2020 Half-Year Report



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Introductory Notes

This half-year group report meets the requirements of German Accounting Standard No. 16 "Half-yearly Financial Reporting" (GAS 16). We prepared the financial data in the Half-Year Report section for SAP SE and its subsidiaries in accordance with International Financial Reporting Standards (IFRS). In doing so, we observed the IFRS both as issued by the International Accounting Standards Board (IASB) and as endorsed by the European Union (EU). This does not apply to numbers expressly identified as non-IFRS. For additional IFRS and non-IFRS information, see the *Supplementary Financial Information* section.

This half-year group report complies with the legal requirements in accordance with the German Securities Trading Act (Wertpapierhandelsgesetz, WpHG) for a half-year financial report, and comprises the consolidated half-year management report, condensed consolidated half-year financial statements, and the responsibility statement in accordance with the German Securities Trading Act, section 115 (2).

This half-year group report updates our consolidated financial statements 2019, presents significant events and transactions of the first half of 2020, and updates the forward-looking information contained in our Management Report 2019. This half-year financial report only includes half-year numbers. Our quarterly numbers are available in the Quarterly Statement. Both the 2019 consolidated financial statements and the 2019 management report are part of our Integrated Report 2019, which is available at www.sapintegratedreport.com.

All of the information in this half-year group report is unaudited. This means that the information has been subject neither to any audit nor to any review by an independent auditor.

Consolidated Half-Year Management Report

Strategy and Business Model

Despite the coronavirus pandemic (COVID-19 pandemic), our strategy and business model remained largely unchanged in the first half of 2020. For a detailed description, see our *Integrated Report 2019*. Nevertheless, to significantly accelerate the digital transformation, SAP is intensifying its activities in the areas of business process integration, innovation, and agility. We set this focus to ensure the success of SAP customers and work together to combat climate change

Products, Research & Development, and Services

This section presents a snapshot of SAP product development and services innovation during the first half of 2020 and is intended to supplement the *SAP Integrated Report 2019*.

Experience

In the first half of 2020, we delivered 13 experience management (XM) offerings to help alleviate the business impact of the COVID-19 pandemic, including pulse check solutions – such as **Qualtrics** Remote Work Pulse, Qualtrics Healthcare Workforce Pulse, and Qualtrics Remote Educator Pulse – and the Qualtrics COVID-19 Prescreen and Routing solution, which aims to help health authorities automate initial screening for symptoms and distribute COVID-19 information to the public. In addition, within the **Qualtrics** EmployeeXM portfolio, we released the Return to Work Pulse offering to help enterprises make informed reopening decisions based on feedback from employees.

Intelligence

Our release of **SAP HANA Cloud** across multiple cloud environments in March 2020 made SAP HANA available not only as an on-premise platform, but also as a service. Further innovation in the first half of 2020 resulted in several offerings to mitigate the social impact of COVID-19, including an emergency repatriation app, which SAP provided to the German Federal Foreign Office, and the **Corona-Warn-App** – developed with Deutsche Telekom and other partners – designed to help track coronavirus infections and break transmission chains in Germany.

Operations

In February 2020, SAP committed to maintaining **SAP S/4HANA**, our next-generation ERP suite, until the end of 2040. Over 800 SAP S/4HANA customers were added in the first half of 2020, boosting total adoption 22% year over year to more than 14,600 customers, of which more than 7,400 are live.

In addition, we made the **SAP Ariba Discovery** solution available free of charge during the COVID-19 pandemic to help buyers source suppliers, goods, and services globally. Similarly, **SAP Concur**

offerings were made available to help curb the impact of global travel disruptions during the pandemic. As flight cancelations began to take hold, our **Triplt** and **Triplt Pro** services were offered for free for six months to individual travelers.

Integration is a topic that SAP sees as crucial to the foundation of an intelligent enterprise. In the first half of 2020, we published SAP's integration plan in the cloud and made significant progress implementing planned integration qualities across organic and acquired SAP cloud offerings.

Our industry cloud was another key focus area. In June 2020, we launched SAP's **industry cloud** portfolio to provide customers with cloud-native, industry applications built by SAP and its partners on technologies in our Business Technology Platform.

The **Climate 21** program defines and develops business and solution capabilities to support our customers on the journey to a low-carbon future. For more information, see the *Energy and Emissions* section in this consolidated half-year management report.

SAP Services and Support

Previously called SAP Digital Business Services, the SAP Services and Support organization comprises a team of more than 22,500 employees serving customers in 180 countries. Our portfolio of offerings is described in the *SAP Integrated Report 2019*.

Security, Data Protection, and Privacy

Cloud solutions and services are becoming increasingly important to many companies' daily operations, particularly in light of the COVID-19 global pandemic. Accordingly, cybersecurity is becoming a larger priority for Information Technology (IT) security professionals around the world, as critical systems such as ERP, CRM, SCM, and other business tools are moving from on-prem environments to the cloud.

SAP's mission is to provide customers with trusted data to enable them to innovate with confidence on their path to an intelligent enterprise. SAP supports this journey by aligning people, procedures, and technology to protect business processes and data, limiting risk and helping to achieve regulatory compliance.

Collaborating with developers, product managers, compliance, procurement, and partners, SAP's committed and highly skilled security team embraces a security-minded culture and a privacy-bydesign mindset.

We review our cybersecurity infrastructure with the goal of safeguarding our critical information and assets, business operations, cloud offerings and portfolio presentation, and related infrastructure against disruption or poor performance. As part of that review, we identified that some of our cloud products did not meet one or more contractually agreed or statutory IT security standards. Specifically, the affected products are SAP Success Factors, SAP Concur, SAP Commissions (formerly CallidusCloud Commissions), SAP CPQ (formerly CallidusCloud CPQ) as well as the SAP Cloud for Customer solution (now part of the SAP Sales Cloud solution), SAP Cloud Platform, and the SAP Analytics Cloud solution. We have resolved the identified gaps for all of the named solutions as at the time of issuance of this report.

Employees and Social Investments

Our people are key in enabling our customers to successfully become intelligent enterprises. For this reason, we strive to understand the needs of today's employee and how a 21st-century organization must evolve to keep attracting, retaining, and growing current and future talent. For a detailed description of our HR strategy, see the *Employees and Social Investments* section in our Integrated Report 2019.

As for the entire global society and economy, COVID-19 was the dominant topic in the first half of 2020. Therefore, our main focus was on the health and safety of our people. We are committed to doing our part to prevent and contain the global spread of the virus, and have an active crisis management driven by our Global Pandemic Taskforce in close collaboration with global, regional, and local management teams. As a precaution, we have implemented measures that align with the recommendations issued by recognized health authorities such as the World Health Organization (WHO), and relevant local health authorities. Most of our people are currently working from home. We are able to ensure business continuity for our people and customers by extending our already existing IT technology and regulations. Frequent pulse checks of our employees help us understand how they experience their individual situation, and allow us to adjust our crisis management accordingly.

Especially in times such as this, positive experiences across different HR touchpoints are key for our consumers, as candidates, employees, managers, executives, and alumni. For instance, we were able to virtualize the entire onboarding process of new hires by applying our own solutions and our own expertise. At the end of the

first half of 2020, the employee retention rate was still at a high level of 93.9% (compared to 93.5% at the end of the first half of 2019 and 93.3% at the end of 2019). We define retention as the ratio of the average number of employees minus the employees who voluntarily departed, to the average number of employees (in full-time equivalents, or FTEs). In our May 2020 pulse survey complementing the annual engagement survey, our Employee Engagement intermediate score increased to 86% (+3pp compared to 2019 annual Employee Engagement score). We aim to keep our Employee Engagement Index between 84% and 86% for 2020. Besides this, we also continue to foster an inclusive, bias-free workforce. The ratio of women in management positions continued its upward trajectory, reaching 27.3% at the end of the first half of 2020 compared to 26.2% at the end of June 2019 and 26.4% at the end of 2019. On June 30, 2020, we had 101,379 FTEs worldwide (June 30, 2019: 98,332; December 31, 2019: 100,330). For a breakdown of headcount by function and geography, see the Notes to the Consolidated Half-Year Financial Statements, Note (B1).

Energy and Emissions

The first half of 2020 was marked by the advancement of several valuable NGO partnerships to support waste reduction and a circular economy. SAP's inclusion in the World Economic Forum's Global Plastic Action Partnership was highlighted at the Annual Meeting in Davos, with SAP's commitment to create a cleaner ocean by 2030. SAP also joined the Ellen MacArthur Foundation, which aims to accelerate the transition to the circular economy. With solutions and tools such as Plastics Cloud, SAP can help companies produce products more responsibly and decrease waste by providing existing and live data of global supply chains and waste flows.

We remain committed to helping rebuild a more resilient, restorative, and inclusive economy within the planetary boundaries – both as an enabler and exemplar. In June 2020, we launched the SAP Product Carbon Footprint Analytics application, helping customers understand their carbon footprint and providing a foundation for analyzing and optimizing greenhouse gas emissions. This is the first solution of the Climate 21 program, SAP's major program to help customers achieve their climate-related objectives and prepare their operations for the emerging business reality where sustainability is a strategic and economic imperative. In a multi-year road map, SAP will work with co-innovation partners to embed sustainability metrics across SAP's solution portfolio.

Over the past several years, we calculated the costs that were avoided through emission reduction initiatives compared to a business-as-usual scenario. For this half year report, we have not published the cost avoidance number as we are currently working on re-evaluating our calculation approach for 2020. Our goal is to become carbon neutral by 2025. SAP's carbon emissions for the first half of 2020 totaled 90 kilotons (kt) of CO_2 compared to 185 kt in the first half of 2019. This strong decrease is a direct result of the exceptional COVID-19 situation. As almost all business activities were moved to remote working models, major $\text{CO}_2\text{-emitting}$ business activities such as business travels were reduced to a minimum.

To gain insight into our efficiency as we grow, we also measure our emissions per employee and per euro of revenue. During the first half of 2020, our carbon emissions (in tons) per employee was 2.0 (compared to 3.2 during the first half of 2019), and our carbon

emissions (in grams) per euro revenue was 7.3 (compared to 12.2 during the first half of 2019) (rolling four quarters).

In recognition of the exemplary actions SAP has taken to embed sustainability across its business worldwide, SAP was included in various ratings and rankings and remains a constituent in multiple environmental, social, and governance (ESG) indices acknowledging SAP's strong ESG performance: the Ethibel Sustainability Index (ESI) Excellence Europe and ESI Excellence Global, the FTSE4Good Index Series, and the Euronext Vigeo Eiris indices (Europe 120 and Eurozone 120). In addition, in the first half of 2020, SAP was once again recognized as an ESG leader by Morgan Stanley Capital International (MSCI) with the best rating of "AAA".

Organization and Changes in Management

In February 2020, SAP Executive Board members Michael Kleinemeier and Stefan Ries agreed with the SAP Supervisory Board to leave the Company. Michael Kleinemeier's last day was April 30, 2020, and Stefan Ries departed on May 31, 2020.

After the departure of Michael Kleinemeier, most of the former SAP Digital Business Services organization teams were fully integrated into the Board areas Customer Success, led by Adaire Fox-Martin, and SAP Product Engineering, led by Thomas Saueressig.

On April 20, 2020, Co-Chief Executive Officer (Co-CEO) Christian Klein became sole Chief Executive Officer. Co-CEO Jennifer Morgan mutually agreed with the SAP Supervisory Board to depart the Company effective April 30, 2020.

Financial Performance: Review and Analysis

Economy and the Market

Global Economic Trends

The COVID-19 pandemic has paralyzed the global economy, states the European Central Bank (ECB) in its June 2020 Economic Bulletin. Though a nascent recovery, led by large emerging market economies with signs of stabilization had been under way at the turn of the year, containment measures against the virus soon became a driving factor behind a sharp decline in worldwide economic activity. Falling commodity prices, tighter financial conditions, and substantial capital outflows aggravated the situation, particularly in emerging market economies.

In the Europe, Middle East, and Africa (EMEA) region, the euro area economy experienced an unprecedented contraction in the first half of 2020. However, the ECB suggests that the gradual easing of the containment measures went along with a bottoming-out in May and tepid signs of improvement at the end of the second quarter. Many countries in Central and Eastern Europe and especially Russia likewise recorded negative growth in the first half of 2020.

In the Americas region, the GDP declined significantly in the United States, and the pace of contraction even accelerated in the second quarter of 2020, finds the ECB. Economic activity deteriorated sharply in Brazil, as well.

The Asia Pacific Japan (APJ) region saw Japan slip into a technical recession in the first half of the year, according to the ECB. Economic activity in that country had already declined at the end of 2019, and the COVID-19 outbreak led to further contractions. China, on the

other hand, was the first country to take sharp containment measures already in late January 2020, and showed first signs of recovery in the second quarter.

The IT Market

At the beginning of 2020, the IT market started ambitiously into another year of digital transformation²⁾, yet the COVID-19 pandemic soon took over and led to significant spending cuts as IT buyers reevaluated their plans and pivoted their strategies³⁾. The U.S.-based market research firm International Data Corporation (IDC) describes this development in several current publications.

According to IDC, by mid-2020, most firms had reduced their spending on IT infrastructure and end user equipment. ⁴⁾ However, technologies that helped companies adapt to the new business environment – namely mobility, cloud, AI, and collaborative tools and technologies – experienced an increase in spending in the first half of 2020 and seemed to lay the groundwork for longer-term strategic transformation, says IDC. ³⁾ Videoconferencing solutions, virtual workspaces, and remote access to support working from home as part of crisis response became spending priorities for many businesses. ⁴⁾

This growing demand somewhat mitigated the impact of COVID-19 on the IT market especially in EMEA where – in an IDC study in April – 48% of businesses cited no impact on SaaS spend. $^{5)}$ APJ saw some increases during the first half of 2020 as well, yet buyer intent dropped significantly in the United States, reports IDC in a further study. $^{4)}$

Sources:

¹⁾ European Central Bank, Economic Bulletin, Issue 4/2020, Publication Date: June 18, 2020 (https://www.ecb.europa.eu/pub/pdf/ecbu/eb202004.en.pdf)
²⁾ IDC CEO Priorities in Europe for 2020: Delivering Value in the Digital Economy, Doc #EUR 146190420

 $^{\rm 3)}$ IDC Market Perspective: COVID-19: Quantifying the Impact on Industry, Doc #US46229820, April 2020

⁴⁾ IDC COVID-19 Tech Index: Coronavirus Index Report, Doc #US46272920, May 2020

 $^{5)}$ IDC Survey Spotlight: What will be the impact of COVID 19 on SaaS spend in 2020?, Doc #US46233119, April 2020

Impact on SAP

Business activity in the first two months of the year was healthy. As the impact of the COVID-19 crisis rapidly intensified towards the end of the first quarter, a significant amount of new business was postponed. This was reflected, in particular, in the significant year-over-year decrease in software licenses revenue.

