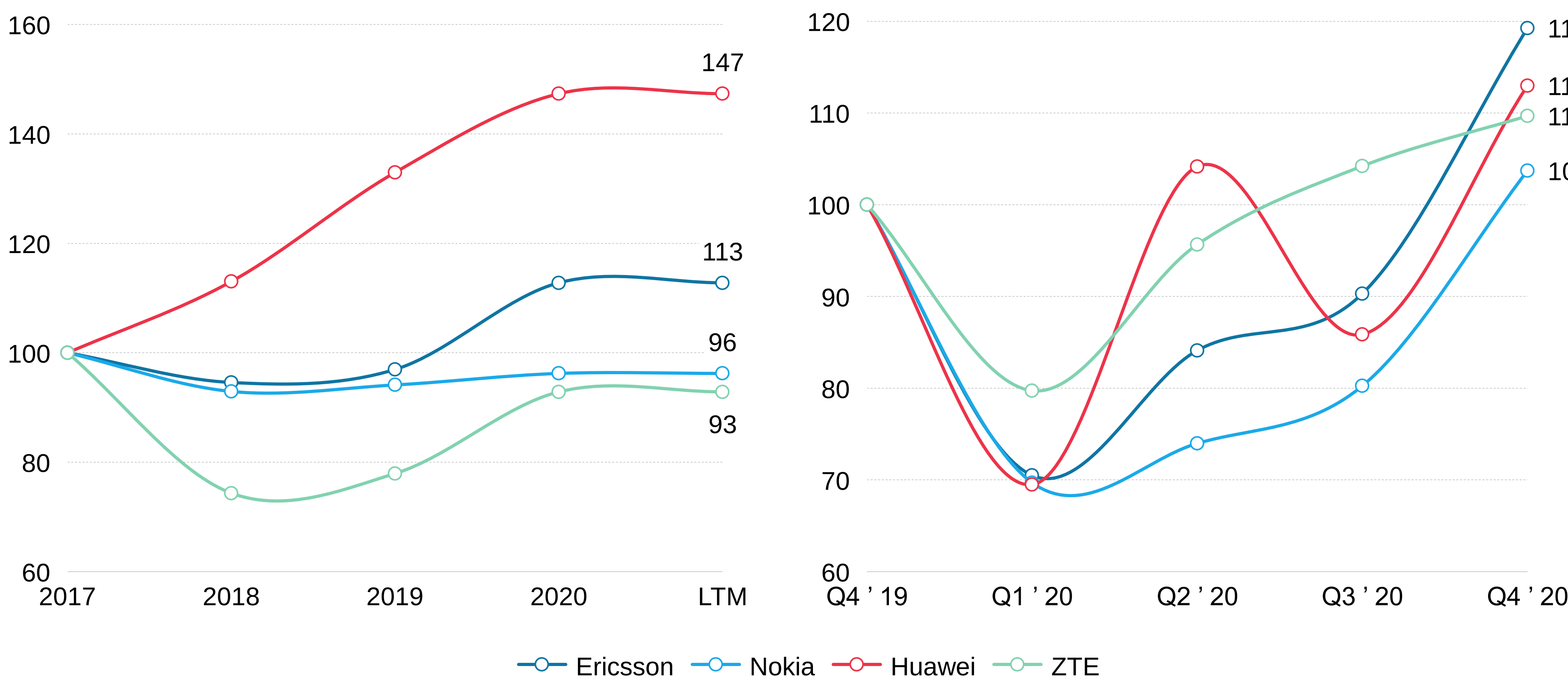



**Dell'Oro Group estimated the overall telecom equipment market advanced 9% YoY during Q3'20 and 5% YoY over the 9M20 period. The telecom equipment market is projected to advance 3% - 4% in 2021.**

# All companies in the infrastructure segment achieved ~15% revenue increase except Nokia

**Indexed Yearly revenues**
2017 to LTM (index 2017=100)

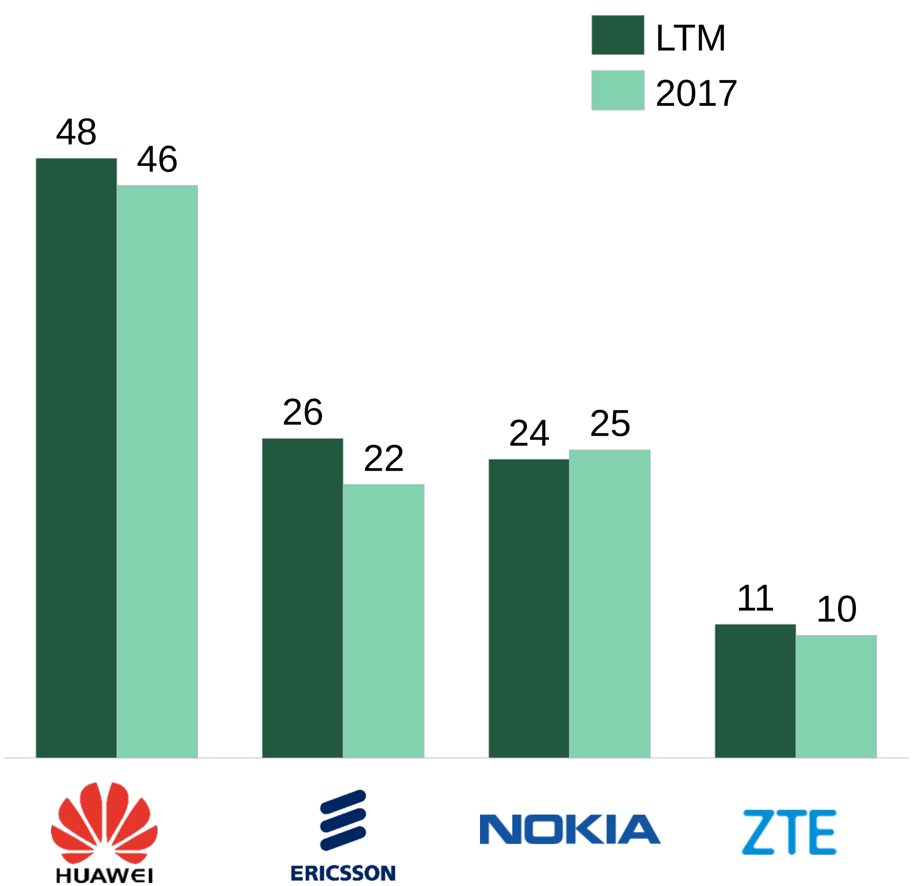
**Indexed Quarterly revenues**
Q4’19 – Q4’20 (index Q4’19=100)



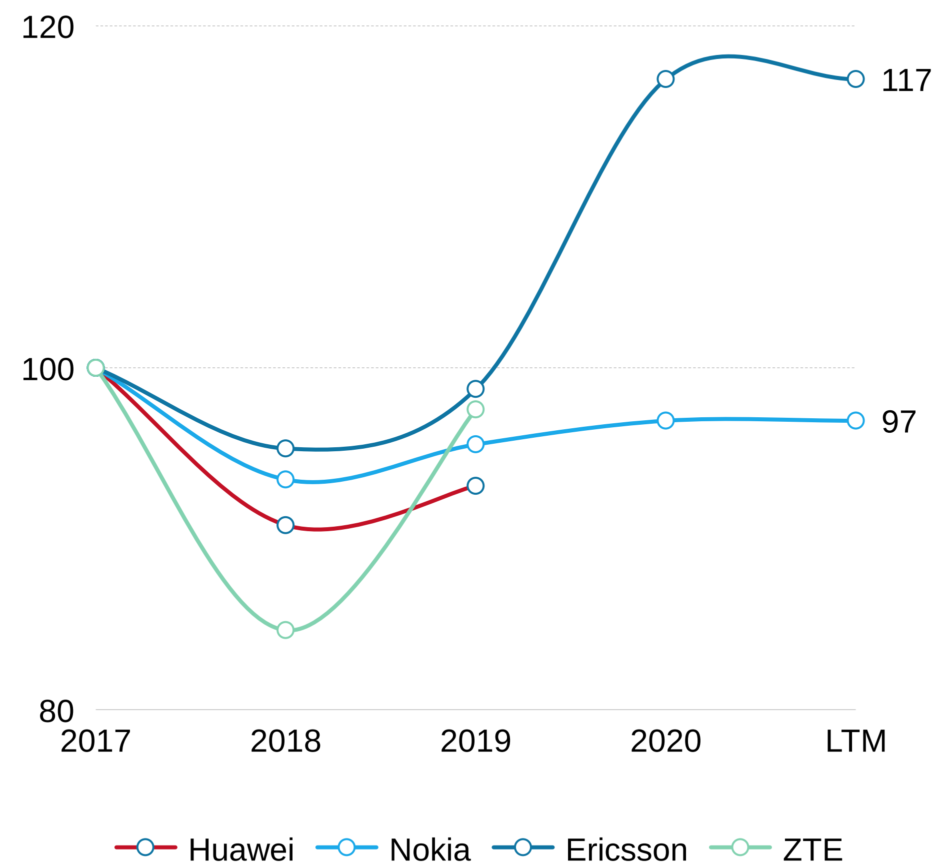

Notes: Fiscal years are used in the yearly analysis. Huawei’s 2020 and LTM revenue based on market projections.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# Segment revenue of Ericsson surged 18% in the past year; Ericsson now holds 131 commercial 5G agreements or contracts with unique operators