Business activity gradually improved over the course of the second quarter. Software licenses revenue, while still below normal levels, recovered more than expected. In particular, the APJ region had a strong recovery in software licenses revenue. Cloud revenue in the second quarter was still impacted by lower pay-as-you-go transactional revenue as a result of the COVID-19 crisis. Current cloud backlog remained strong with continued high demand for digital supply chain, e-commerce, cloud platform, and Qualtrics solutions.

To ensure the Company's financial flexibility, SAP slowed hiring, reduced discretionary spend, and cut costs naturally through less travel and virtual rather than physical events. In addition, SAP has quickly responded to the new environment by adopting a virtual sales and remote implementation strategy to effectively serve existing and acquire new customers. With this strategy, SAP continued to operate effectively in the first six months and, in combination with the solid topline performance despite the COVID-19 pandemic, SAP's prompt measures drove higher operating profit and operating margin.

Key Figures – SAP Group in the First Half of 2020 (IFRS)

€ millions, unless otherwise stated	Q1-Q2 2020	Q1-Q2 2019	Δ	∆ in %
Cloud	4,055	3,247	807	25
Software licenses	1,224	1,599	-374	-23
Software support	5,826	5,692	134	2
Cloud and software	11,106	10,538	567	5
Total revenue	13,264	12,722	542	4
Operating expense	-10,770	-12,031	1,261	-10
Operating profit	2,494	691	1,803	>100
Operating margin (in %)	18.8	5.4	13.4pp	NA
Profit after tax	1,697	475	1,222	>100
Effective tax rate (in %)	30.6	29.7	0.9pp	NA
Earnings per share, basic (in €)	 1.42	0.38	1.04	>100

Operating Results (IFRS)

Revenue

Total revenue was €13,264 million (first half of 2019: €12,722 million), an increase of 4% compared to the same period in 2019. The growth in revenue resulted primarily from an increase in SAP's cloud business. Our cloud revenue was €4,055 million (first half of 2019: €3,247 million), an increase of 25% compared to the same period in 2019, with the cloud revenue growth rates remaining on a high level, despite the fact that cloud revenue was impacted by lower pay-as-you go transactional revenue as a result of the COVID-19 crisis.

Due to the impact of the COVID-19 crisis, a significant amount of new business was postponed mainly in the first quarter. This is reflected, in particular, in the significant year-over-year decrease in software licenses revenue. However, business already began to recover gradually in the second quarter. Software licenses revenue was €1,224 million in the first half of 2020 (first half of 2019: €1,599 million), a decrease of 23% compared to the same period in 2019.

Operating Expense

Our operating expenses decreased by 10% to \le 10,770 million (first half of 2019: \le 12,031 million). The decrease was mainly driven by a significant reduction in restructuring expenses, and share-based compensation. Because of a company-wide restructuring program that SAP launched in 2019, restructuring expenses were \ge 1,085 million in the first half of 2019. In the first half of 2020, restructuring cost amounted to \ge 13 million. For more information about restructuring, see the Notes to the Consolidated Half-Year Financial Statements, *Note* (*B.4*). Share-based payment expenses decreased to \ge 612 million (first half of 2019: \ge 1,114 million). For more information about share-based payment expenses, see the Notes to the Consolidated Half-Year Financial Statements, *Note* (*B.3*).

Noteworthy was also a significant decrease in travel costs by 57% in the first half of 2020, which was mainly a direct effect of the travel restrictions imposed due to the COVID-19 pandemic. Furthermore, there had been natural savings for example from lower facility-

related costs and virtualized events. To protect profitability, SAP responded quickly to the COVID-19 crisis by slowing hiring and reducing discretionary spend. Personnel expenses declined by 1.2%. For more information about the impact of COVID-19, see *Note (IN.2)*.

Operating Profit and Operating Margin

Compared with the same period in the previous year, operating profit increased by $\[\le \]$ 1,803 million to $\[\le \]$ 2,494 million (first half of 2019: $\[\le \]$ 691 million). This was mainly a result of the aforementioned expense reductions.

Our operating margin increased by 13.4pp to 18.8% (first half of 2019:5.4%).

Profit After Tax and Earnings per Share

Profit after tax was €1,697 million (first half of 2019: €475 million). Basic earnings per share was €1.42 (first half of 2019: €0.38).

The effective tax rate was 30.6% (first half of 2019: 29.7%). The year-over-year increase in the effective tax rate mainly resulted from tax effects relating to changes in non-deductible expenses and taxes for prior years.

Performance Against Our Outlook (Non-IFRS)

In this section, all discussion of the contribution to target achievement is based exclusively on non-IFRS measures. In contrast, the discussion of operating results in the previous section refers to IFRS figures only, so those figures are not expressly identified as IFRS figures.

We present, discuss, and explain the reconciliation from IFRS measures to non-IFRS measures in the *Supplementary Financial Information* section.

Outlook for 2020 (Non-IFRS)

For our outlook based on non-IFRS numbers, see the *Financial Targets and Prospects for 2020 (Non-IFRS)* section in this consolidated half-year management report.

Key Figures – SAP Group in the First Half of 2020 (Non-IFRS)

				Non-IFRS
€ millions, unless otherwise stated	Q1-Q2 2020	Q1-Q2 2019	∆in %	∆in % (Constant Currency)
Cloud	4,057	3,299	23	22
Software licenses	1,224	1,599	-23	-23
Software support	5,826	5,692	2	2
Cloud and software	11,107	10,589	5	4
Total revenue	13,266	12,773	4	3
Operating expense	-9,820	-9,490	3	3
Operating profit	3,446	3,283	5	4
Operating margin (in %)	26.0	25.7	0.3pp	0.2pp
Profit after tax	2,409	2,397	1	NA
Effective tax rate (in %)	29.0	26.6	2.4pp	NA
Earnings per share, basic (in €)	2.02	1.99	1	NA

Performance (Non-IFRS)

Starting in 2020, we replaced the metric new cloud bookings by current cloud backlog (CCB) as a more meaningful indicator of our cloud go-to-market success, as it reflects new contracts closed as well as renewals of existing contracts. CCB is the contractually committed cloud revenue we expect to recognize over the upcoming 12 months. As at June 30, 2020, CCB was \$6,655 million, an increase of 20% year over year.

Our cloud revenue (non-IFRS) was \le 4,057 million (first half of 2019: \le 3,299 million), an increase of 23% (22% at constant currencies) compared to the same period in 2019. Our cloud margin increased by 2.3pp to 69.4% (first half of 2019: 67.1%).

Cloud and software revenue (non-IFRS) was €11,107 million (first half of 2019: €10,589 million), an increase of 5%. On a constant currency basis, the increase was 4%. This increase was mainly driven by cloud revenue growth. Software licenses revenue (non-IFRS) decreased by 23% at constant currencies. As mentioned above, the COVID-19 crisis contributed significantly to this decrease.

Total revenue (non-IFRS) was €13,266 million (first half of 2019: €12,773 million), an increase of 4%. On a constant currency basis, the increase was 3%.

Operating expense (non-IFRS) was €9,820 million (first half of 2019: €9,490 million), an increase of 3% (3% on a constant currency basis). Although cloud revenue (non-IFRS) rose by 23%, cost of cloud (non-IFRS) increased by only 14%. The cost of software licenses and support (non-IFRS) decreased by 4%. Also, SAP's service business contributed positively to the overall profitability. The services gross margin (non-IFRS) increased by 2.3pp compared

to the first half of 2019. This is mainly the result of efficiency gains in our consulting and premium engagement business.

In total, operating expenses (non-IFRS) in the first half of 2020 grew by 3% compared to the first half of 2019. Within operating expenses, research and development cost as well as general and administration cost showed the highest increase.

Operating profit (non-IFRS) was €3,446 million (first half of 2019: €3,283 million), an increase of 5%. On a constant currency basis, the increase was 4%.

Operating margin (non-IFRS) was 26.0%, an increase of 0.3pp, or 0.2pp on a constant currency basis (first half of 2019: 25.7%).

Profit after tax (non-IFRS) was €2,409 million (first half of 2019: €2,397 million), an increase of 1%. Basic earnings per share (non-IFRS) was €2.02 (first half of 2019: €1.99), an increase of 1%.

The effective tax rate (non-IFRS) was 29.0% (first half of 2019: 26.6%). The year-over-year increase in the effective tax rate mainly resulted from tax effects relating to changes in non-deductible expenses and taxes for prior years.

Divestments

In the second quarter of 2020, we signed a definitive agreement to sell our SAP Digital Interconnect business (for more information, see the Notes to the Consolidated Half-Year Financial Statements, Note(D.1)).

Segment Performance

At the end of the first half of 2020, SAP had four reportable segments: the Applications, Technology & Support segment, the Services segment, the Concur segment, and the Qualtrics segment.

For more information about our segment reporting and the changes in the composition of our reportable segments in the first half of 2020, see the Notes to the Consolidated Half-Year Financial Statements, *Notes (C.1)* and *(C.2)*.

Applications, Technology & Support

€ millions, unless otherwise stated		Q1-Q2 2020	Q1-Q2 2019	∆ in %	∆ in %
(Non-IFRS)	Actual Currency	Constant Currency	Actual Currency	Actual Currency	Constant Currency
Cloud revenue	3,112	3,087	2,482	25	24
Cloud gross margin (in %)	64.8	64.8	61.8	3.0pp	3.0pp
Segment revenue	10,301	10,253	9,923	4	3
Segment gross margin (in %)	79.2	79.2	79.2	0.0pp	0.0pp
Segment profit (loss)	4,159	4,131	3,978	5	4
Segment margin (in %)	40.4	40.3	40.1	0.3pp	0.2pp

In the first half of 2020, the Applications, Technology & Support segment recorded strong growth in cloud revenue of 25% (24% at constant currencies). This led to an increase of the cloud gross margin of 3.0pp. Software support revenue increased slightly in the first half of 2020. It rose 2% to €5,824 million. However, software licenses revenue decreased by 23% to €1,220 million mainly due to the impact of the COVID-19 crisis. Consequently, the Applications,

Technology & Support segment achieved a total software licenses and support revenue of €7,044 million. Total segment revenue grew 4% (3% at constant currencies) to €10,301 million, leading to a slight increase in the segment margin of 0.3pp (0.2pp at constant currencies). Overall, the revenue share of more predictable revenue streams in this segment increased 4.4pp from 82.3% in the first half of 2019 to 86.8% in the first half of 2020.

Services

€ millions, unless otherwise stated		Q1-Q2 2020	Q1-Q2 2019	∆ in %	Δ in %
(Non-IFRS)	Actual Currency	Constant Currency	Actual Currency	Actual Currency	Constant Currency
Services revenue	1,644	1,630	1,654	-1	-1
Services gross margin (in %)	30.0	29.5	23.2	6.8pp	6.3pp
Segment revenue	1,646	1,632	1,656	-1	-1
Segment gross margin (in %)	26.6	26.1	19.5	7.1pp	6.6pp
Segment profit (loss)	207	196	85	>100	>100
Segment margin (in %)	12.6	12.0	5.2	7.4pp	6.8pp

The Services segment was introduced at the beginning of 2020, comprising major parts of SAP's services business. In the first half of 2020, the segment recorded services revenue of $\[\in \]$ 1,644 million, representing a slight decline of 1%. The respective cost of services, however, decreased at a higher rate during the same period by 9% (10% at constant currencies), leading to a 6.8pp increase in the

services gross margin (6.3pp at constant currencies). This margin improvement was primarily attributable to the positive development of SAP's consulting and premium engagement business and savings due to an increased remote services delivery share and travel restrictions. Overall, the segment profit and the segment margin benefitted from this development as well.

Concur

€ millions, unless otherwise stated		Q1-Q2 2020	Q1-Q2 2019	∆ in %	∆ in %
(Non-IFRS)	Actual Currency	Constant Currency	Actual Currency	Actual Currency	Constant Currency
Cloud revenue	690	675	654	5	3
Cloud gross margin (in %)	88.2	88.2	85.7	2.5pp	2.4pp
Segmentrevenue	807	791	770	5	3
Segment gross margin (in %)	79.5	79.4	77.2	2.3pp	2.2pp
Segment profit (loss)	297	289	279	7	4
Segment margin (in %)	36.8	36.5	36.2	0.6pp	0.3pp

Despite the challenging environment as a result of the COVID-19 pandemic, the Concur segment was able to increase cloud revenue in the first half of 2020 by 5% (3% at constant currencies). The cost of cloud declined during the same period by 13% (14% at constant currencies). The cloud gross margin improved 2.5pp (2.4pp at constant currencies) to 88.2%. The segment gross margin

benefitted from this development as well and increased 2.3pp (2.2pp at constant currencies) to 79.5% (79.4% at constant currencies). Overall, the Concur segment ended the first half of 2020 with an operating profit of €297 million, representing an increase of 7% (4% at constant currencies).

Qualtrics

€ millions, unless otherwise stated		Q1-Q2 2020	Q1-Q2 2019	∆ in %	Δ in $\%$
(Non-IFRS)	Actual Currency	Constant Currency	Actual Currency	Actual Currency	Constant Currency
Cloud revenue	250	244	158	59	55
Cloud gross margin (in %)	90.9	90.9	91.8	-0.8pp	-0.9pp
Segment revenue	329	321	214	54	50
Segment gross margin (in %)	77.0	76.9	80.5	-3.5pp	-3.6pp
Segment profit (loss)	-5	-4	14	<-100	<-100
Segment margin (in %)	-1.5	-1.2	6.6	-8.1pp	-7.8pp

The Qualtrics segment, which comprises SAP's experience management solutions, closed the first half of 2020 with a strong cloud revenue growth of 59% (55% at constant currencies). The cloud gross margin, however, declined slightly by 0.8pp (0.9pp at constant currencies). Total segment revenue grew 54% (50% at

Reconciliation of Cloud Revenues and Margins

€ millions, unless otherwise stated		(21-Q2 2020	Q1-Q2 2019	∆ in %	∆ in %
(Non-IFRS)		Actual Currency	Constant Currency	Actual Currency	Actual Currency	Constant Currency
	Intelligent Spend ³⁾	1,411	1,389	1,292	9	7
Cloud revenue – SaaS/PaaS ¹⁾	Thereof Concur segment	690	675	654	5	3
	Other ⁴⁾	2,225	2,205	1,678	33	31
	Total	3,636	3,594	2,970	22	21
Cloud revenue – laaS ²⁾		421	417	329	28	27
Cloud revenue		4,057	4,011	3,299	23	22
	Intelligent Spend ³⁾	79.3	79.2	77.9	1.4pp	1.3pp
	Thereof Concur segment	88.2	88.2	85.7	2.5pp	2.4pp
Cloud gross margin – SaaS/PaaS ¹⁾ (in %)	Other ⁴⁾	69.8	69.9	66.6	3.3pp	3.3pp
	Total	73.5	73.5	71.5	2.0pp	2.0pp
Cloud gross margin – IaaS ²⁾ (in %)		33.5	33.2	27.1	6.5pp	6.1pp
Cloud gross margin (in %)		69.4	69.3	67.1	2.3pp	2.2pp

¹⁾ Software as a service/platform as a service

 $^{^{\}rm 2)}$ Infrastructure as a service; completely included in the Applications, Technology & Support segment

³⁾ Intelligent Spend includes the Concur segment and further Intelligent Spend offerings mainly included in the Applications, Technology & Support segment.

 $^{^{\}rm 4)}$ Other includes all other SaaS/PaaS offerings that do not belong to Intelligent Spend.

 $The individual \ revenue \ and \ margin \ numbers \ for segments \ are \ disclosed \ on \ the \ previous \ pages.$

Finances and Assets (IFRS)

Cash Flow

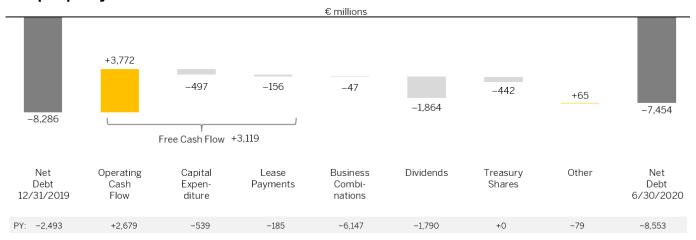
Q1-Q2 2020	Q1-Q2 2019	Δ
3,772	2,679	+41%
-497	-539	-8%
-156	-185	-15%
3,119	1,956	+59%
24	15	+8pp
184	412	-228pp
76	70	6
	3,772 -497 -156 3,119 24	3,772 2,679 -497 -539 -156 -185 3,119 1,956 24 15 184 412

The increase in operating cash flow resulted mainly from lower payments for income taxes (€785 million decrease year over year), compensated by higher share-based payments (€117 million increase year over year).

We calculate free cash flow as net cash flows from operating activities minus purchases of intangible assets and property, plant, and equipment without acquisitions (capital expenditure) and minus repayments of lease liabilities.

DSO for receivables is defined as the average number of days from the raised invoice to the cash receipt from the customer (rolling 12 months).

Group Liquidity



Liquidity and Financial Position

€ millions	6/30/2020	12/31/2019	Δ
Financial debt	14,855	13,668	+1,187
Cash and cash equivalents	6,205	5,314	+890
Current time deposits and debt securities	1,196	67	+1,128
Group liquidity	7,401	5,382	+2,019
Net debt	7,454	8,286	-831
Goodwill	29,214	29,159	+55
Total assets	60,709	60,212	+497
Total equity	29,072	30,822	-1,750
Equity ratio (total equity as a percentage of total assets)	48	51	-3pp

In May 2020, we issued €2,000 million in Eurobonds with maturities between three and nine years.

Competitive Intangibles

The resources that are the basis for our current as well as future success do not appear in the Consolidated Statements of Financial Position. This is apparent from a comparison of the market capitalization of SAP SE with the carrying amount of our equity. With a market capitalization of €152.7 billion at the end of the first half of 2020, the market capitalization of our equity (based on all outstanding shares) is more than five times higher than its carrying amount.

Some of the most important competitive intangibles that influence our market value include: customer capital, our employees and their knowledge and skills, our ecosystem of partners, software we developed ourselves, our ability to innovate, the brands we have built up – in particular, the SAP brand itself – and our organization.

SAP was recognized as the world's 17th most valuable brand in the 2020 BrandZ Global Top 100 Most Valuable Brands ranking. The ranking estimates SAP's brand value at US\$58 billion, unchanged year over year.

Risk Management and Risks

We have comprehensive risk-management structures in place that are intended to enable us to recognize and analyze risks early on, take the appropriate action, and mitigate any risks that materialize as presented in the Risk Management and Risks chapter in our Integrated Report 2019 and our Annual Report on Form 20-F

for 2019. In this section, we present relevant changes and new developments with regards to our risk factors. For changes in our Litigation, Claims, and Legal Contingencies since our last Integrated Report, see the Notes to the Consolidated Half-Year Financial Statements, *Note (G.1)*.

	Probability	Impact	Risk Level	Trend ¹⁾
Cloud Operations				
Integrated Report 2019	unlikely	business-critical	medium	→
Half-Year Report 2020	likely	business-critical	high	71

¹⁾ Trend: Risk level compared with previous year.

Cloud Operations: We are committed to the safety of our customer data, and we take a variety of steps designed to prevent unauthorized access and intrusions. The world of IT security is constantly evolving, requiring us to periodically review and revise our processes to provide our customers with appropriate IT security. We review our cybersecurity infrastructure with the goal of safeguarding our critical information and assets, business operations, cloud offerings and portfolio presentation, and related infrastructure against disruption or poor performance. As part of that review, we identified that some of our cloud products did not meet one or more contractually agreed or statutory IT security standards. Specifically, the affected products are SAP Success Factors, SAP Concur, SAP Commissions (formerly Callidus Cloud Commissions), and SAP CPQ (formerly Callidus Cloud CPQ), as well as the SAP Cloud for Customer solution (now part of the SAP Sales Cloud solution), SAP Cloud Platform, and the SAP Analytics Cloud solution.

These findings were not identified in response to a security incident. Furthermore, we do not believe that any customer data was compromised as a result of these issues. We refer to our May 4, 2020, ad hoc notification for further details. In an effort to ensure that the affected products meet relevant terms and conditions, we updated the corresponding security-related terms and conditions. We have resolved the identified gaps for all of the named solutions as at the time of issuance of this report.

We have raised our estimate of the probability of occurrence of this risk (as presented in the Integrated Report 2019 and Annual Report on Form 20-F for 2019) to likely, and cannot exclude the possibility that if this risk were to occur, it could have a business-critical impact on our operations, financial position, profit, and cash flows. We now classify this increased risk as a high risk. For more information, see the *Security, Data Protection, and Privacy* section in this consolidated half-year management report.

	Probability	Impact	Risk Level	Trend ¹⁾
Economic, Political, Social, and Regulatory Risks				
COVID-19 pandemic	likely	business-critical	high	new

 $^{^{1)}}$ Trend: Risk level compared with previous year.

COVID-19 Pandemic: A novel strain of coronavirus (COVID-19) was first identified in Wuhan, China in December 2019, and spread across the globe, subsequently being classified as a pandemic by the WHO. While surfacing in almost all regions around the world, this outbreak prompted governments and businesses to introduce preventative measures to contain or mitigate further spreading, impacting the global economy with immediate effect. Repercussions included supply chain interruptions and an impact on production manufacturing and the borrowing of money, and were observed across innumerable industries, from tourism and leisure to the luxury goods industry. In addition, uncertainty and travel restrictions impacted businesses, jobs, and consumer confidence, which in turn led to a reduction in consumer spending. At the same time, businesses were confronted with higher costs resulting from measures introduced to mitigate the spread of infection, such as the extension of holiday periods, lengthy workforce absences due to sick leave, delays in people returning to work and additional health screenings: public sector investments, meanwhile, were redirected to health-related expenditures. Individual economies were the first to raise concerns related to observed recession indicators.

We cannot predict the degree to which or over which period of time this outbreak and associated measures will impact our customers, our business, and our business operations with effects that could be material, leading to the following risks, among others:

- Global recession, economic downturns, increased unemployment rates, or customers re-evaluating their business plans, priorities, and IT needs, with subsequent delays, shifts, or reductions in IT investments
- Financially impacted customers struggling to meet contractual obligations
- Increasingly complex digitalization requirements that challenge uninterrupted customer interaction and subsequent customer satisfaction
- Limited availability of qualified implementation partners who are largely unaffected
- Workforce mobility limitations resulting from government- or SAP-imposed travel restrictions
- Workforce productivity impacts resulting from adaptation to new working models

- Business continuity challenges in our business-critical data centers and in our mission-critical support activities if sites and/or the workforce were to be contaminated and/or the workforce were not available due to travel limitations
- Interruption in the maintenance of our cloud services infrastructure, or reduced reliability and adequacy of cloud service capacity
- Decrease in software sales with subsequent impact on growth of our maintenance and services business
- Delays in cash collection due to interrupted invoice processing and delayed execution of financial transactions
- Increased costs in effectively managing the ramp-up of onsite operations

Even though parts of the world economy are restarting, any one or more of these events could have a material adverse effect on our business, business operations, financial position, profit, and cash flows. SAP has established a global pandemic taskforce and is closely monitoring the situation, and developing and implementing necessary measures and actions designed to address and mitigate the described risks and adverse effects, such as:

- Active and collaborative dialog with our customers to jointly evaluate options and opportunities as part of our long-term Customer First strategy
- Ongoing review of payment models to address our customers' current need for payment flexibility while ensuring our liquidity, leveraging finance partners as applicable
- Strict adherence to applicable governmental advisories to foster compliance and health safeguarding
- Alignment with governmental authorities to enable accessibility to our workforce during times of restricted citizen movement, and alignment with service providers to ensure consistent application of standards at co-location sites
- Information, training courses, and guidance for our workforce as elements of our comprehensive transitional approach in an already digitalized technology landscape, with the majority of our workforce accustomed to remote working models
- Expansion of health and well-being initiatives and offerings, including an Emergency Helpline
- Switch to remote working protocols leveraging virtualized communication technologies, and the continued enhancement of working models that protect customers, partners, and workforce
- Introduction of remote customer support models enabling administration via remote access for critical situations
- Conducting clear team social distancing and workspace protocols for remaining onsite activities
- Implementation of formal sanitization protocols at our premises
- Implementation of enhanced methodologies for virtual sales and remote implementation
- Creation and implementation of virtual event and conference experiences
- Establishment of an ecosystem COVID-19 taskforce to focus on revising mission-critical partnering policies, and making those policies available to all partners through a dedicated resource center
- Monitoring of cash collection rates along with the application of appropriate measures and subsequent adaption of financial planning
- Strict internal cost discipline and conscious adaptation of workforce planning

We cannot exclude the possibility that if one or more of these risks were to occur, it could have a business-critical impact on our operations, financial position, profit, and cash flows. We estimate the probability of occurrence of this risk to be likely. This could exacerbate other risks presented in the *Risk Management and Risks* section of our Integrated Report 2019 and our Annual Report on Form 20-F for 2019 or cause a negative deviation from our financial and non-financial targets. We classify this risk as a high risk.

Based on our aggregation approach, we subsequently see changes in the consolidated risk profile related to the percentages of all reported risks categorized as "high" or "medium" in our risk level matrix. The number of risks categorized as "high" now account for 35% (previously 27%) of all reported risks, while the risks categorized as "medium" now account for 39% (previously 45%).

We do not believe that any of the risks we have identified in our Integrated Report 2019 and Annual Report on Form 20-F for 2019, and as outlined in the update above, jeopardize our ability to continue as a going concern.

Other than as reflected in the update above, we do not see any relevant changes to our assessment of the risk factors since the publication of our Integrated Report 2019 and Annual Report on Form 20-F for 2019.

Expected Developments and Opportunities

Future Trends in the Global Economy

At the end of the second quarter, many countries started easing containment measures against the COVID-19 pandemic. However, global economic activity will probably recover only gradually, projects the ECB in its most recent Economic Bulletin. Furthermore, the ECB projects that recovery might start in the third quarter and increase to a significant economic growth in 2021 and 2022. For emerging market economies in particular, the ECB expects a more subdued recovery than those seen after previous downturns.

In the EMEA region, sizeable support from fiscal and monetary policy could help economic growth in the euro area to rebound in the second half of the year. In Central and Eastern Europe, however, economic activity will most likely remain weak throughout the year, predicts the ECB.

As for the Americas region, domestic demand in the United States could recover through eased containment measures. Backed by strong economic policy support, this would support a gradual recovery in the second half of 2020, says the ECB.

For the APJ region, the ECB projects that fiscal measures taken in Japan in the second quarter might provide stimulus to the economy from the third and fourth quarter onward. For China, the ECB sees weak external demand prospects, but anticipates a gradual upturn in domestic demand that could lead to progressive economic recovery in the second half of 2020.