**Segment revenues**
2017 - LTM, BUSD

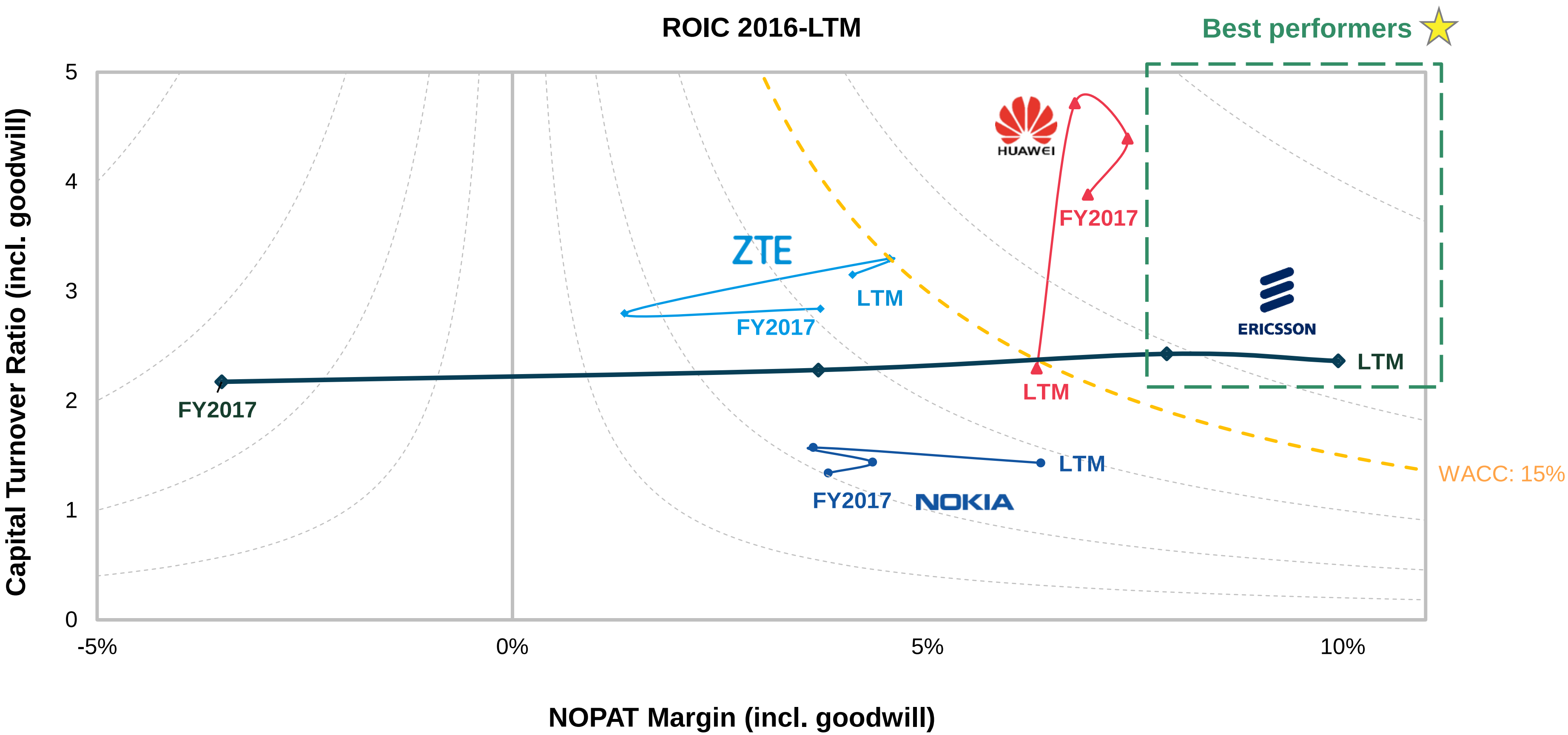



**Indexed yearly segment revenues**
2017 – LTM (index 2016=100)




Note: Included segments per company: Huawei (Carrier), Ericsson (Networks, Digital Services, Managed Services), Nokia (Networks, Software), ZTE (Operator Network)
2020 segment revenue of Huawei and ZTE unavailable, LTM segment revenue of Huawei and ZTE is based on 3Q'19 – 2Q'20.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

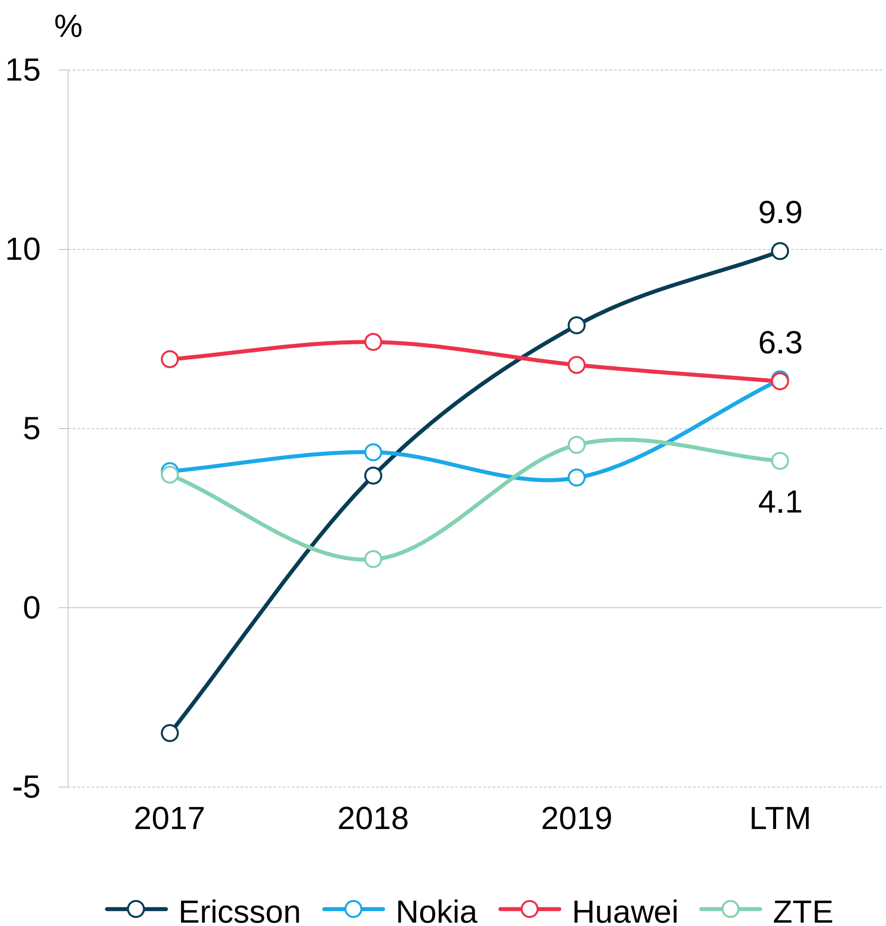
# By consistently expanding its NOPAT margin over the past four years, Ericsson ROIC reached 23.5% in LTM