The International Monetary Fund (IMF) projects the following economic trends and growth rates for the mid-term horizon until the end of 2021:

Economic Trends – Year-Over-Year GDP Growth

%	2019	2020e	2021p
World	2.9	-4.9	5.4
Advanced economies	1.7	-8.0	4.8
Emerging market and developing economies	3.7	-3.0	5.9
Regions			
Euro area	1.3	-10.2	6.0
Germany	0.6	-7.8	5.4
Emerging and developing Europe	2.1	-5.8	4.3
Middle East and Central Asia	1.0	-4.7	3.3
Sub- Saharan Africa	3.1	-3.2	3.4
United States	2.3	-8.0	4.5
Canada	1.7	-8.4	4.9
Latin America and the Caribbean	0.1	-9.4	3.7
Japan	0.7	-5.8	2.4
Emerging and developing Asia	5.5	-0.8	7.4
China	6.1	1.0	8.2

e = estimate, p = projection

Source: International Monetary Fund (IMF), World Economic Outlook June 2020, A Crisis Like No Other (https://www.imf.org/en/Publications/WEO/Issues/2020/06/24/WEOUpdateJune2020)

The IT Market: Outlook for 2020 and Beyond

According to the U.S.-based market research firm IDC, the COVID-19 pandemic has caused a shift in expectations and priorities for the coming months: organizations still rate digital transformation as a top agenda item²⁾, but they now focus on business resiliency through digital transformation, favouring technologies that allow them to automate and scale³⁾.

Thus, for example, nearly 50% of tech decision makers in a recent IDC poll indicated increasing demand for cloud computing in the second half of the year as a result of the pandemic³⁾ – laaS and SaaS featuring even more strongly than PaaS⁴⁾. That is because, according to IDC, many businesses plan to accelerate digital transformation significantly to address the exponential increase in demand for remote worker services and greater agility.⁵⁾ Nearly half of all tech decision makers in the same IDC poll also named expanding their customer engagement model to online or self-service as a top or high priority.³⁾

As for IT services, a significant portion of European IT buyers expect to sustain or even increase spending to the end of 2020, says IDC. ⁶⁾ This sentiment seems to be particularly positive in Germany and Russia. ⁶⁾

In summary, however, compared with initial estimates in January of this year (3.6% growth in 2020), IDC's spending predictions for the global IT market by mid-year have decreased to -1.6% in 2020, but currently show nearly the same predictions as in January for the subsequent years.⁷⁾

Sources:

Doc #EUR 146190420

1) European Central Bank, Economic Bulletin, Issue 4/2020, Publication Date: June 18, 2020 (https://www.ecb.europa.eu/pub/pdf/ecbu/eb202004.en.pdf)
2) IDC CEO Priorities in Europe for 2020: Delivering Value in the Digital Economy,

3) IDC Survey Spotlight: COVID-19 Brings New C-Suite Priorities, Doc #US46403520, May 2020

4) IDC COVID-19 Tech Index: Coronavirus Index Report, Doc #US46272920, May 2020

5) IDC Survey Spotlight: What will be the impact of COVID 19 on SaaS spend in 2020?, Doc #US46233119, April 2020

6) IDC Survey Spotlight: What is the Effect of COVID-19 on IT Services in Europe?, Doc #EUR146256120, April 2020

7) IDC Market Perspective: COVID-19: Quantifying the Impact on Industry, Doc #US46229820, April 2020

Impact on SAP

The pandemic shifted priorities of our customers and accelerated transformational projects that will help increase their agility and resilience at the same time. In addition, the demand for and adoption of cloud services remains on a strong trajectory as corporations prefer fast implementation cycles and flexible scalability. SAP's integrated suite approach, which is based on an open platform that allows customers and partners to adopt technologies such as blockchain, machine learning, Internet of Things, and robotic process automation, resonates well with the demand.

We expect that our investments in strategic growth areas such as industry cloud, the Climate 21 program, and business networks will drive additional business momentum and position SAP as a thought leader for the priorities of the future.

With our broad solution portfolio, unmatched industry and geographic diversification coupled with our strong base of more predictable revenue, we consider ourselves well prepared to not only weather the crisis but emerge even stronger.

Financial Targets and Prospects (Non-IFRS)

Revenue and Operating Profit Targets and Prospects

On April 21, 2020, SAP updated its 2020 outlook to reflect the estimated impact of the COVID-19 crisis. SAP reiterated this revised outlook on July 8, 2020. It is based on the assumption of a gradually improving demand environment in the third and fourth quarter as economies reopen further and population lockdowns ease. SAP now expects:

- Non-IFRS cloud revenue in a range of €8.3 billion to €8.7 billion at constant currencies (2019: €7.01 billion), up 18% to 24% at constant currencies (previously: €8.7 billion to €9.0 billion, up 24% to 28% at constant currencies).
- Non-IFRS cloud and software revenue in a range of €23.4 billion to €24.0 billion at constant currencies (2019: €23.09 billion), up 1% to 4% at constant currencies (previously: €24.7 billion to €25.1 billion, up 7% to 9% at constant currencies).
- Non-IFRS total revenue in a range of €27.8 billion to €28.5 billion at constant currencies (2019: €27.63 billion), up 1% to 3% at constant currencies (previously: €29.2 billion to €29.7 billion, up 6% to 8% at constant currencies).
- Non-IFRS operating profit in a range of €8.1 billion to €8.7 billion at constant currencies (2019: €8.21 billion), down 1% to 6% at constant currencies (previously: €8.9 billion to €9.3 billion, up 8% to 13% at constant currencies).

 The share of more predictable revenue (defined as the total of cloud revenue and software support revenue) to be approximately 72% (previously: approximately 70%).

We expect the economic situation caused by the COVID-19 pandemic to impact our cloud gross margin performance.

We now expect that, in 2020, the cloud gross margin of our SaaS/PaaS – Intelligent Spend revenue will be higher than 78% (previously: 80%; 2019: 78%).

We continue to expect that, in 2020, the cloud gross margin of our other SaaS/PaaS revenue will reach approximately 70% (2019: 68%).

We continue to expect the gross margin of our laaS cloud revenue to be in a range of approximately 30% to 35% inin 2020 (2019: 29%).

We now expect our cloud gross margin to be approximately 70% in 2020 (previously: 71%; 2019: 68%).

We continue to expect the 2020 gross margin for our software licenses and support to remain at a similar level to 2019 (2019: 87%).

In addition, we continue to expect our 2020 gross margin for services to remain at a similar level to 2019 (2019: 25%).

As we look to increase our profitability through 2020, our cost ratios (cost as a percentage of total revenue) are continuously expected to develop as follows through 2020: Research and development is expected to remain at the current level; sales and marketing as well as general and administration are expected to decline slightly.

Further, we continue to expect the segment profit to increase in all our reportable segments.

While SAP's full year 2020 business outlook is at constant currencies, actual-currency reported figures are expected to be impacted by currency exchange rate fluctuations as the Company progresses through the year. For the Q3 and full year 2020 expected currency impacts, see the table below.

Expected Currency Impact Based on June 2020 Level for the Rest of the Year

In percentage points	Q3	Q1 – Q4
Cloud	-3pp to -1pp	-1pp to +1pp
Cloud and software	-3pp to -1pp	-2pp to Opp
Operating profit	-2pp to Opp	-1pp to +1pp

In the face of the COVID-19 pandemic, SAP expects approximately €600 million in expense savings through the reduction of discretionary spend in addition to natural savings in areas such as travel, facilities, events, and others.

Though the growth in headcount is not as dynamic as in previous years, we intend to employ more people at the end of 2020 than in 2019. We continue to hire additional employees especially in our innovation divisions such as product development. We continuously strive for profit expansion in all of our operating segments.

The following table shows the estimates of the items that represent the differences between our IFRS financial measures and our non-IFRS financial measures.

Non-IFRS Measures

€ millions	Estimated Amounts for Full Year 2020	Q1-Q2 2020	Q1-Q2 2019
Revenue adjustments	0-30	2	51
Acquisition related charges	580-690	325	341
Share-based payment expenses	1,200-1,600	612	1,114
Restructuring	20–40	13	1,085

SAP now expects a full-year 2020 effective tax rate (IFRS) of 28.5% to 29.5% (previous outlook: 27.0% to 28.0%) and an effective tax rate (non-IFRS) of 27.5% to 28.5% (previous outlook: 26.5% to 27.5%). The increase in comparison to the previous outlook mainly results from changes in taxes for prior years.

Medium-Term Prospects

We did not change our medium-term prospects in the first half of 2020. We expect to hold a virtual Capital Markets Day in the fourth quarter 2020 to provide an update on our mid-term strategy.

For a detailed description, see our *Integrated Report 2019*.

Goals for Liquidity, Finance, and Investments

On June 30, 2020, we had negative net liquidity. We believe that our liquid assets combined with our undrawn credit facilities are sufficient to meet our operating financing needs in the second half of 2020 as well, and, together with expected cash flows from operations, will support debt repayments and our currently planned capital expenditure requirements over the near and medium term.

In 2020 and compared to 2019, we expect lower cash outflows for restructuring (reduction by approximately \le 600 million to \le 650 million) and tax payments (reduction by approximately \le 850 million to \le 950 million), while share-based compensation is expected to be on a roughly similar level.

Considering all these effects, and despite the challenges imposed by COVID-19 and the reassessment of our cash flow expectations on April 21, 2020, we now expect an increase of operating cash flow to above ${\in}5.0$ billion (previously approximately ${\in}5.0$ billion) and free cash flow to increase to around ${\in}4.0$ billion (previously approximately ${\in}3.5$ billion) in 2020, compared to our operating cash flow of ${\in}3.5$ billion and free cash flow of ${\in}2.3$ billion in 2019. For 2023, we expect around ${\in}8.0$ billion in free cash flow.

In the second half of 2020, we intend to repay US\$290 million in US Private Placements in November and €500 million in Eurobonds in December. In addition, we might repay portions of the Qualtrics-related €2.0 billion acquisition term loan. At the date of this report, scheduled debt repayments of around €6.2 billion until the end of 2023 are pending. The ratio of net debt as at December 31, 2020, of around €7.5 billion divided by the total of operating profit (IFRS) plus depreciation and amortization is expected at around 0.9.

Our planned investment expenditures for 2020 and 2021, other than from business combinations, consist primarily of the purchase of IT infrastructure (data centers, etc.) and the construction of new buildings. Compared to the planned investment expenditures of approximately $\[\in \]$ 1.1 billion for 2020, as disclosed in our Integrated Report 2019, we now expect total capital expenditures of

approximately €0.9 billion for 2020 – thereof approximately €487 million for IT infrastructure (approximately €591 million in our Integrated Report 2019) and approximately €230 million for construction activities (approximately €235 million in our Integrated Report 2019). In 2021, capital expenditures are expected to stay at a similar level as in 2020, thereof €240 million for construction activities.

Non-Financial Goals 2020 and Ambitions for 2023

In addition to our financial goals, we also focus on three non-financial targets for 2020: customer loyalty, employee engagement, and carbon emissions. As a result of the COVID-19 pandemic, we have experienced a significant decrease in our carbon emissions due to a reduction in CO₂-intensive business activities. As a consequence, we have reduced our original carbon emissions target from 238 kt to 210 kt. The targets for customer loyalty and employee engagement remain unchanged compared to what we disclosed in our Integrated Report 2019. For a detailed description of our non-financial goals for 2020 and ambitions for 2023, see our *Integrated Report 2019*.

Premises on Which Our Outlook and Prospects Are Based

In preparing our outlook, we have taken into account all events known to us at the time we prepared this report that could influence SAP's business going forward.

Among the premises on which this outlook is based are those presented concerning economic development and the assumption that there will be no major acquisitions in 2020 or 2021.

Due to the current uncertainty regarding the duration and severity of the COVID-19 pandemic, SAP cannot predict whether our response to date or actions that we may take in the future will be effective in mitigating the impact on our business and results of operations.

Opportunities

We have comprehensive opportunity-management structures in place that are intended to enable us to recognize and analyze opportunities early and to take the appropriate action. Despite the COVID-19 pandemic, the opportunities remain largely unchanged compared to what we disclosed in our *Integrated Report 2019*. Nevertheless, the currently accelerated digital transformation, especially in purchasing processes, supply chains, and in the support of the home office situation, may create further opportunities.

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.III Consolidated Income Statement of SAP Group (IFRS) - Half Year

€ millions, unless otherwise stated	Note	Q1-Q2 2020	Q1-Q2 2019	∆ in %
Cloud		4,055	3,247	25
Software licenses		1,224	1,599	-23
Software support		5,826	5,692	2
Software licenses and support		7,051	7,291	-3
Cloud and software		11,106	10,538	5
Services		2,159	2,184	-1
Total revenue	(A.1), (C.2)	13,264	12,722	4
Cost of cloud		-1,370	-1,237	11
Cost of software licenses and support		-998	-1,069	_7
Cost of cloud and software		-2,368	-2,306	3
Cost of services		-1,725	-1,845	-7
Total cost of revenue		-4,094	-4,151	-1
Gross profit		9,171	8,571	7
Research and development		-2,210	-2,114	5
Sales and marketing		-3,684	-3,833	-4
General and administration		-729	-895	-19
Restructuring	(B.4)	-13	-1,085	-99
Other operating income/expense, net		-41	48	<-100
Total operating expenses		-10,770	-12,031	-10
Operating profit (loss)		2,494	691	>100
Other non-operating income/expense, net		-103	-44	>100
Finance income		406	286	42
Finance costs		-354	-258	37
Financial income, net	(C.3)	53	29	84
Profit (loss) before tax	(C.2)	2,444	675	>100
Income tax expense			-201	>100
Profit (loss) after tax	.	1,697	475	>100
Attributable to owners of parent		1,681	455	>100
Attributable to non-controlling interests		16	20	-19
Earnings per share, basic (in €)¹¹		1.42	0.38	>100
Earnings per share, diluted (in €)¹)		1.42	0.38	>100

¹⁾ For the six months ended June 30, 2020 and 2019, the weighted average number of shares was 1,185 million (diluted: 1,185 million) and 1,194 million (diluted: 1,194 million), respectively (treasury stock excluded).