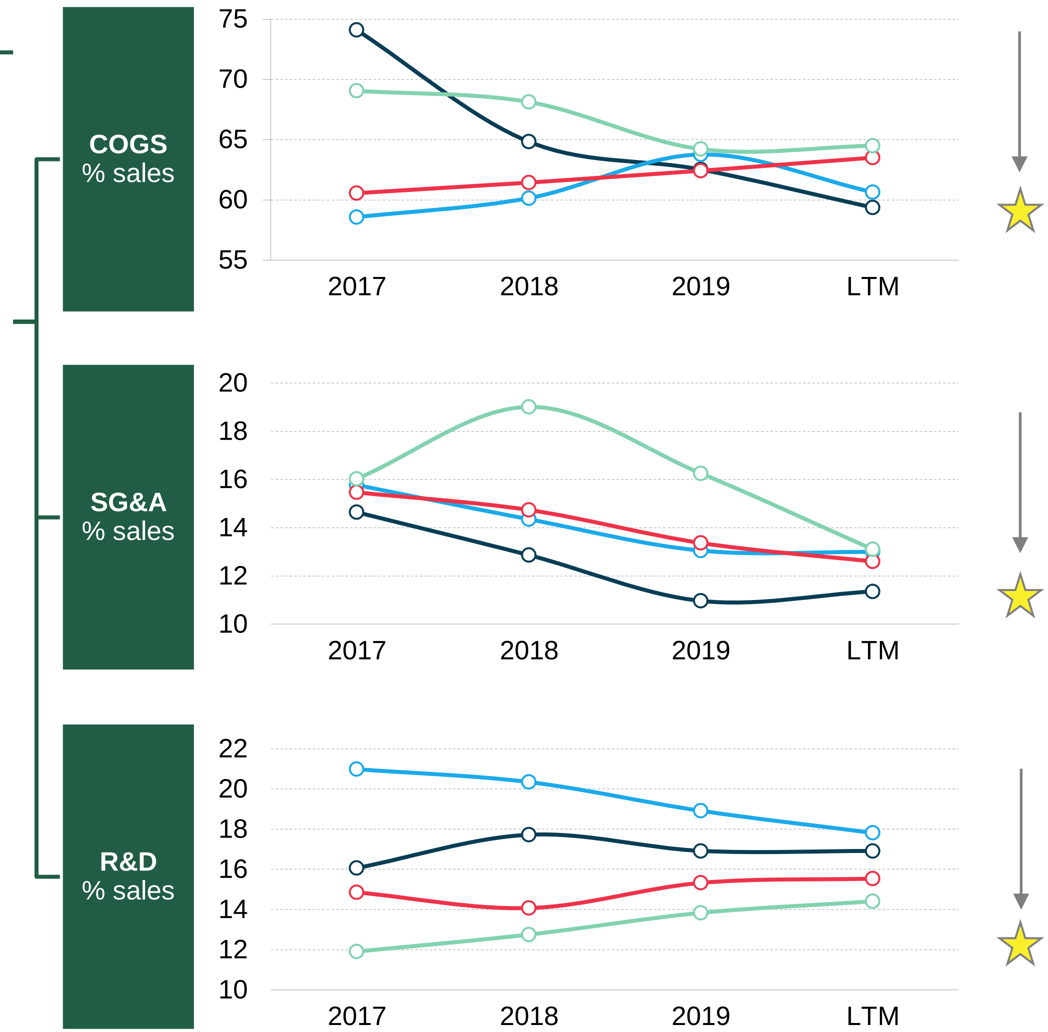



Note: Fiscal years are used in the yearly analysis. Huawei reports annually. LTM ROIC analysis of Huawei and ZTE is based on data from 4Q'19 – 3Q'20.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# With significant reduction in COGS and SG&A ratio from 2017 to LTM, NOPAT margin of Ericsson widened 13.4 p.p.

**NOPAT margin,** %

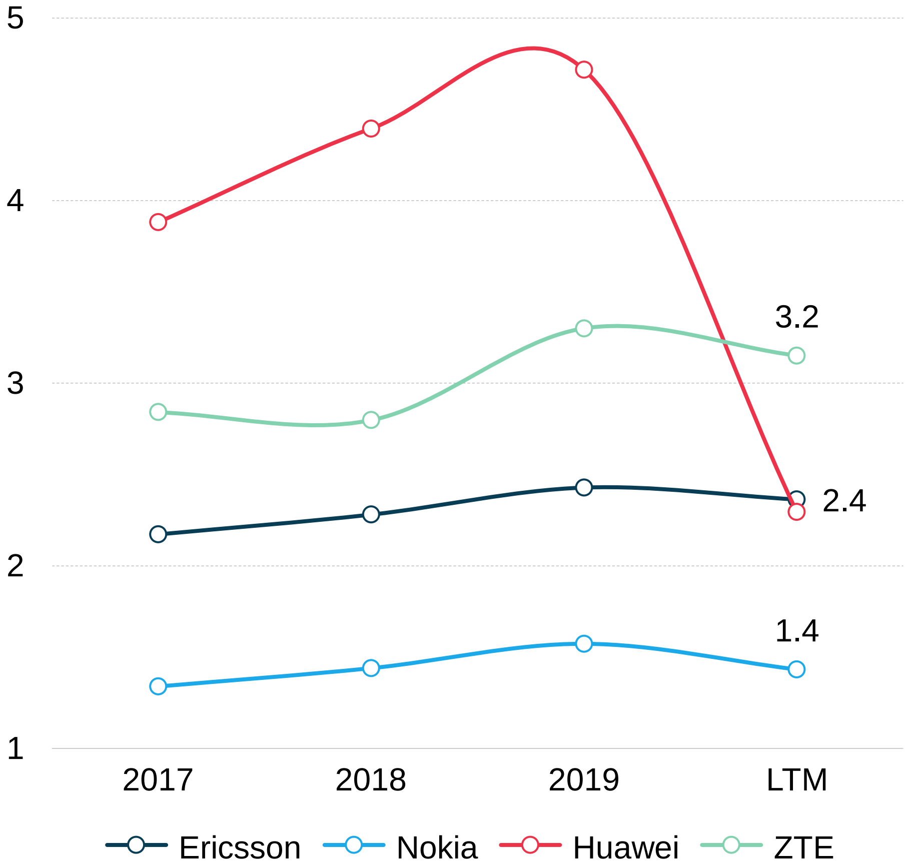


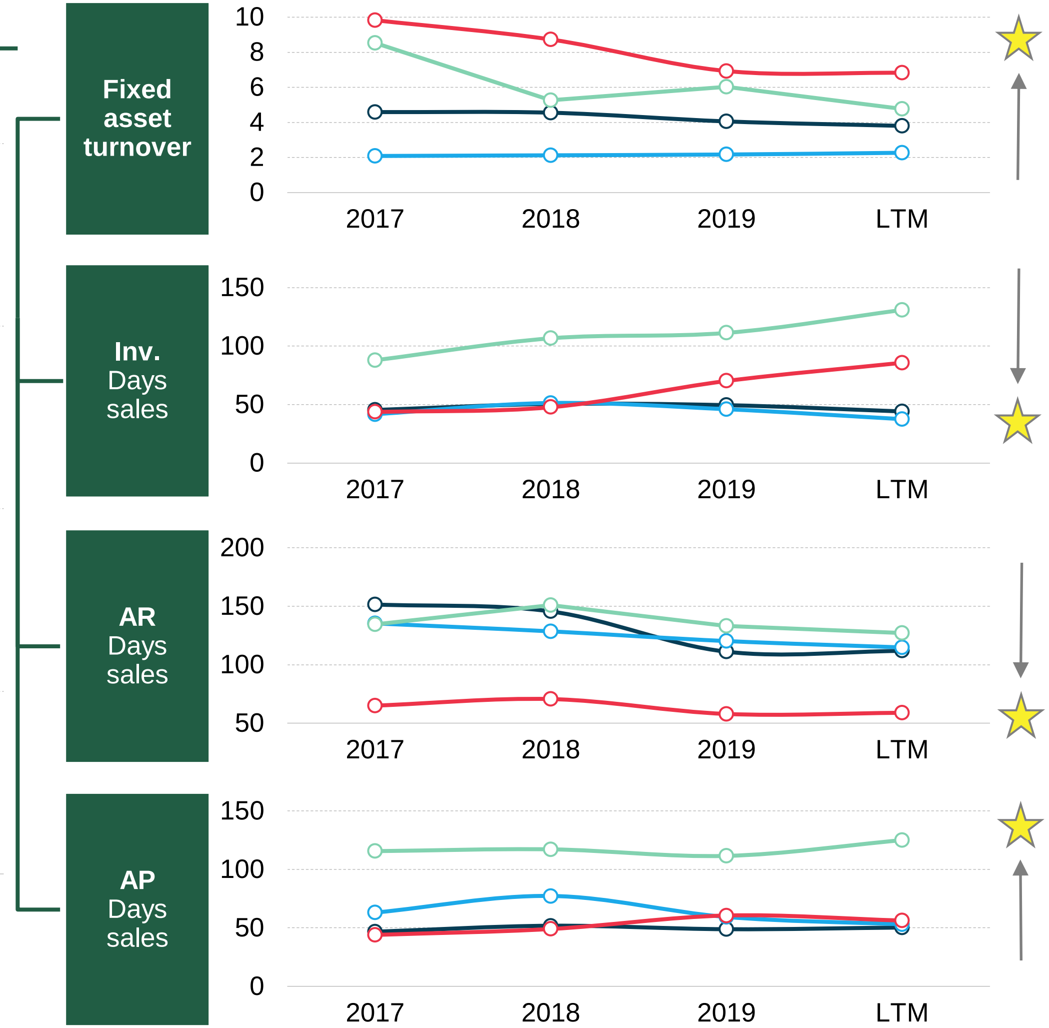




Notes: Fiscal years are used in the yearly analysis. LTM analysis of Huawei and ZTE is based on data from 4Q'19 – 3Q'20.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# Apart from Huawei, whose inventory turnover has been slowed by sanctions, the CTR of all the other players stabilized from 2017 to LTM

## Capital turnover ratio (CTR)




Notes: Fiscal years are used in the yearly analysis. LTM analysis of Huawei and ZTE is based on data from 4Q'19 – 3Q'20.