Due to rounding, numbers may not add up precisely.

Consolidated Statements of Comprehensive Income of SAP Group (IFRS) - Half Year

€ millions	Q1-Q2 2020	Q1-Q2 2019
.iil Profit after tax	1,697	475
Items that will not be reclassified to profit or loss		
Remeasurements on defined benefit pension plans, before tax	4	6
Income taxes relating to remeasurements on defined benefit pension plans	-1	-5
Remeasurements on defined benefit pension plans, net of tax	4	1
Other comprehensive income for items that will not be reclassified to profit or loss, net of tax	4	1
Items that will be reclassified subsequently to profit or loss		
Gains (losses) on exchange differences on translation, before tax	-28	180
Reclassification adjustments on exchange differences on translation, before tax	0	0
Exchange differences, before tax	-28	180
Income taxes relating to exchange differences on translation	-1	0
Exchange differences, net of tax	-30	180
Gains (losses) on cash flow hedges/cost of hedging, before tax	10	-8
Reclassification adjustments on cash flow hedges/cost of hedging, before tax	3	9
Cash flow hedges/cost of hedging, before tax	13	1
Income taxes relating to cash flow hedges/cost of hedging	-3	0
Cash flow hedges/cost of hedging, net of tax	9	1
Other comprehensive income for items that will be reclassified to profit or loss, net of tax	-20	181
Other comprehensive income, net of tax	-17	181
Total comprehensive income	1,680	656
Attributable to owners of parent	1,664	636
Attributable to non-controlling interests	16	20

Due to rounding, numbers may not add up precisely.

and the same of th			
millions	Note	2020	2019
Cash and cash equivalents		6,205	5,314
Other financial assets		1,419	29
Trade and other receivables		6,584	7,90
Other non-financial assets	(A.2)	1,359	1,18
Tax assets		476	50
Total current assets		16,043	15,21
Goodwill	(D.2)	29,214	29,15
Intangible assets		4,158	4,49
Property, plant, and equipment	(D.3)	5,272	5,49
Other financial assets		2,595	2,33
Trade and other receivables		91	12
Other non-financial assets	(A.2)	1,777	1,70
Tax assets		313	43
Deferred tax assets		1,246	1,25
Total non-current assets		44,666	44,99
otal assets		60,709	60,21
millions		2020	201
Trade and other payables		1,311	1,58
Tax liabilities		391	25
Financial liabilities	(E.2)	4,066	3,27
Other non-financial liabilities		3,636	4,81
Provisions	(B.4)	105	26
Contract liabilities		5,791	4,26
Total current liabilities		15,300	14,46
Trade and other payables		7	
Tax liabilities		566	53
Financial liabilities	(E.2)	14,499	12,92
Other non-financial liabilities		603	81
Provisions		515	47
Deferred tax liabilities		79	7
Contract liabilities		69	8
Total non-current liabilities		16,338	14,92
Total liabilities		31,637	29,39
lssued capital		1,229	1,22
Share premium		548	54
Retained earnings		28,529	28,78
Other components of equity		1,749	1,77
Treasury shares		-3,072	-1,58
Equity attributable to owners of parent		28,982	30,74
Non-controlling interests		89	7
Total equity	(E.1)	29,072	30,82
otal equity and liabilities	(2.2)	60,709	60,212

Due to rounding, numbers may not add up precisely.

Consolidated Statements of Changes in Equity of SAP Group (IFRS)

€ millions				Equity Attril	outable to Owne	ers of Parent	Non-	Total Equity
-	Issued Capital	Share Premium	Retained Earnings	Other Components of Equity	Treasury Shares	Total	Controlling Interests	
12/31/2018	1,229	543	27,407	1,234	-1,580	28,832	45	28,877
Adoption of IFRS 16			-71			-71		-71
1/1/2019	1,229	543	27,336	1,234	-1,580	28,761	45	28,807
.III Profit after tax			455			455	20	475
Other comprehensive income			1	181		181		181
Comprehensive income			456	181		636	20	656
Share-based payments		3				3		3
Dividends			-1,790			-1,790	-5	-1,795
Hyperinflation			-30			-30		-30
6/30/2019	1,229	545	25,970	1,415	-1,580	27,579	60	27,640
1 12/31/2019	1,229	545	28,783	1,770	-1,580	30,746	76	30,822
.⊪ Profit after tax			1,681			1,681	16	1,697
Other comprehensive income			4	-20		-17		-17
Comprehensive income			1,684	-20		1,664	16	1,680
Share-based payments		3				3		3
Dividends			-1,864			-1,864	-2	-1,866
Purchase of treasury shares					-1,492	-1,492		-1,492
Hyperinflation			-5			-5		-5
Transactions with non-controlling interests			-69			-69		-69
Other changes			-1			-1	-1	-2
4 6/30/2020	1,229	548	28,529	1,749	-3,072	28,982	89	29,072

Due to rounding, numbers may not add up precisely.

Consolidated Statement of Cash Flows of SAP Group (IFRS)

€ millions	Q1-Q2 2020	Q1-Q2 2019
.ııl Profit (loss) after tax	1,697	475
Adjustments to reconcile profit (loss) after tax to net cash flows from operating activities:		
Depreciation and amortization	925	897
Share-based payment expense	612	1,114
.iil Income tax expense	747	201
III Financial income, net	-53	-29
Decrease/increase in allowances on trade receivables	47	-9
Other adjustments for non-cash items	-3	-55
Decrease/increase in trade and other receivables	1,132	354
Decrease/increase in other assets	-404	-390
Increase/decrease in trade payables, provisions, and other liabilities	-977	-2
Increase/decrease in contract liabilities	1,578	2,363
Share-based payments	-949	-832
Interest paid	-176	-176
Interest received	87	45
Income taxes paid, net of refunds	-491	-1,277
Net cash flows from operating activities	3,772	2,679
Business combinations, net of cash and cash equivalents acquired	-47	-6,147
Proceeds from sales of subsidiaries or other businesses	0	61
Purchase of intangible assets or property, plant, and equipment	-497	-539
Proceeds from sales of intangible assets or property, plant, and equipment	39	35
Purchase of equity or debt instruments of other entities	-1,390	-579
Proceeds from sales of equity or debt instruments of other entities	248	469
Net cash flows from investing activities	-1,647	-6,700
Dividends paid	-1,864	-1,790
Dividends paid on non-controlling interests	-2	-2
Purchase of treasury shares	-442	0
Proceeds from borrowings	2,015	2,523
Repayments of borrowings	-832	-29
Payments of lease liabilities	-156	-185
Net cash flows from financing activities	-1,281	517
Effect of foreign currency rates on cash and cash equivalents	46	45
Net decrease/increase in cash and cash equivalents	890	-3,459
The Cash and cash equivalents at the beginning of the period	5,314	8,627
The Cash and cash equivalents at the end of the period	6,205	5,168

Due to rounding, numbers may not add up precisely.

Notes to the Consolidated Half-Year Financial Statements

(IN.1) Basis for Preparation

General Information About Consolidated Half-Year Financial Statements

The registered seat of SAP SE is in Walldorf, Germany (Commercial Register of the Lower Court of Mannheim HRB 719915). The accompanying condensed Consolidated Half-Year Financial Statements of SAP SE and its subsidiaries (collectively, "we," "us," "our," "SAP," "Group," and "Company") have been prepared in accordance with the International Financial Reporting Standards (IFRS) and in particular in compliance with International Accounting Standard (IAS) 34. In this context, IFRS includes all standards issued by the International Accounting Standards Board (IASB) and related interpretations issued by the IFRS Interpretations Committee (IFRS IC). The variances between the applicable IFRS standards as issued by the IASB and the standards as used by the European Union are not relevant to these financial statements.

Certain information and disclosures normally included in the notes to annual financial statements prepared in accordance with IFRS have been condensed or omitted. We believe that the disclosures made are adequate and that the information gives a true and fair view.

Our business activities are influenced by certain seasonal effects. Historically, our overall revenue tends to be highest in the fourth quarter. Interim results are therefore not necessarily indicative of results for a full year.

Amounts reported in previous years have been reclassified if appropriate to conform to the presentation in this half-year report.

These unaudited condensed Consolidated Half-Year Financial Statements should be read in conjunction with SAP's audited Consolidated IFRS Financial Statements for the Year Ended December 31, 2019, included in our Integrated Report 2019 and our Annual Report on Form 20-F for 2019.

Due to rounding, numbers presented throughout these Consolidated Half-Year Financial Statements may not add up precisely to the totals we provide and percentages may not precisely reflect the absolute figures.

Amounts disclosed in our Consolidated Half-Year Financial Statements that are taken directly from our \blacksquare Consolidated Income Statements or our \blacksquare Consolidated Statements of Financial Position are marked by the symbols \blacksquare and \blacksquare , respectively.

Accounting Policies, Management Judgments, and Sources of Estimation Uncertainty

How We Present Our Accounting Policies, Judgments, and Estimates

To ease the understanding of our financial statements, we present the accounting policies, judgments, and estimates on a given subject together with other disclosures related to the same subject in the Note that deals with this subject. For easier identification of our accounting policies, judgments, and estimates, the respective disclosures are marked with the symbol 2 and framed by a light gray box.

We describe however, only material changes of our accounting policies, judgments, and estimates in relation to our Consolidated Financial Statements for 2019 in this report.

The following table provides an overview of where our accounting policies, management judgments, and estimates are disclosed:

Note	Accounting Policies, Judgments, and Estimates
(IN.2)	Impact of COVID-19
(A.1)	Revenue
(C.1)	Results of Segments

(IN.2) Impact of COVID-19

Management Judgments and Estimates Due to the COVID-19 Pandemic

Management judgments and estimates can affect the amounts and reporting of assets and liabilities as at the reporting date, and the amounts of income and expense reported for the period. Due to the currently unforeseeable global consequences of the COVID-19 pandemic, these management judgments and estimates are subject to increased uncertainty. Actual amounts may differ from the management judgments and estimates; changes can have a material impact on the Interim Consolidated Financial Statements. All available information on the expected economic developments and country-specific governmental mitigation measures was included when updating the management judgments and estimates. This information was also included in the analysis of the recoverability and collectability of assets and receivables.

As the pandemic continues to evolve, it is difficult to predict its duration and the magnitude of its impact on assets, liabilities, results of operations, and cash flows. We based financial-statement-related estimates and assumptions on existing knowledge and best information available, and applied a scenario assuming the economic impact of the current COVID-19 situation is not of long-term duration – a view that is also supported by the gradual business recovery we experienced in the second quarter of 2020.

For more information about the impact of the COVID-19 pandemic on our business, see the *Financial Performance: Review and Analysis* section and the *Risk Management and Risk* section in this consolidated half-year management report. For more information about the impact on goodwill, see *Note (D.2)*.

Further possible future effects on the measurement of individual assets and liabilities are currently being analyzed.

Section A – Customers

This section discusses disclosures related to contracts with our customers. These consist of revenue breakdowns and information about our trade receivables. For more information, see our Consolidated Financial Statements for 2019, *Section A – Customers*.

(A.1) Revenue

Accounting Policy

In the first half of 2020, there were no significant changes in our revenue accounting policies. The COVID-19 outbreak had no significant impact on estimates and judgments related to our revenue accounting policies in the first half of 2020. For more information about our revenue accounting policies, see our Consolidated Financial Statements for 2019, *Note (A.1)*.

Geographic Information

The amounts for revenue by region in the following tables are based on the location of customers.

Cloud Revenue by Region

€ millions	Q1-Q2 2020	Q1-Q2 2019
EMEA	1,277	967
Americas	2,275	1,868
APJ	502	412
.iil SAP Group	4,055	3,247

Cloud and Software Revenue by Region

€ millions	Q1-Q2 2020	Q1-Q2 2019
EMEA	4,840	4,629
Americas	4,545	4,230
APJ	1,720	1,680
.iil SAP Group	11,106	10,538

Total Revenue by Region

€ millions	Q1-Q2 2020	Q1-Q2 2019
Germany	1,846	1,783
Rest of EMEA	3,862	3,754
EMEA	5,708	5,537
United States	4,577	4,245
Rest of Americas	983	957
Americas	5,560	5,202
Japan	641	526
Rest of APJ	1,356	1,457
APJ	1,997	1,983
.iil SAP Group	13,264	12,722

For information about the breakdown of revenue by segment and segment revenue by region, see *Note (C.1)*.

(A.2) Trade and Other Receivables

€ millions			6/30/2020
	Current	Non- Current	Total
Trade receivables, net	6,337	17	6,354
Other receivables	247	74	321
4 Total	6,584	91	6,675
€ millions			12/31/2019

4 Total	7,908	129	8,037
Other receivables	346	108	454
Trade receivables, net	7,561	21	7,582
	Current	Non- Current	Total
€ millions			12/31/2019

Section B – Employees

This section provides financial insights into our employee benefit arrangements. It should be read in conjunction with the compensation disclosures for key management personnel in *Note* (*G.5*) in our Consolidated Financial Statements for 2019 as well as SAP's *Compensation Report*. For more information, see our Consolidated Financial Statements for 2019, *Section B – Employees*.

(B.1) Employee Headcount

On June 30, 2020, the breakdown of our full-time equivalent employee numbers by function and by region was as shown in the table below. The increase in headcount in the SAP Group to 101,379 employees was mainly due to organic growth of full-time equivalents in research and development as well as in the cloud function.