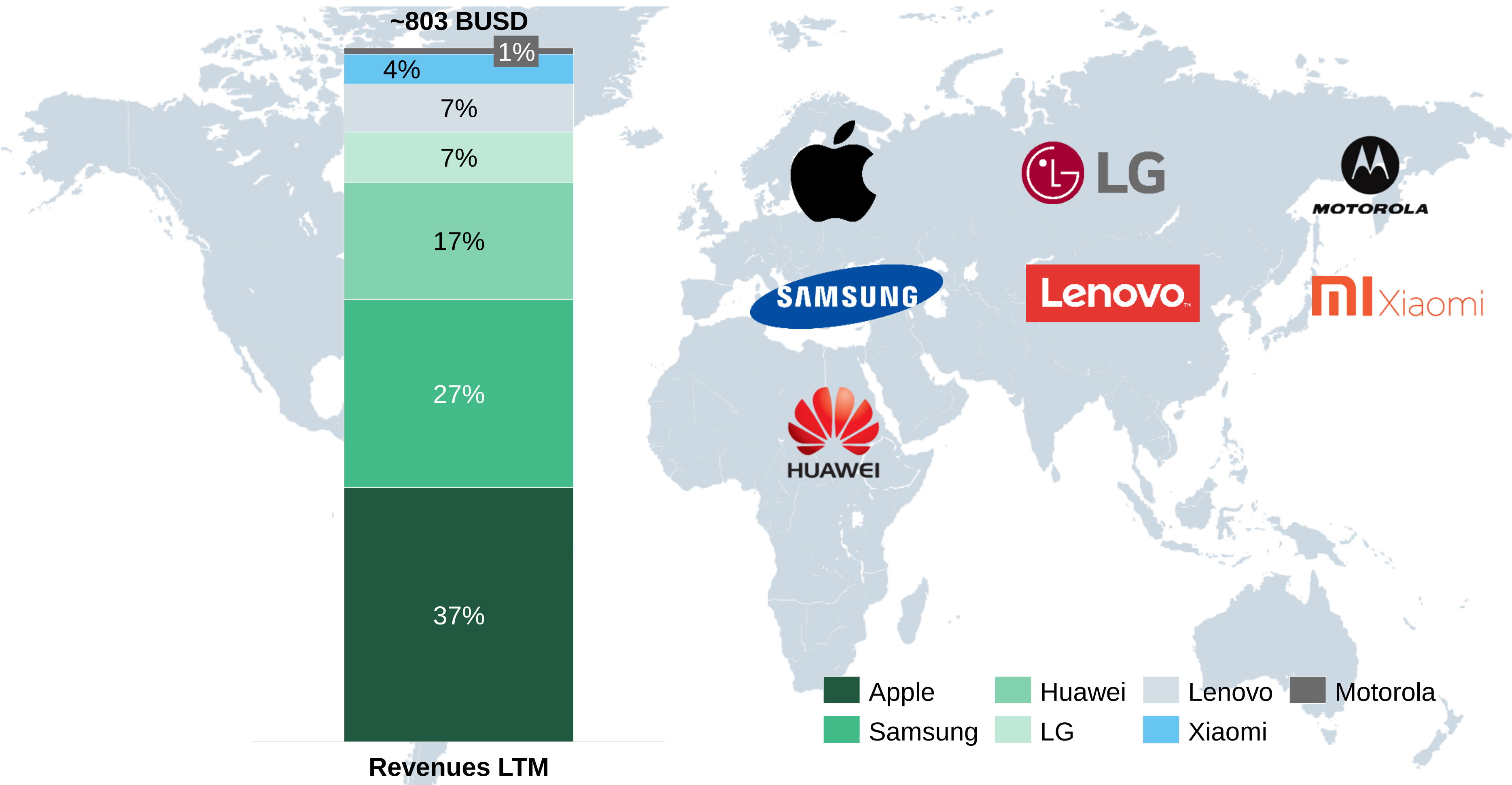
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# Contents



# The Q4 2020 report includes seven major device manufacturers

**Report overview**
Revenue in BUSD, LTM




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

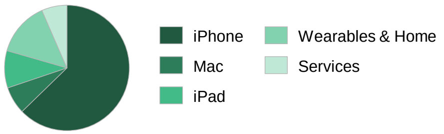
# Key takeaways from the Device OEM segment

## Key takeaways

| | |
|---|---|
| **Creating Shareholder Value** | 1. Apple continues to hold material ROIC advantage over its peers at 103%<br>2. Lenovo and Samsung improved their ROIC in the LTM by 3.9 p.p. and 3.2 p.p. respectively |
| **Revenue Performance** | 1. With the launch of iPhone 12 series, Apple's quarterly revenue jumped 51% QoQ, surpassing the $100 billion mark<br>2. Xiaomi had sustained extensive revenue growth in LTM, of which Q4'20 revenue reached 66% YoY growth |
| **Margin Performance** | 1. Apple, Motorola and Samsung outperformed the others with EBITDA margins of 32%, 31% and 29% respectively in Q4'20<br>2. NOPAT margin of the Device OEMs spread from 2.3% (Lenovo) to 17.6% (Apple) in LTM |
| **Capital Efficiency** | 1. CTR of the Device OEMs averaged at 3.5 in LTM, Lenovo led the segment with a CTR of 7.3, while Motorola and Samsung trailed at 1.3<br>2. While days sales outstanding of its peers converged around 50 days, that of Motorola hovered around 115 days |

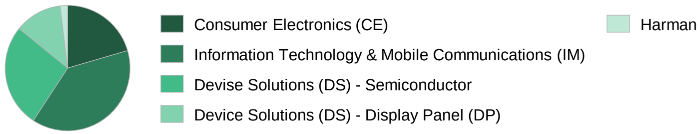
# Device OEMs’ business segments, revenue split and descriptions

**Company** | **Business segments and revenue share in 2020, %** | **Description**



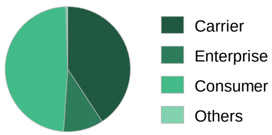

- iPhone: Mobile Phones
- Services: iTunes Store, iCloud, Apple Pay, other services
- Mac: Laptops & Personal Computers
- iPad: Tablets
- Wearables & Home: Apple Watch, Apple branded accessories for Apple products

SAMSUNG



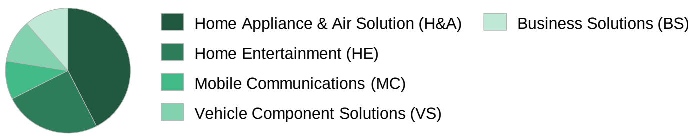

- Information Technology & Mobile Communications: Mobile Phones, Communication systems and computers
- Device Solutions: Semiconductor Business and display panels
- Consumer Electronics: TVs, monitors, printers, air conditioners and refrigerators
- Harman: Infotainment, connected solutions for automakers,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

HUAWEI



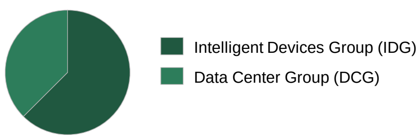

- Carrier: Building telecommunications networks and services
- Enterprise: Equipment, software and services to enterprise customers
- Consumer: Manufacturing of electronic communication services (e.g. phones)
- Others: Communication services not applicable to above descriptions

LG



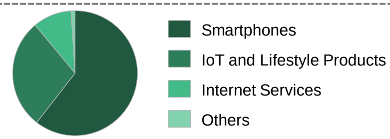

- Home Entertainment: TV, Monitors, PCs, Security Devices, Audio/Video
- Home Appliance & Air solution: Kitchen appliances, Vacuums, displays
- Mobile Communications: Mobile communications, handsets
- VS: Vehicle components and others
- Business solutions/B2B: Information displays, solar modules and others

Lenovo



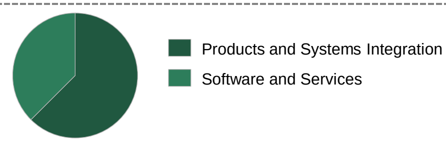

- IDG: Personal computer and smart devices, and mobile businesses
- DCG: Provide data center solutions

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

MOTOROLA

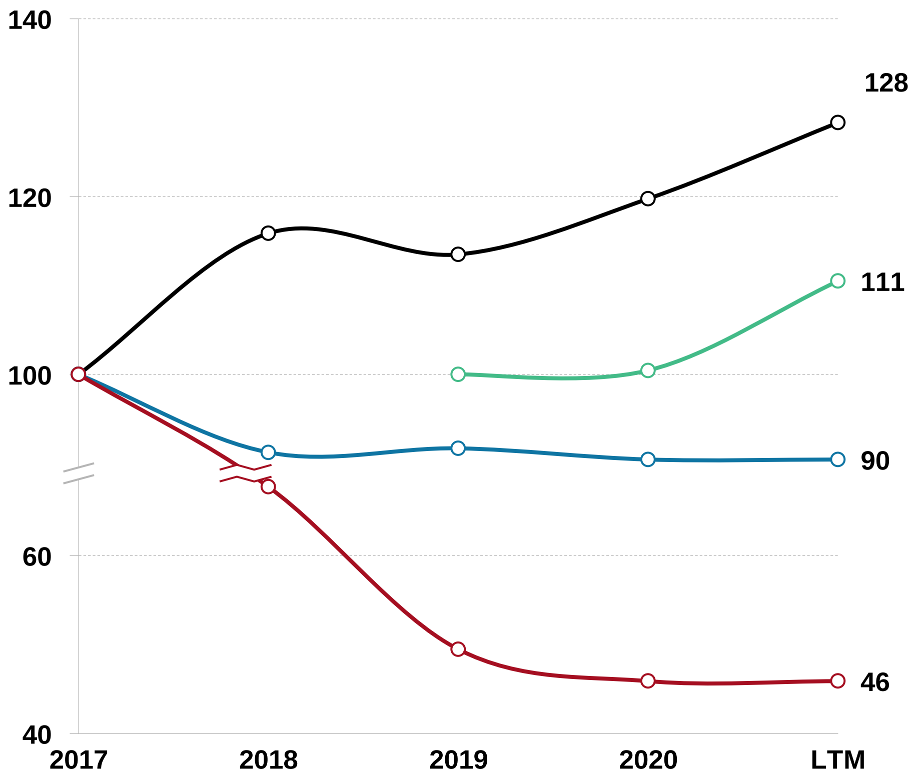



- Products and System Integration: Offers a portfolio of infrastructure, devices, accessories, video security devices and infrastructure; and implements and integrates such systems, devices and applications
- Software and Services: Provides public safety and enterprise command center software, unified communications applications and video software solutions delivered on-premise and as a service

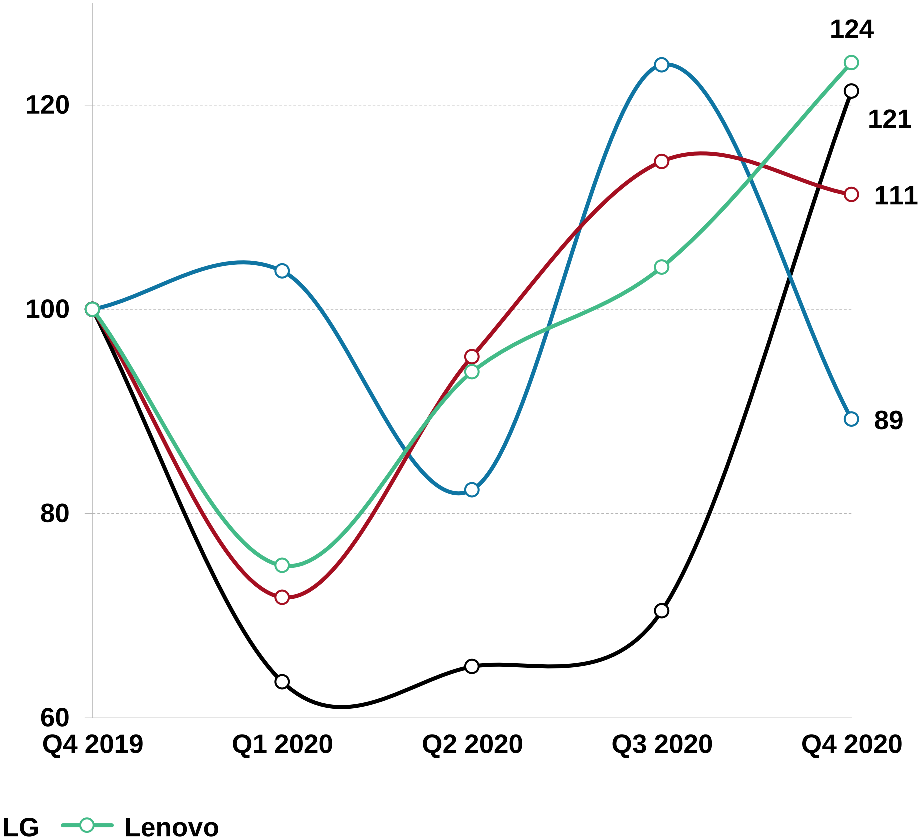
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# Apple delivered its largest quarter by revenue of all time in Q4’20, crossing the $100 billion mark in a single quarter

**Segment Yearly revenue development**
2017 - LTM (index 2016=100)




**Segment Quarterly revenue development**
Q4’19 – Q4’20 (index Q4’19=100)



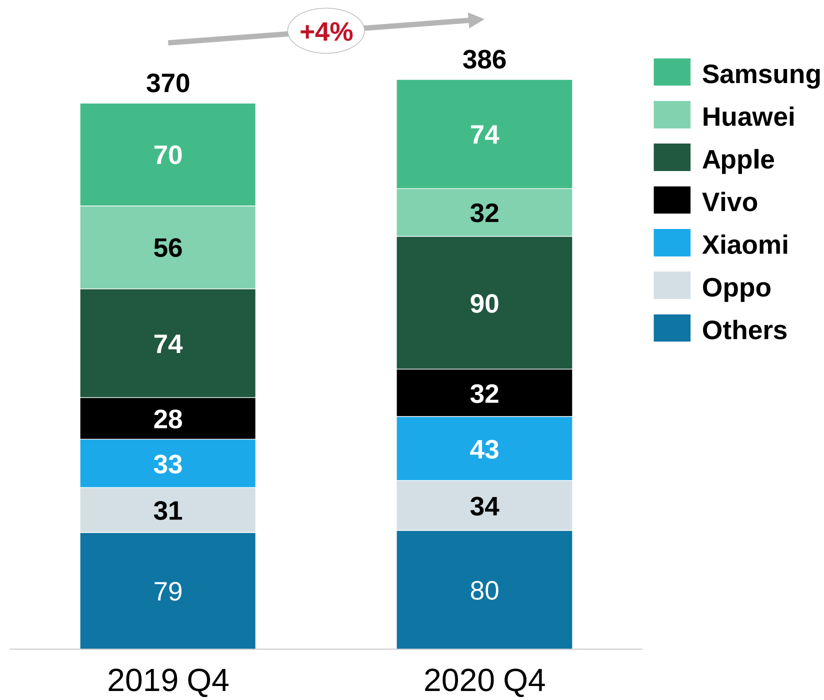

Note: Included segments per company: Huawei (Consumer business), Samsung (Information technology and mobile communication), LG (Mobile communication), Lenovo (Intelligent device), Apple (All segments)
Source: CapitalIQ, Annual/Quarterly/Half Year Reports

# Events across the Device OEMs sector from the last 3 months

## News and happenings for Device OEMs

| | |
|---|---|
| Oct-2020 | **Samsung** and three major contract manufacturing partners of **Apple** are among 16 firms to win $6.65 billion incentives under India's federal plan to boost domestic smartphone production over the next five years. |
| Nov-2020 | **Xiaomi**'s share price has doubled since June, its value surged to $80 billion on November 5th. The main explanation is the flagging performance **Huawei** allows Xiaomi, which is better insulated from the geopolitical store, to cash on Huawei's troubles. |
| Nov-2020 | **Oppo** showed off its products in concept during its second annual "Inno Day", including a smartphone with an expandable "rolling" screen and a new set of AR glasses. **LG** also teased an extendable slide-out display for its next Explorer Project phone. |
| Nov-2020 | **Huawei** Technologies Co Ltd is selling its budget brand smartphone unit **Honor** to a consortium of over 30 agents and dealers for $15B, according to a joint statement signed by 40 companies involved in the purchase. |
| Dec-2020 | **Samsung** announced a new plan to collaborate with **IBM** to develop edge computing, 5G and hybrid cloud solution to help businesses across all industries modernize their operations and realize the promise of Industry 4.0. |
| Dec-2020 | Riding on its stellar performance in China and India, **MediaTek** became the biggest smartphone chipset vendor with 31 percent market share in Q3 2020 for the first time, as smartphone sales rebounded in the September quarter. |