Number of Employees (in Full-Time Equivalents)

Full-time equivalents				6/30/2020				6/30/2019
	EMEA	Americas	APJ	Total	EMEA	Americas	APJ	Total
Cloud and software	6,354	4,638	5,461	16,454	6,390	4,530	5,260	16,180
Services	8,278	6,067	5,992	20,337	8,302	5,766	5,772	19,839
Research and development	12,941	5,942	9,330	28,214	12,486	5,378	8,805	26,668
Sales and marketing	10,266	10,493	5,104	25,863	9,966	10,223	5,118	25,307
General and administration	3,208	2,215	1,233	6,656	3,120	2,064	1,239	6,424
Infrastructure	2,138	1,049	670	3,857	2,240	1,022	651	3,913
SAP Group (6/30)	43,184	30,404	27,791	101,379	42,504	28,983	26,844	98,332
Thereof acquisitions ¹⁾	0	0	0	0	338	1,638	137	2,113
SAP Group (six months' end average)	43,190	30,248	27,718	101,156	42,538	29,283	26,784	98,605

 $^{^{1)}}$ Acquisitions closed between January 1 and June 30 of the respective year

(B.2) Employee Benefits Expenses

Employee Benefits Expense

€ millions	Q1-Q2 2020	Q1-Q2 2019
Salaries	5,225	4,853
Social security expenses	782	781
Share-based payment expenses	612	1,114
Pension expenses	220	193
Employee-related restructuring expenses	12	1,069
Termination benefits	46	29
Employee benefits expense	6,897	8,039

(B.3) Share-Based Payments

The allocations of expenses for share-based payments to the various expense items are as follows:

Share-Based Payments

€ millions	Q1-Q2 2020	Q1-Q2 2019
Cost of cloud and software	53	81
Cost of services	94	144
Research and development	159	252
Sales and marketing	197	327
General and administration	110	311
Share-based payments	612	1,114

For more information about our share-based payments and a detailed description of our share-based payment plans, see our Consolidated Financial Statements for 2019, *Note (B.3)*.

Restricted Stock Unit Plan Including Move SAP Plan and Grow SAP Plan (RSU Plan)

In the first half of 2020, we granted 8.3 million (first half of 2019: 8.2 million) share units. This includes 0.8 million share units which we granted in June 2020 under the new Grow SAP Plan. This fixed-term plan has broadly the same terms and conditions as the Move SAP Plan, recognizes all employees' commitment to SAP's success, and deepens their participation in our future company performance.

Own SAP Plan (Own)

The number of shares purchased by our employees under this plan was 2.7 million in the first half of 2020 (first half of 2019: 2.6 million). The plan enables employees to purchase shares at preferred conditions and build value by becoming an SAP shareholder.

(B.4) Restructuring

€ millions	Q1-Q2 2020	Q1-Q2 2019
Employee-related restructuring expenses	-12	-1,069
Onerous contract-related restructuring expenses and restructuring related impairment losses	0	-16
III Restructuring expenses	-13	-1,085

In 2019, SAP launched a global restructuring program. The expenses presented in the first half of 2020 are mainly costs resulting from the revaluation and adjustment of provisions relating to this program.

If not presented separately, these restructuring expenses would break down in our income statements as follows:

Restructuring Expenses by Functional Area

€ millions	Q1-Q2 2020	Q1-Q2 2019
Cost of cloud and software	-2	-127
Cost of services	-5	-169
Research and development	-5	-443
Sales and marketing	0	-281
General and administration	0	-64
.ııl Restructuring expenses	-13	-1,085

Section C – Financial Results

This section provides insight into the financial results of SAP's reportable segments and of SAP overall, as far as not already covered by previous sections. This includes segment results and income taxes. For more information, see our Consolidated Financial Statements for 2019, Section C – Financial Results.

(C.1) Results of Segments

General Information

SAP has five operating segments that are regularly reviewed by our Executive Board, which is responsible for assessing the performance of our Company and for making resource allocation decisions as our Chief Operating Decision Maker (CODM). The operating segments are largely organized and managed separately according to their product and service offerings, notably whether the products and services relate to our services activities, travel management offerings, experience management solutions, or communication offerings, or cover other areas of our business.

For more information about our segments, see our Consolidated Financial Statements for 2019, $Note\ (C.1)$.

In the first half of 2020, the following changes to the composition of our operating segments occurred:

- Bringing together services delivery and services sales functions, a new global services unit was established resulting in a new segment called Services segment. Most of the services business was formerly part of the Applications, Technology & Services segment. However, the services segment does not reflect the full services business, as other segments provide services as well.
- As a result of the above-mentioned change, the former Applications, Technology & Services segment was renamed to Applications, Technology & Support segment.
- Through the integration of Ariba and Fieldglass offerings as well as major parts of Concur engineering functions into the Applications, Technology & Support segment and into the newly established Services segment, the former Intelligent Spend Group segment only comprises the remaining Concur business going forward. The Intelligent Spend Group segment was therefore renamed to Concur segment.
- The Qualtrics segment as well as the non-reportable Digital Interconnect segment remained unchanged. However, on May 5, 2020, SAP announced the sale of the Digital Interconnect business. The transaction is expected to close in the fourth quarter of 2020. For more information, see *Note (D.1)*.

The segment information for prior periods has been restated to conform with these changes to our reportable segments.

Segment Reporting Policies

In the first half of 2020, there were no significant changes in our segment accounting policies. For a detailed overview of our segment accounting policies, judgments, and sources for management reporting, see our Consolidated Financial Statements for 2019, *Note (C.1)*.

Applications, Technology & Support

€ millions		Q1-Q2 2020	Q1-Q2 2019
	Actual Currency	Constant Currency	Actual Currency
Cloud	3,112	3,087	2,482
Software licenses	1,220	1,225	1,590
Software support	5,824	5,798	5,689
Software licenses and support	7,044	7,023	7,280
Cloud and software	10,156	10,110	9,761
Services	145	144	162
Total segment revenue	10,301	10,253	9,923
Cost of cloud	-1,095	-1,088	-948
Cost of software licenses and support	-887	-886	-932
Cost of cloud and software	-1,982	-1,974	-1,880
Cost of services	-156	-156	-179
Total cost of revenue	-2,138	-2,130	-2,059
Segment gross profit	8,163	8,124	7,864
Other segment expenses	-4,004	-3,993	-3,886
Segment profit (loss)	4,159	4,131	3,978

Services

€ millions		Q1-Q2 2020	Q1-Q2 2019	
	Actual Currency	Constant Currency	Actual Currency	
Cloud	0	0	0	
Software licenses	0	0	0	
Software support	2	2	2	
Software licenses and support	2	2	2	
Cloud and software	2	2	3	
Services	1,644	1,630	1,654	
Total segment revenue	1,646	1,632	1,656	
Cost of cloud	-37	-37	-29	
Cost of software licenses and support	-21	-21	-34	
Cost of cloud and software	-57	-58	-63	
Cost of services	-1,151	-1,149	-1,270	
Total cost of revenue	-1,208	-1,206	-1,333	
Segment gross profit	438	426	324	
Other segment expenses	-231	-230	-238	
Segment profit (loss)	207	196	85	

Concur

€ millions		Q1-Q2 2020	Q1-Q2 2019
	Actual Currency	Constant Currency	Actual Currency
Cloud	690	675	654
Software licenses	0	0	0
Software support	0	0	0
Software licenses and support	0	0	0
Cloud and software	690	675	654
Services	118	115	115
Total segment revenue	807	791	770
Cost of cloud	-81	-80	-93
Cost of software licenses and support	0	0	0
Cost of cloud and software	-81	-80	-93
Cost of services	-84	-83	-82
Total cost of revenue	-166	-163	-176
Segment gross profit	642	628	594
Other segment expenses	-344	-339	-315
Segment profit (loss)	297	289	279

Qualtrics

€ millions		Q1-Q2 2020	Q1-Q2 2019
	Actual Currency	Constant Currency	Actual Currency
Cloud	250	244	158
Software licenses	0	0	0
Software support	0	0	0
Software licenses and support	0	0	0
Cloud and software	250	244	158
Services	79	77	56
Total segment revenue	329	321	214
Cost of cloud	-23	-22	-13
Cost of software licenses and support	0	0	0
Cost of cloud and software	-23	-22	-13
Cost of services	-53	-52	-29
Total cost of revenue	-76	-74	-42
Segment gross profit	253	247	172
Other segment expenses	-258	-251	-158
Segment profit (loss)	-5	-4	14

Segment Revenue by Region

€ millions	EMEA			Americas				APJ			Total Segment Revenue		
	Q1-Q2 2020		Q1-Q2 2019	Q1-Q2 2020		Q1-Q2 2019	Q1-Q2 2020		Q1-Q2 2019	Q1-Q2 2020		Q1-Q2 2019	
	Actual Currency	Constant Currency	Actual Currency	Actual Currency	Constant Currency	Actual Currency	Actual Currency	Constant Currency	Actual Currency	Actual Currency	Constant Currency	Actual Currency	
Applications, Technology & Support	4,755	4,756	4,617	3,890	3,844	3,693	1,655	1,653	1,614	10,301	10,253	9,923	
Services	735	734	740	723	711	681	188	187	235	1,646	1,632	1,656	
Concur	119	116	103	606	595	587	82	80	80	807	791	770	
Qualtrics	47	46	29	256	250	170	26	25	15	329	321	214	
Total reportable segments	5,657	5,652	5,488	5,476	5,401	5,131	1,951	1,944	1,944	13,084	12,997	12,563	

For a breakdown of revenue by region for the SAP Group, see *Note (A.1)*.

(C.2) Reconciliation of Segment Measures to Income Statement

€ millions		Q1-Q2 2020	Q1-Q2 2019	
	Actual Currency	Constant Currency	Actual Currency	
Applications, Technology & Support	10,301	10,253	9,923	
Services	1,646	1,632	1,656	
Concur	807	791	770	
Qualtrics	329	321	214	
Total segment revenue for reportable segments	13,084	12,997	12,563	
Other revenue	182	180	210	
Adjustment for currency impact	0	88	0	
Adjustment of revenue under fair value accounting	-2	-2	-51	
.III Total revenue	13,264	13,264	12,722	
Applications, Technology & Support	4,159	4,131	3,978	
Services	207	196	85	
Concur	297	289	279	
Qualtrics	_5	-4	14	
Total segment profit for reportable segments	4,658	4,611	4,356	
Other revenue	182	180	210	
Other expenses	-1,395	-1,378	-1,283	
Adjustment for currency impact	0	33	0	
Adjustment for				
Revenue under fair value accounting	-2	-2	-51	
Acquisition-related charges	-325	-325	-341	
Share-based payment expenses	-612	-612	-1,114	
.nl Restructuring	-13	-13	-1,085	
.III Operating profit	2,494	2,494	691	
.nl Other non-operating income/expense, net	-103	-103	-44	
.nd Financial income, net	53	53	29	
III Profit before tax	2,444	2,444	675	

(C.3) Financial Income, Net

Finance income mainly consists of gains from disposal of equity securities and IFRS 9-related fair value adjustments totaling €333 million in the first half of 2020 (first half of 2019: €196 million).

Included in the above 2020 amounts are several equity securities transactions, most notably the sales of Livongo Health, Inc.'s stock. Due to the significant share price increase in Livongo Health, Inc.'s stock, Sapphire Ventures Fund II, L.P. and other group entities sold a significant portion of their shareholdings in Livongo Health, Inc. This resulted in a gain of approximately €104 million from the share sales as well as the adjustment of the remaining shareholdings in the company.

Finance costs mainly consist of losses from disposal or IFRS 9-related fair value adjustments of Sapphire Ventures investments totaling €159 million in the first half 2020 (first half of 2019: €27 million).

For more information about our Financial Income, Net, see our Consolidated Financial Statements for 2019, *Note (C.4)*.

(C.4) Income Taxes

We are subject to ongoing tax audits by domestic and foreign tax authorities. Currently, we are in dispute mainly with the German and only a few foreign tax authorities. The German dispute is in respect of certain secured capital investments, while the few foreign disputes are in respect of the deductibility of intercompany royalty payments and intercompany services. In all cases, we expect that a favorable outcome can only be achieved through litigation. For all of these matters, we have not recorded a provision as we believe that the tax authorities' claims have no merit and that no adjustment is warranted. If, contrary to our view, the tax authorities were to prevail in their arguments before the court, we would expect to have an additional expense of approximately €1,133 million (2019: €2,013 million) in total (including related interest expenses and penalties of €596 million (2019: €982 million)). The contingent liabilities decreased in 2020 mainly due to changes in foreign currency exchange rates for our few foreign disputes and due to a German Federal Fiscal Court decision in a tax litigation on intercompany financing matters.

Section D - Invested Capital

This section highlights the non-current assets including investments that form the basis of our operating activities. Additions in invested capital include separate asset acquisitions or business combinations. For more information, see our Consolidated Financial Statements for 2019, *Section D – Invested Capital*.

(D.1) Business Combinations and Divestitures

We acquire businesses in specific areas of strategic interest to us, particularly to broaden our product and service portfolio.

Prior-year acquisitions are described in our Consolidated Financial Statements for 2019. There were no business combinations in the first half of 2020.

Sale of SAP Digital Interconnect

On May 5, 2020, SAP and Sinch AB, Stockholm, Sweden (hereafter "Sinch"), announced that they had entered into a definitive agreement for Sinch to acquire the SAP Digital Interconnect group. The business sold (which is a non-reportable segment to SAP) consists of several SAP subsidiaries as well as assets transferred from certain SAP entities. The purchase price amounts to €225 million (on a cash-free, debt-free basis). The transaction is expected to close in the fourth quarter of 2020 − following satisfaction of applicable regulatory and other approvals. Due to immateriality, we have not separately presented the business as a discontinued operation.

(D.2) Goodwill

For goodwill, we have – based on a qualitative and quantitative analysis – assessed the existence of triggering events that would require an impairment test in the first half of 2020.

The review of internal and external factors (and the fact that the software industry is presumably being less strongly impacted than other industries, which was also further supported by a gradual recovery of the business in the second quarter of 2020) led us to conclude that, based on the information currently available, the COVID-19 impact on the cash generating units where goodwill was allocated to, is expected to be rather short-term, with SAP being able to materially catch up to pre-COVID-19 revenue growth and profit levels in the mid-term and long-term.

Thus, in the absence of triggering events, no impairment tests were performed in the first half of 2020.