## Global smartphone shipments
Million units



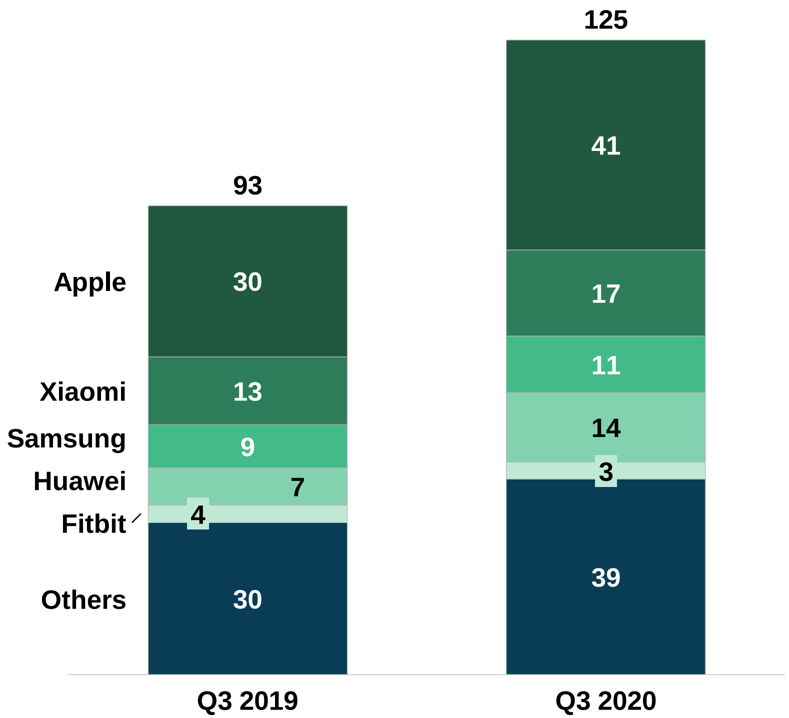

**In Q4'20, the smartphone market saw a bounce-back with a total of 385.9 million shipments headlined by Apple's iPhone 12 series. Following Huawei's divestment of the Honor Series, Xiaomi rose to third with 43.3 million shipments and the highest YoY growth of all vendors at 32%.**

.

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

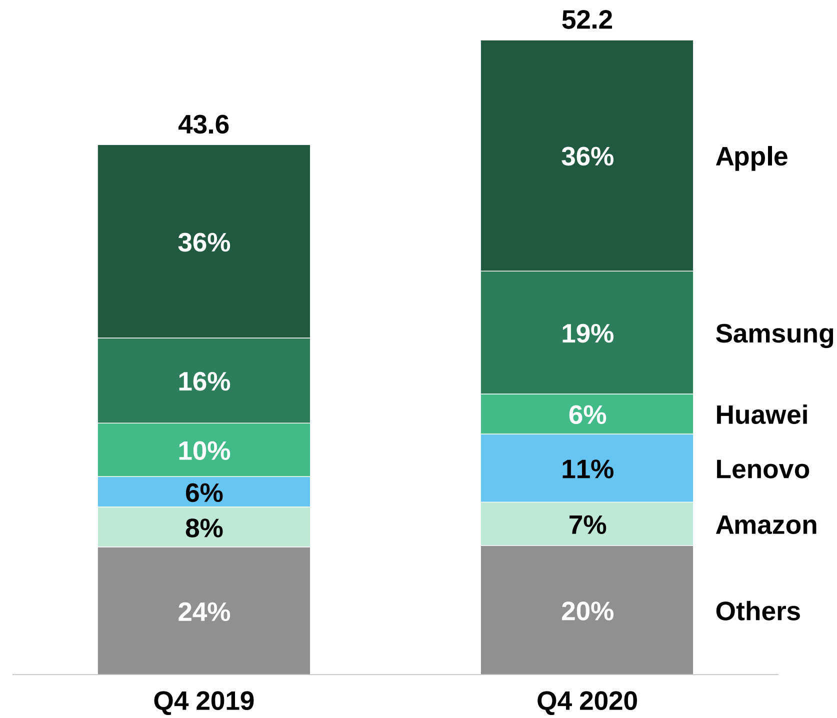
# Both global wearables and tablet market saw substantial YoY growth; Apple still leads both markets with over 35% of market share

**Global wearables shipments**
Million units




**The global wearables market grew 35.1% year over year during the Q3 2020 with total shipments reaching 125 million units. The surge was driven by seasonality, new product launches, and the global pandemic.**

**Global tablet shipments**
Million units



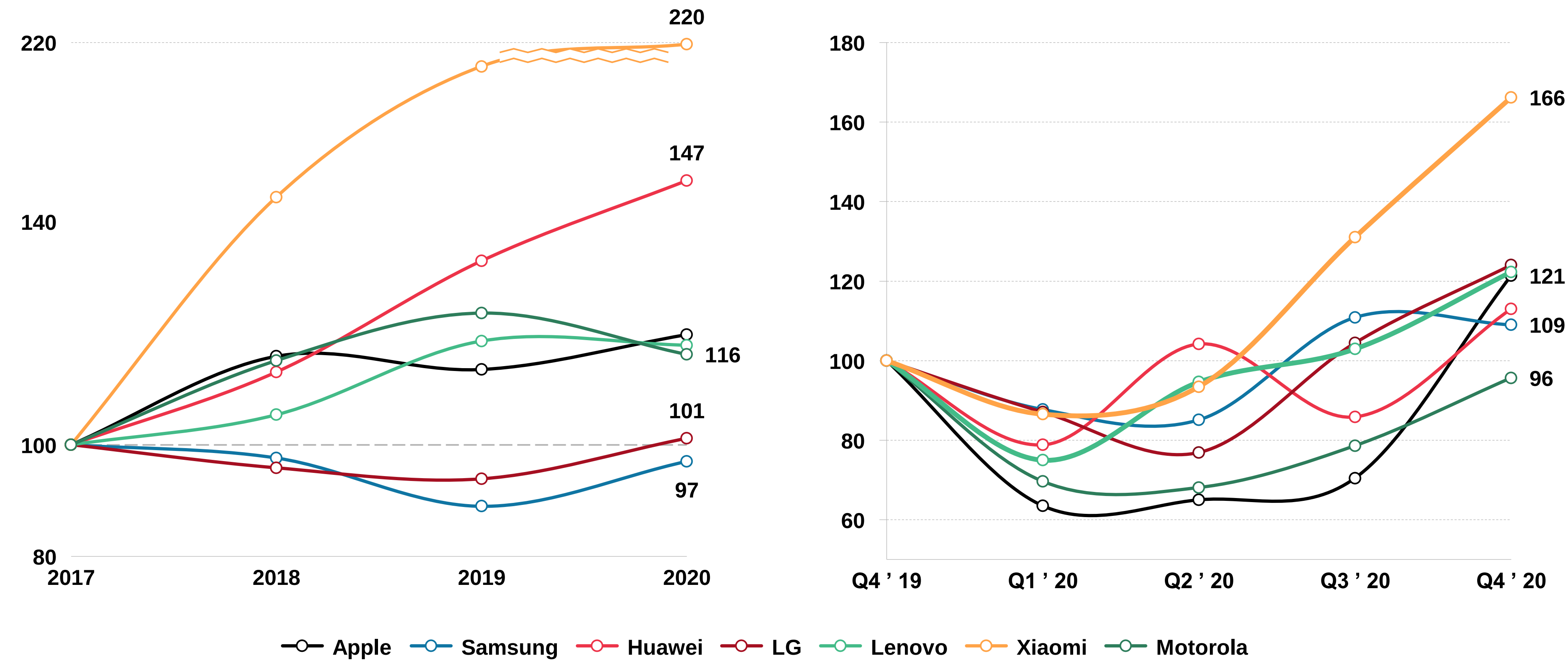

**The global tablet market has seen a 19.5% YoY growth in Q4'20, Impacted by the pandemic, the tablet market reached shipment levels not seen since the fourth quarter of 2017 when the total was 49.9 million.**

Source: IDC, Counterpoint Research and Applied Value Analysis.

# In 2020, Xiaomi's business grew significantly in China and overseas, reaching record levels in both shipments and revenue

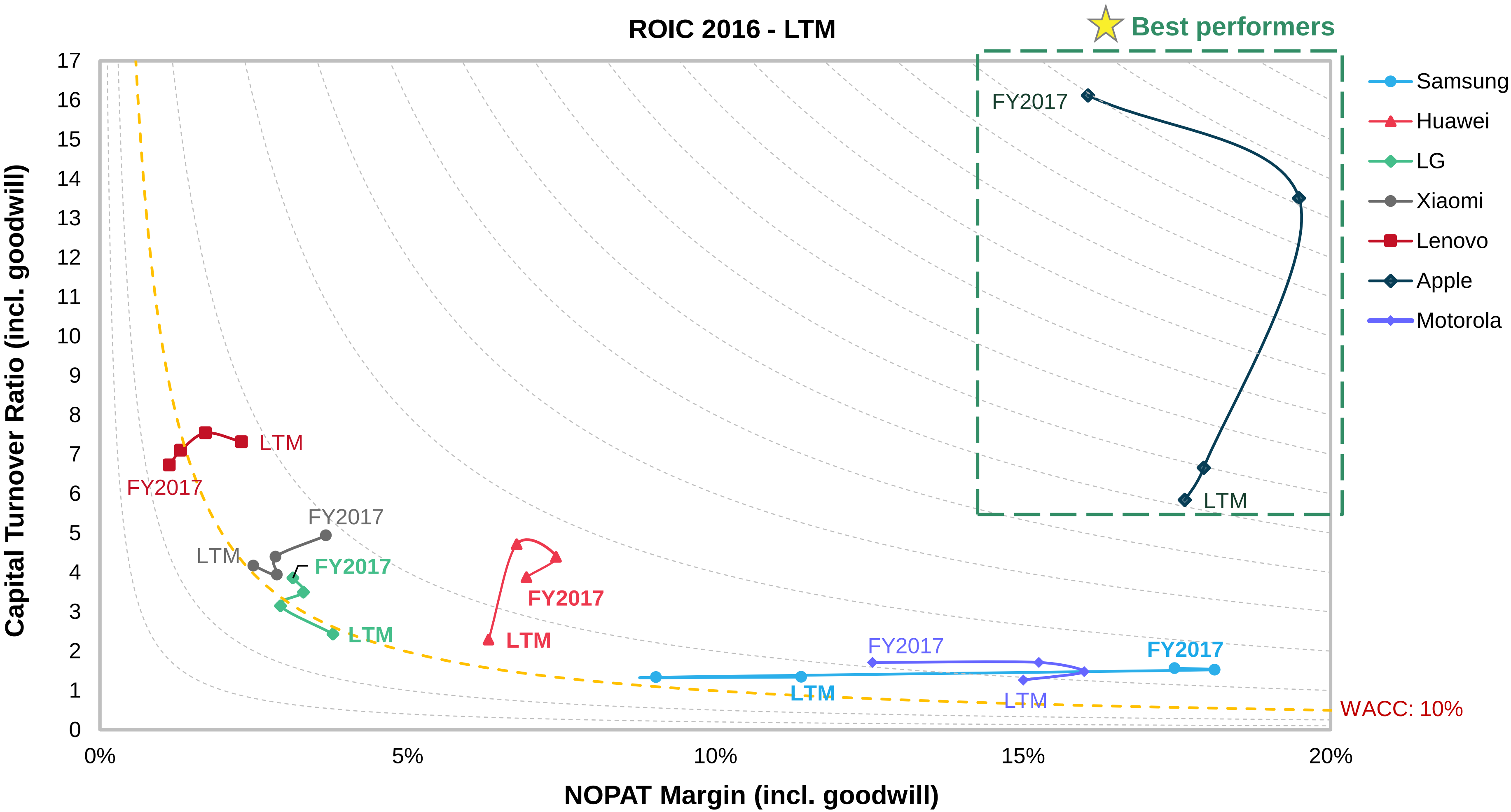
**Group Yearly revenue development**
2017 - 2020 (index 2016=100)

**Group Quarterly revenue development**
Q4'19 – Q4'20 (index Q4'19=100)




Note: 2020 and Q4'20 revenues of Huawei and Xiaomi based on market projections.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

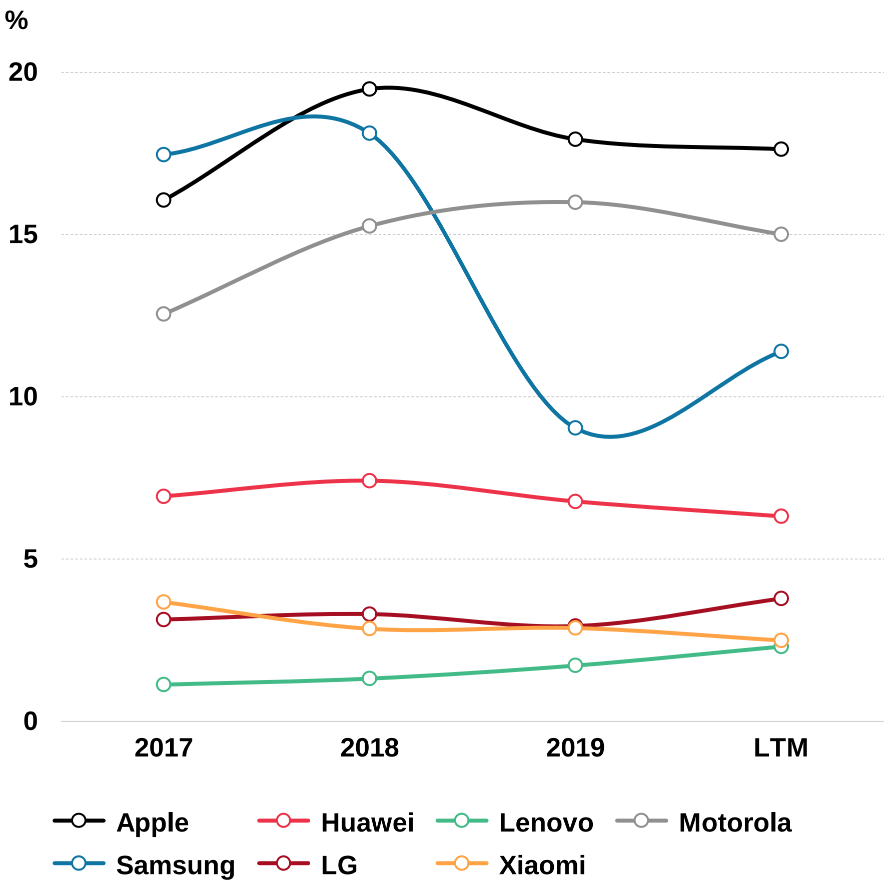
# ROIC of Lenovo and Samsung enhanced the most in 2020 at 3.9 p.p. and 3.2 p.p. respectively

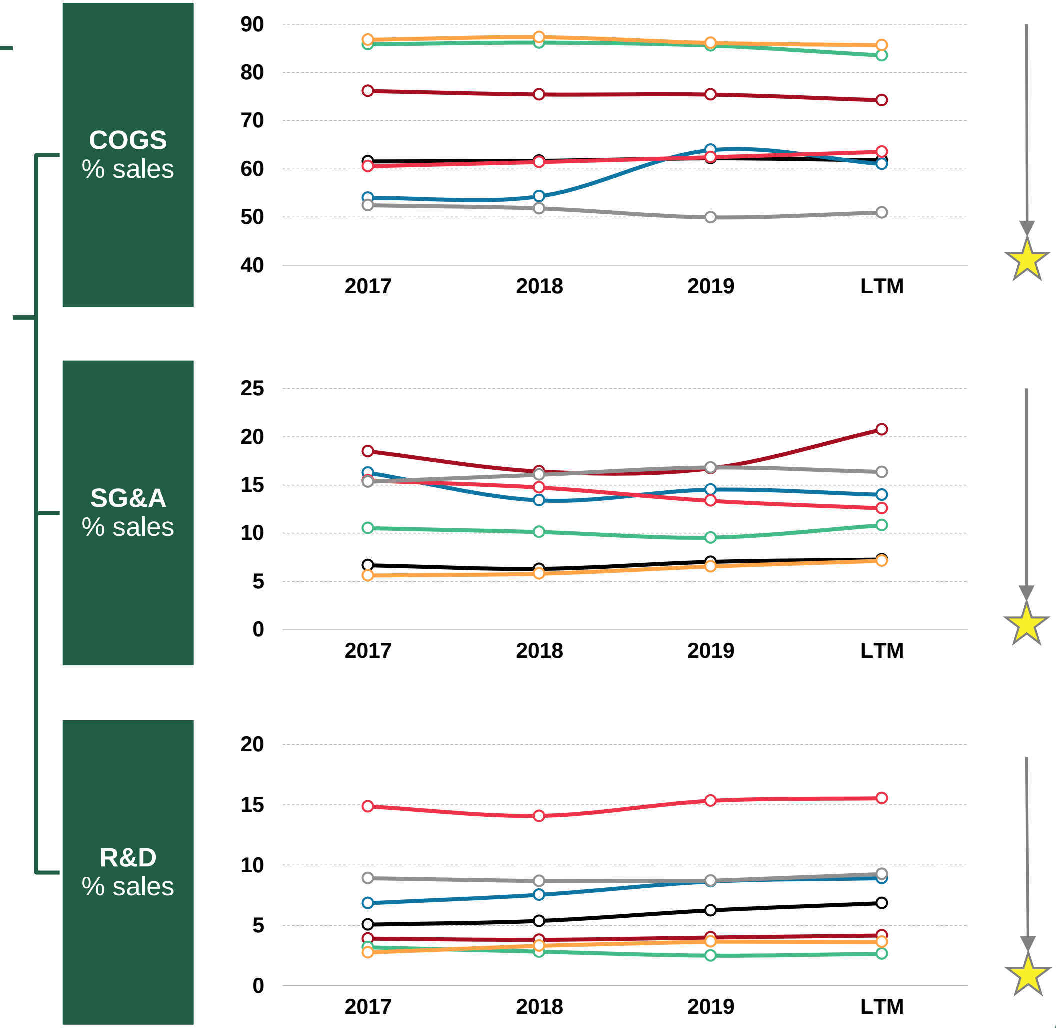



Notes: Fiscal years are used in the yearly analysis. LTM data of Huawei and Xiaomi based on 4Q19 – 3Q'20.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# Apple holds the highest NOPAT margin of 17.6% among the device OEMs, followed by Motorola at 15.0%