(D.3) Property, Plant, and Equipment Property, Plant, and Equipment (Summary)

€ millions	6/30/2020	12/31/2019
Property, plant, and equipment excluding leases	3,388	3,529
Right-of-use assets	1,884	1,967
⁴ Total	5,272	5,496

Section E – Capital Structure, Financing and Liquidity

This section provides information related to how SAP manages its capital structure. Our capital management is based on a high equity ratio, modest financial leverage, a well-balanced maturity profile, and deep debt capacity. For more information, see our Consolidated Financial Statements for 2019, *Section E – Capital Structure, Financing, and Liquidity*.

(E.1) Total Equity

Number of Shares

millions	Issued Capital	Treasury Shares
12/31/2018	1,228.5	-34.9
6/30/2019	1,228.5	-34.9
12/31/2019	1,228.5	-34.9
Purchase	0	-14.1
6/30/2020	1,228.5	-48.9

We bought back 14,070,538 shares at an average price of €106.04 between February 20, 2020, and March 19, 2020.

Other Components of Equity

€ millions	Exchange Differences	Cash Flow Hedges	Total	
12/31/2018	1,239	-5	1,234	
Other comprehensive income ¹⁾	180	1	181	
6/30/2019	1,419 -		1,415	
12/31/2019	1,776	-6	1,770	
Other comprehensive income ¹⁾	-30	9	-20	
6/30/2020	1,746	4	1,749	

 $^{^{1)}}$ The exchange differences in other comprehensive income include the effect from hyperinflation accounting for our subsidiaries in Venezuela and Argentina.

(E.2) Liquidity

€ millions				6	/30/2020		
	Nomi	Nominal Volume			Carrying Amount		
	Current	Non- Current	Current	Non- Current	Total		
Bonds	1,000	9,868	1,001	9,887	10,887		
Private placement transactions	259	775	261	820	1,081		
Commercial Paper	930	0	930	0	930		
Bankloans	23	2,000	23	1,998	2,021		
Financial debt	2,212	12,643	2,215	12,704	14,919		
Lease liabilities	NA	NA	370	1,787	2,157		
Other financial liabilities	NA	NA	1,482	7	1,489		
4 Financial liabilities			4,066	14,499	18,565		
Financial debt as % of 🍄 financial liabilities			54	88	80		

€ millions				:	12/31/2019		
	Nominal Volume			Carrying Amount			
	Current	Non- Current	Current	Non- Current	Total		
Bonds	1,150	8,367	1,150	8,283	9,433		
Private placement transactions	258	772	259	808	1,067		
Commercial Paper	1,100	0	1,100	0	1,100		
Bank loans	21	2,000	22	1,995	2,017		
Financial debt	2,529	11,139	2,531	11,086	13,617		
Lease liabilities	NA	NA	389	1,814	2,203		
Other financial liabilities	NA	NA	353	23	376		
T Financial liabilities			3,273	12,923	16,196		
Financial debt as % of 🍄 financial liabilities			77	86	84		

For the first half of 2020, the current other financial liabilities include liabilities amounting to $\ensuremath{\mathfrak{e}}$ 1,050 million relating to the share buyback completed in the first six months of 2020.

Section F – Risk Management and Fair Value Disclosures

This section discusses financial risk factors and risk management. In our half-year report, this includes the transfers between levels of the fair value hierarchy. For more information, particularly about our risk management related to foreign currency exchange rate risk, interest rate risk, equity price risk, credit risk, liquidity risk, and other financial risk factors, see our Consolidated Financial Statements for 2019, Section F – Risk Management and Fair Value Disclosures

(F.1) Financial Risk Factors, Financial Risk Management, and Fair Value Disclosures on Financial Instruments

A detailed overview of our other financial instruments, financial risk factors, the management of financial risks, and the determination of fair value as well as the classification of our other financial instruments into the fair value hierarchy of IFRS 13 are presented in *Notes (F.1)* and *(F.2)* in our Consolidated Financial Statements for 2019.

We do not disclose the fair value of our financial instruments as of June 30, 2020, for the following reasons:

- For a large number of our financial instruments, their carrying amounts are a reasonable approximation of their fair values, and
- For those financial instruments where the carrying amount differs from fair value, there was no material change in the relation between carrying amount and fair value since December 31, 2019.

Transfers Between Levels of the Fair Value Hierarchy

Transfers of equity investments from Level 2 to Level 1, which occurred because disposal restrictions lapsed and deducting a discount for such restriction was no longer necessary, were €109 million in the first half year 2020 (December 31, 2019: €5 million).

Section G – Other Disclosures

This section provides additional disclosures on miscellaneous topics, including information pertaining to other litigation, claims, and legal contingencies, and related party transactions. For more information, see our Consolidated Financial Statements for 2019, *Section G – Other Disclosures*.

(G.1) Litigation, Claims, and Legal Contingencies

We are subject to a variety of claims and lawsuits that arise from time to time in the ordinary course of our business, including proceedings and claims that relate to companies we have acquired. We will continue to vigorously defend against all claims and lawsuits against us. We currently believe that resolving the claims and lawsuits pending as at June 30, 2020, will neither individually nor in the aggregate have a material adverse effect on our business, financial position, profit, or cash flows. Consequently, the provisions recorded for these claims and lawsuits as at June 30, 2020, are neither individually nor in the aggregate material to SAP.

Among the claims and lawsuits are the following classes (for more information about these classes, see our Consolidated Financial Statements for 2019, Note(G.3)).

Intellectual Property-Related Litigation and Claims

There have been no significant changes to the amount of provisions recorded for intellectual property-related litigation and claims compared to the amounts disclosed in $Note\left(G.3\right)$ in our Consolidated Financial Statements for 2019. There have also been no significant changes in contingent liabilities from intellectual property-related litigation and claims for which no provision has been recognized.

The legal proceedings instituted in 2010 by United States-based TecSec, Inc. against SAP (including its subsidiary Sybase) and many other defendants in the United States, in which TecSec sought unspecified monetary damages and permanent injunctive relief, were settled in 2020.

For the other individual cases of intellectual property-related litigation and claims disclosed in our Integrated Report 2019, there were no significant developments in the first half of 2020.

Tax-Related Litigation

There have been no significant changes in contingent liabilities from non-income tax-related litigation for which no provision has been recognized compared to our Consolidated Financial Statements for 2019, *Note (G.3)*.

For more information about income tax-related litigation, see *Note* (*C.4*).

Anti-Bribery and Export Control Matters

SAP received communications alleging conduct that may violate anti-bribery laws in the United States (including the U.S. Foreign Corrupt Practices Act (FCPA)), and other countries. Further, we

voluntarily self-disclosed potential export controls and economic sanctions violations. The investigations are ongoing and neither the outcome of the investigations nor the date when substantiated findings will be available is predictable at this point in time. SAP continues to enhance its anti-corruption compliance program as well as its export control compliance program. We continue to be fully committed to anti-bribery laws and export restriction controls and will continue full cooperation with all parties involved.

It is impossible at this point in time to determine whether the potential anti-bribery law violations and the potential export restriction violations represent present obligations of SAP and, if so, to reliably estimate the amount of these obligations. As a consequence, as at June 30, 2020, no provisions have been recognized for these potential violations in our Consolidated Half-Year Financial Statements. It is currently also not practicable to estimate the financial effect of any contingent liabilities that may result from these potential violations.

For more information, see our Consolidated Financial Statements for 2019, *Note (G.3)*.

(G.2) Related Party Transactions

Certain Executive Board and Supervisory Board members of SAP SE currently hold (or have held within the last year) positions of significant responsibility with other entities (for more information, see our Consolidated Financial Statements for 2019, $Note\ (G.5)$). We have relationships with certain of these entities in the ordinary course of business.

During the reporting period, we had no related party transactions that had a material effect on our business, financial position, or results in the reporting period.

For more information about related party transactions, see our Consolidated Financial Statements for 2019, $Note\left(G.6\right)$.

(G.3) Events After the Reporting Period

No events that have occurred since June 30, 2020, have a material impact on the Company's Consolidated Half-Year Financial Statements

Release of the Consolidated Half-Year Financial Statements

The Executive Board of SAP SE approved these consolidated half-year financial statements on July 22, 2020, for submission to the Audit Committee of the Supervisory Board and for subsequent issuance.

(G.4) Scope of Consolidation

	Total
12/31/2019	264
Additions	0
Disposals	-3
6/30/2020	261

In the first half of 2020, there were no acquisitions or foundations of legal entities. The disposals are mainly due to liquidations and mergers of legal entities.

For more information about our business combinations and the effect on our Consolidated Financial Statements, see $Note\left(D.1\right)$ and our Integrated Report 2019.

Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles for half-year financial reporting, the Consolidated Half-Year Financial Statements give a true and fair view of the assets, liabilities, financial position, and profit or loss of the SAP Group, and the Consolidated Half-Year Management Report of the SAP Group includes a fair review of the development and performance of the business and the position of the SAP Group, together with a description of the material opportunities and risks associated with the expected development of the SAP Group for the remaining months of the financial year.

Walldorf, July 22, 2020 SAP SE Walldorf, Baden The Executive Board

Christian Klein Adaire Fox-Martin

Luka Mucic Jürgen Müller

Thomas Saueressig

Supplementary Financial Information

Financial and Non-Financial Key Facts (IFRS and Non-IFRS)

€ millions, unless otherwise stated	Q1 2019	Q2 2019	Q3 2019	Q4 2019	TY 2019	Q1 2020	Q2 2020
Revenues							
Cloud (IFRS)	1,555	1,692	1,789	1,896	6,933	2,011	2,044
Cloud (non-IFRS)	1,581	1,717	1,807	1,907	7,013	2,012	2,044
% change – yoy	48	40	37	35	40	27	19
% change constant currency – yoy	41	35	33	32	35	25	18
Software licenses (IFRS)	650	948	932	2,002	4,533	451	773
Software licenses (non-IFRS)	650	948	932	2,002	4,533	451	773
% change – yoy	4	-5	-1	-4	-2	-31	-18
% change constant currency – yoy	1	-6	-4	-6	-5	-31	-18
Software support (IFRS)	2,838	2,854	2,907	2,948	11,547	2,934	2,892
Software support (non-IFRS)	2,838	2,854	2,907	2,948	11,548	2,934	2,892
% change – yoy	7	4	5	4	5	3	1
% change constant currency – yoy	4	2	3	2	3	2	2
Software licenses and support (IFRS)	3,489	3,802	3,839	4,950	16,080	3,386	3,665
Software licenses and support (non-IFRS)	3,489	3,802	3,840	4,950	16,080	3,386	3,665
% change – yoy	6	2	4	1	3	-3	-4
% change constant currency – yoy	3	0	1	-1	1	-4	-3
Cloud and software (IFRS)	5,044	5,495	5,629	6,846	23,012	5,397	5,709
Cloud and software (non-IFRS)	5,070	5,520	5,647	6,857	23,093	5,398	5,709
% change – yoy	16	11	13	8	12	6	3
% change constant currency – yoy	12	8	10	6	9	5	3
Total revenue (IFRS)	6,091	6,631	6,791	8,041	27,553	6,521	6,743
Total revenue (non-IFRS)	6,118	6,656	6,809	8,052	27,634	6,522	6,744
% change – yoy	16	11	13	8	12	7	1
% change constant currency – yoy	12	8	10	6	9	5	1
Share of more predictable revenue (IFRS, in %)	72	69	69	60	67	76	73
Share of more predictable revenue (non-IFRS, in %)	72	69	69	60	67	76	73
Profits							
Operating profit (loss) (IFRS)	-136	827	1,679	2,102	4,473	1,210	1,284
Operating profit (loss) (non-IFRS)	1,467	1,816	2,086	2,839	8,208	1,482	1,964
% change	19	11	20	12	15	1	8
% change constant currency	13	8	15	9	11	0	7
Profit (loss) after tax (IFRS)	-108	582	1,259	1,637	3,370	811	885
Profit (loss) after tax (non-IFRS)	1,080	1,317	1,564	2,190	6,152	1,015	1,395
% change	25	12	15	22	18	-6	6
Margins							
Cloud gross margin (IFRS, in %)	61.2	62.6	64.5	65.1	63.5	66.4	66.0
Cloud gross margin (non-IFRS, in %)	66.2	67.9	69.0	69.5	68.2	69.3	69.5
Software license and support gross margin (IFRS, in %)	84.6	86.0	87.0	88.1	86.6	85.2	86.4
Software license and support gross margin (non-IFRS, in %)	85.7	87.1	87.6	88.8	87.4	85.7	87.4
Cloud and software gross margin (IFRS, in %)	77.4	78.8	79.9	81.7	79.6	78.2	79.1
Cloud and software gross margin (non-IFRS, in %)	79.6	81.1	81.7	83.4	81.6	79.6	81.0
Gross margin (IFRS, in %)	66.5	68.2	70.3	72.8	69.7	68.3	69.9
Gross margin (non-IFRS, in %)	69.5	71.4	72.3	75.2	72.3	69.8	72.6
arosomargin (non ir ito, iir 70)	09.0	/ ⊥.~+	, L.J	, J. <u>C</u>	, L.J	00.0	,2.0