**NOPAT margin,** %

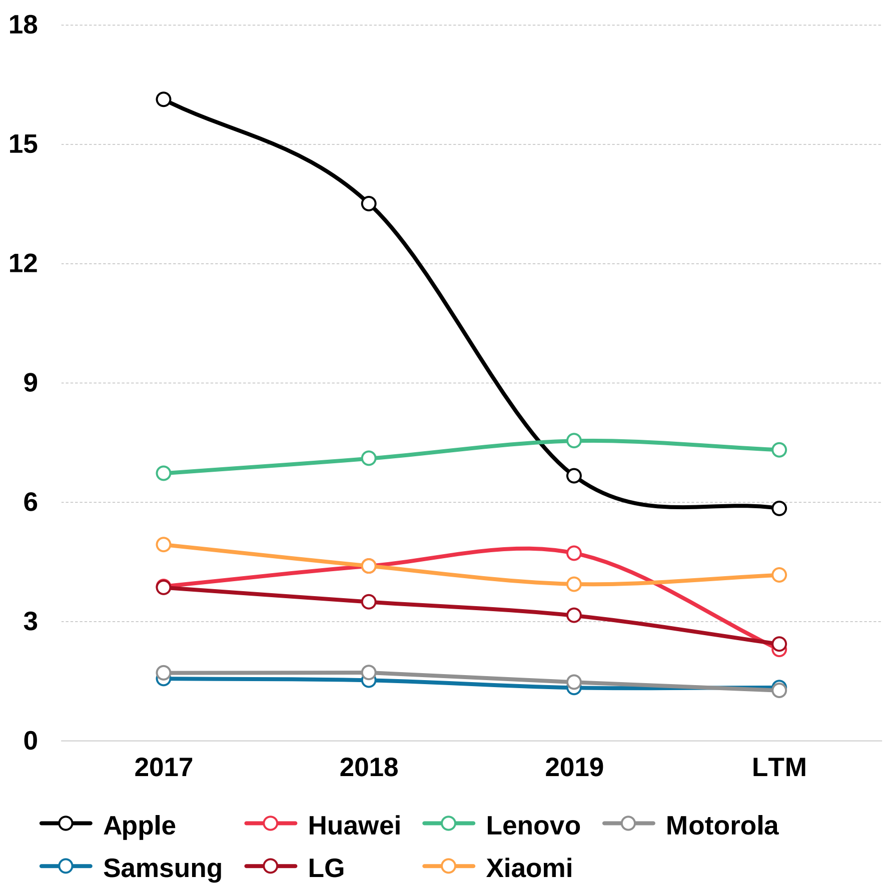


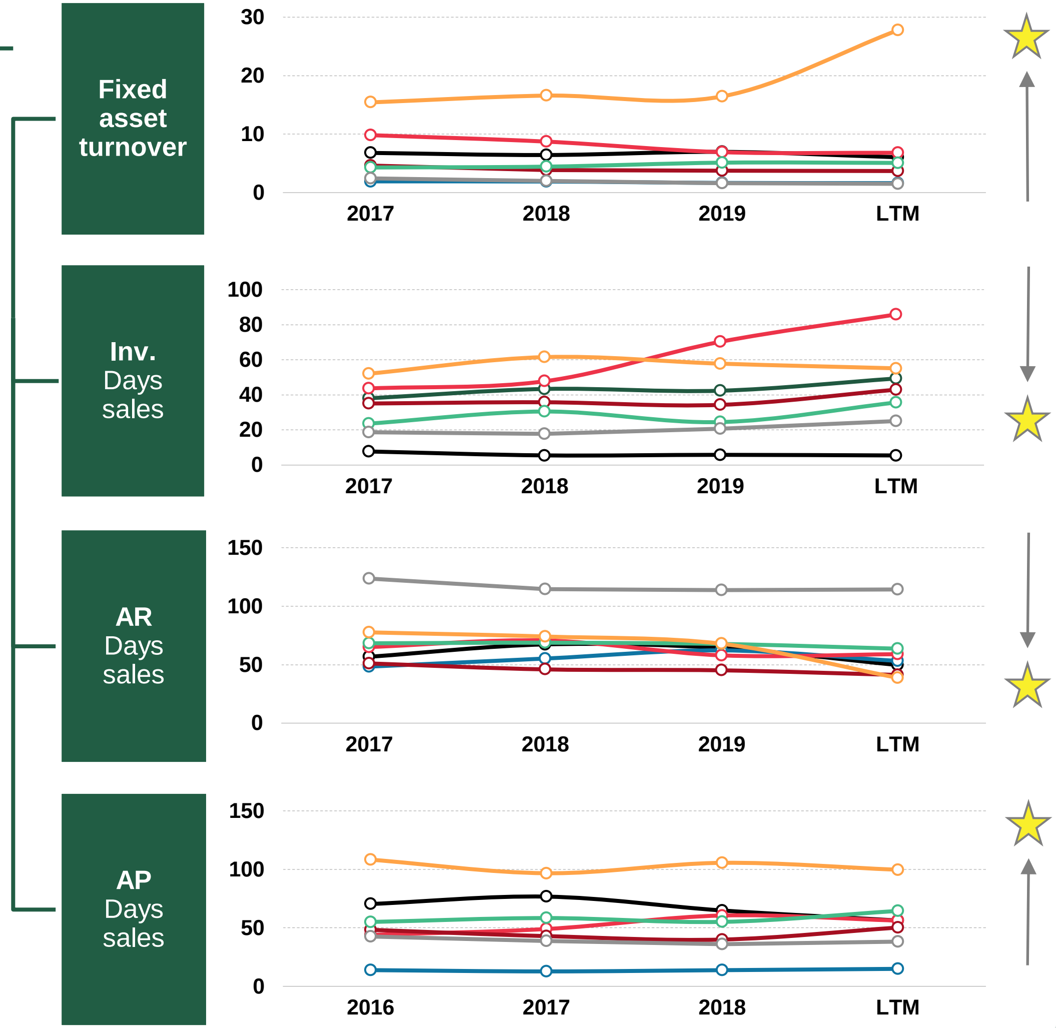




Notes: Fiscal years are used in the yearly analysis. LTM data of Huawei and Xiaomi based on 4Q19 – 3Q'20.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

# Lenovo outperforms the others with a CTR of 7.3 in 2020; Xiaomi's fixed asset turnover rate surged over 10% in LTM

## Capital turnover ratio (CTR)




Notes: Fiscal years are used in the yearly analysis. LTM data of Huawei and Xiaomi based on 4Q19 – 3Q'20.
Source: Capital IQ, Annual & quarterly reports, Applied Value Analysis.

## Contents



# Applied Value is a management consulting & investment firm founded on the principles of lean growth and entrepreneurship

1997

Background as an internal change agent in the **Kinnevik Group**…

KINNEVIK

…today, a hands-on consultancy supporting clients **across industries**

2021

## Industries of Expertise

- Telecom & Media
- Chemicals & Process
- Industrials & Engineering
- Consumer Goods
- Automotive

## Applied Value Group

- Investments
- Management Consulting
- Social Impact

### Selected portfolio companies

HUMAN CARE, COSMOSID, Division 5 Inc Steel Fabrication, rivermeadow, Bake My Day, Kaunis Iron, PNP Stålhallar, Sourcing Value, Söderfors Steel

APPLIED VALUE

C10, Hand in Hand, Straight Ahead Ministries, World Vision, Exodus, Opportunity International, Wenham House, KRIS, Code for Life

ROI driven

Fact-based

Practical over theoretical

Hands-On

Global perspectives

# Applied Value challenges and supports repeat global clients across industries from six offices

## Selected Clients

ERICSSON
SONY
Facebook
Digicel
MILLICOM
telenor
CellMax Technologies AB
rivermeadow
Sprint
telcel
NOKIA
TELE2
3
BlackBerry
ascom
Telia Company
Tradedoubler
clavister
FINGERPRINTS

## Applied Value Offices and Footprint


**New York**
Empire State Building
350 Fifth Ave. Suite 5400
New York, NY 10118
USA

+1 646 336 4971

**Stockholm**
Kungsgatan 2
PO Box 5047
111 43 Stockholm
Sweden

+46 8 562 787 00

**Helsinki**
Old Church Park
Lönnrotinkatu 5
00120, Helsinki
Finland

+358 40 84 110 60

**Shanghai**
Room 1504, Tower A,
NA Plaza No. 518
Kunming Road,
Shanghai, 200041
P.R. China

+86 21 5213 6390

APPLIED VALUE GROUP