€ millions, unless otherwise stated	Q1 2019	Q2 2019	Q3 2019	Q4 2019	TY 2019	Q1 2020	Q2 2020
Operating margin (IFRS, in %)	-2.2	12.5	24.7	26.1	16.2	18.6	19.0
Operating margin (non-IFRS, in %)	24.0	27.3	30.6	35.3	29.7	22.7	29.1
AT&S segment – Cloud gross margin (in %)	61.1	62.4	63.1	63.1	62.5	64.4	65.2
AT&S segment – Segment gross margin (in %)	78.4	80.0	80.4	82.9	80.6	78.3	80.1
AT&S segment – Segment margin (in %)	37.0	43.0	44.8	48.4	43.7	36.7	43.8
Services segment – Services gross margin (in %)	21.3	25.0	31.2	29.1	26.8	26.9	33.3
Services segment – Segment gross margin (in %)	17.1	21.8	28.3	25.8	23.4	23.1	30.4
Services segment – Segment margin (in %)	3.3	6.9	15.9	12.3	9.8	10.1	15.2
Concur segment – Cloud gross margin (in %)	84.9	86.5	86.9	88.7	86.8	88.1	88.4
Concur segment – Segment gross margin (in %)	76.8	77.5	77.9	80.6	78.3	79.8	79.2
Concur segment – Segment margin (in %)	36.4	36.0	39.8	40.5	38.2	37.6	36.0
Qualtrics segment – Cloud gross margin (in %)	91.4	92.0	91.4	90.1	91.1	90.8	91.0
Qualtrics segment – Segment gross margin (in %)	81.4	79.9	78.6	74.9	78.3	75.4	78.6
Qualtrics segment – Segment margin (in %)	7.9	5.6	3.2	-6.5	1.6	-7.5	4.3
Key Profit Ratios							
Effective tax rate (IFRS, in %)	23.2	28.6	26.1	26.2	26.7	27.7	33.1
Effective tax rate (non-IFRS, in %)	26.1	27.0	25.8	25.9	26.2	27.2	30.3
Earnings per share, basic (IFRS, in €)	-0.10	0.48	1.04	1.36	2.78	0.68	0.73
Earnings per share, basic (non-IFRS, in €)	0.90	1.09	1.30	1.82	5.11	0.85	1.17
Order Entry and current cloud backlog							
Current cloud backlog	5,329	5,526	NA	NA	NA	6,647	6,655
% change – yoy	NA	NA	NA	NA	NA	25	20
% change constant currency – yoy	NA	NA	NA	NA	NA	24	21
Orders – number of cloud deals (in transactions)	2,961	3,624	3,717	5,377	15,679	3,113	3,775
Share of cloud orders greater than €5 million based on total	2,901	26	29	35	31	28	28
cloud order entry volume (in %) Share of cloud orders smaller than €1 million based on total	39	34	33	28	32	37	35
cloud order entry volume (in %) Orders – number of on-premise software deals (in transactions)	12,229	12,522	12,270	15,563	52,584	10,517	9,175
Share of orders greater than €5 million based on total software order entry volume (in %)	28	28	31	35	32	24	34
Share of orders smaller than €1 million based on total software order entry volume (in %)	42	36	39	31	35	42	38
Liquidity and Cash Flow							
	2,802	122	638	178	3,496	2 02 /	788
Net cash flows from operating activities	•••••••••••	-122	·····	·····	·····	2,984	
Capital expenditure	-359	-180	-164	-114	-817	-333	-164
Payments of lease liabilities	-78 2.265	-106	-104	-115	-403	-72	-84
Free cash flow	2,365	-409	370	-50	2,276	2,580	540
% of total revenue (IFRS)	39	-6	5	-1	8	40	8
% of profit after tax (IFRS)	-2,198	-70	29	-3	68	318	61
Group liquidity	7,673	5,280	5,597	5,382	5,382	7,872	7,401
Financial debt (-)	-13,866	-13,833	-13,874	-13,668	-13,668	-13,700	-14,855
Net debt (-)	-6,193	-8,553	-8,277	-8,286	-8,286	-5,827	-7,454
Days sales outstanding (DSO, in days) ¹⁾	69	70	71	71	71	73	76
Financial Position							
Cash and cash equivalents	7,332	5,168	5,525	5,314	5,314	7,816	6,205
Goodwill	29,160	28,853	29,904	29,159	29,159	29,731	29,214
Total assets	60,860	57,874	59,963	60,212	60,212	62,947	60,709
Contract liabilities (current)	6,068	5,558	4,400	4,266	4,266	6,726	5,791
Equity ratio (total equity in % of total assets)	48	48	50	51	51	49	48

€ millions, unless otherwise stated	Q1 2019	Q2 2019	Q3 2019	Q4 2019	TY 2019	Q1 2020	Q2 2020
Non-Financials							
Number of employees (quarter end) ²⁾	98,659	98,332	99,710	100,330	100,330	101,150	101,379
Employee retention (in %, rolling 12 months)	93.8	93.5	93.3	93.3	93.3	93.3	93.9
Women in management (in %, quarter end)	26.0	26.2	26.3	26.4	26.4	26.8	27.3
Greenhouse gas emissions (in kilotons)	110	75	65	50	300	65	25

¹⁾ Days sales outstanding measures the average number of days from the raised invoice to cash receipt from the customer. We calculate DSO by dividing the average invoiced trade receivables balance of the last 12 months by the average monthly cash receipt of the last 12 months.

Due to rounding, numbers may not add up precisely.

²⁾ In full-time equivalents.

Reconciliation from Non-IFRS Numbers to IFRS Numbers - Half Year

€ millions, unless otherwise stated				Ç	21-Q2 2020		Q1-	-Q2 2019			∆ in %
	IFRS	Adj.	Non- IFRS	Currency Impact	Non-IFRS Constant Currency	IFRS	Adj.	Non- IFRS	IFRS	Non- IFRS	Non-IFRS Constant Currency ¹²
Revenue Numbers											
Cloud	4,055	2	4,057	-46	4,011	3,247	51	3,299	25	23	22
Software licenses	1,224	0	1,224	5	1,230	1,599	0	1,599	-23	-23	-23
Software support	5,826	0	5,826	-27	5,800	5,692	0	5,692	2	2	2
Software licenses and support	7,051	0	7,051	-21	7,029	7,291	0	7,291	-3	-3	-4
Cloud and software	11,106	2	11,107	-67	11,040	10,538	51	10,589	5	5	4
Services	2,159	0	2,159	-21	2,137	2,184	0	2,184	-1	-1	-2
Total revenue	13,264	2	13,266	-88	13,178	12,722	51	12,773	4	4	3
Operating Expense Numbers									 -		
Cost of cloud	-1,370	128	-1,242			-1,237	151	-1,086	11	14	
Cost of software licenses and support	-998	53	-946			-1,069	79	-990	– 7	-4	
Cost of cloud and software	-2,368	180	-2,188			-2,306	231	-2,075	3	5	
Cost of services	-1,725	95	-1,630			-1,845	146	-1,699	_7	-4	
Total cost of revenue	-4,094	276	-3,818			-4,151	377	-3,774	-1	1	
Gross profit	9,171	277	9,448			8,571	428	8,999	7	5	
Research and development	-2,210	163	-2,047			-2,114	257	-1,857	5	10	***************************************
Sales and marketing	-3,684	388	-3,296			-3,833	496	-3,337	-4	-1	***************************************
General and administration	-729	111	-618			-895	325	-570	-19	8	
Restructuring	-13	13	0			-1,085	1,085	0	-99	NA	
Other operating income/expense, net	-41	0	-41			48	0	48	<-100	<-100	
Total operating expenses	-10,770	950	-9,820	55	-9,765	-12,031	2,540	-9,490	-10	3	3
Profit Numbers							·				-
Operating profit (loss)	2,494	952	3,446	-33	3,413	691	2,592	3,283	>100	5	4
Other non-operating income/expense, net	-103	0	-103			-44	0	-44	>100	>100	
Finance income	406	0	406		•••••	286	0	286	42	42	***************************************
Finance costs	-354	0	-354			-258	0	-258	37	37	•••••
Financial income, net	53	0	53			29	0	29	84	84	
Profit (loss) before tax	2,444	952	3,396			675	2,592	3,267	>100	4	
Income tax expense	-747	-239	-986			-201	-669	-870	>100	13	
Profit (loss) after tax	1,697	713	2,409			475	1,923	2,397	>100	1	
Attributable to owners of parent	1,681	713	2,393			455	1,923	2,378	>100	1	
Attributable to non-controlling interests	16	0	16			20	0	20	-19	-19	
Key Ratios											
Operating margin (in %)	18.8		26.0		25.9	5.4		25.7	13.4pp	0.3pp	0.2pp
Effective tax rate (in %) ²⁾	30.6		29.0			29.7		26.6	0.9pp	2.4pp	
Earnings per share, basic (in €)	1.42		2.02			0.38		1.99	>100	1	

¹⁾ Constant-currency period-over-period changes are calculated by comparing the current year's non-IFRS constant-currency numbers with the non-IFRS number of the previous year's respective period.

Due to rounding, numbers may not add up precisely.

²⁾ The difference between our effective tax rate (IFRS) and effective tax rate (non-IFRS) in the first half of 2020 mainly resulted from tax effects of share-based payment expenses and acquisition-related charges. The difference between our effective tax rate (IFRS) and effective tax rate (non-IFRS) in the first half of 2019 mainly resulted from tax effects of share-based payment expenses, restructuring expenses and acquisition-related charges.

Non-IFRS Adjustments Actuals and Estimates - Half Year

€ millions	Estimated Amounts for Full Year 2020	Q1-Q2 2020	Q1-Q2 2019
Operating profit (loss) (IFRS)		2,494	691
Revenue adjustments	0-30	2	51
Adjustment for acquisition-related charges	580–690	325	341
Adjustment for share-based payment expenses	1,200–1,600	612	1,114
Adjustment for restructuring	20-40	13	1,085
Operating expense adjustments		950	2,540
Operating profit (loss) adjustments		952	2,592
Operating profit (loss) (non-IFRS)		3,446	3,283

Non-IFRS-Adjustments by Functional Areas - Half Year

€ millions		Q1-Q2 2020 Q1-Q2 2019										
	IFRS	Acqui- sition- Related	SBP ¹⁾	Restruc- turing	Non-IFRS	IFRS	Acqui- sition- Related	SBP ¹⁾	Restruc- turing	Non-IFRS		
Cost of cloud and software	-2,368	127	53	0	-2,188	-2,306	150	81	0	-2,075		
Cost of services	-1,725	2	94	0	-1,630	-1,845	3	144	0	-1,699		
Research and development	-2,210	4	159	0	-2,047	-2,114	5	252	0	-1,857		
Sales and marketing	-3,684	191	197	0	-3,296	-3,833	169	327	0	-3,337		
General and administration	-729	1	110	0	-618	-895	14	311	0	-570		
Restructuring	-13	0	0	13	0	-1,085	0	0	1,085	0		
Other operating income/expense, net	-41	0	0	0	-41	48	0	0	0	48		
Total operating expenses	-10,770	325	612	13	-9,820	-12,031	341	1,114	1,085	-9,490		

 $^{^{1)}}$ Share-based payments

Due to rounding, numbers may not add up precisely.

Revenue by Region (IFRS and Non-IFRS) - Half Year

€ millions				(Q1-Q2 2020		Q:	l-Q2 2019	Δin			
	IFRS	Adj.	Non- IFRS	Currency Impact	Non-IFRS Constant Currency	IFRS	Adj.	Non-IFRS	IFRS	Non- IFRS	Non-IFRS Constant Currency ¹⁾	
Cloud Revenue by Region	1											
EMEA	1,277	0	1,277	-5	1,272	967	0	967	32	32	32	
Americas	2,275	2	2,277	-38	2,239	1,868	51	1,919	22	19	17	
APJ	502	0	502	-3	499	412	0	412	22	22	21	
Cloud revenue	4,055	2	4,057	-46	4,011	3,247	51	3,299	25	23	22	
Cloud and Software Reve	enue by Regio	on										
EMEA	4,840	0	4,840	-2	4,838	4,629	0	4,629	5	5	5	
Americas	4,545	2	4,547	-60	4,487	4,230	51	4,281	7	6	5	
APJ	1,720	0	1,720	-5	1,715	1,680	0	1,680	2	2	2	
Cloud and software revenue	11,106	2	11,107	-67	11,040	10,538	51	10,589	5	5	4	
Total Revenue by Region												
Germany	1,846	0	1,846	-1	1,845	1,783	0	1,783	3	3	3	
Rest of EMEA	3,862	0	3,862	-2	3,860	3,754	0	3,754	3	3	3	
Total EMEA	5,708	0	5,708	-3	5,705	5,537	0	5,537	3	3	3	
United States	4,577	2	4,578	-108	4,471	4,245	51	4,296	8	7	4	
Rest of Americas	983	0	983	29	1,012	957	0	957	3	3	6	
Total Americas	5,560	2	5,561	-79	5,483	5,202	51	5,253	7	6	4	
Japan	641	0	641	-25	617	526	0	526	22	22	17	
Rest of APJ	1,356	0	1,356	18	1,373	1,457	0	1,457	-7	-7	-6	
Total APJ	1,997	0	1,997	-7	1,990	1,983	0	1,983	1	1	0	
Total revenue	13,264	2	13,266	-88	13,178	12,722	51	12,773	4	4	3	

¹⁾ Constant-currency period-over-period changes are calculated by comparing the current year's non-IFRS constant-currency numbers with the non-IFRS number of the previous year's respective period.

Due to rounding, numbers may not add up precisely.

General Information

Forward-Looking Statements

This half-year report contains forward-looking statements and information based on the beliefs of, and assumptions made by, our management using information currently available to them. Any statements contained in this report that are not historical facts are forward-looking statements as defined in the U.S. Private Securities Litigation Reform Act of 1995. We have based these forward-looking statements on our current expectations, assumptions, and projections about future conditions and events. As a result, our forward-looking statements and information are subject to uncertainties and risks, many of which are beyond our control. If one or more of these uncertainties or risks materializes, or if management's underlying assumptions prove incorrect, our actual results could differ materially from those described in or inferred from our forward-looking statements and information. We describe these risks and uncertainties in the Risk Management and Risks section, respectively in the there-mentioned sources.

The words "aim," "anticipate," "assume," "believe," "continue," "could," "counting on," "is confident," "development," "estimate," "expect," "forecast," "future trends," "guidance," "intend," "may," "might," "outlook," "plan," "project," "predict," "seek," "should," "strategy," "want," "will," "would," and similar expressions as they relate to us are intended to identify such forward-looking statements. Such statements include, for example, those made in the *Operating Results* section, the *Risk Management and Risks* section, the *Expected Developments and Opportunities* section, and other forward-looking information appearing in other parts of this half-year financial report. To fully consider the factors that could affect our future financial results, both our Integrated Report 2019 and our Annual Report on Form 20-F for December 31, 2019, should be considered, as well as all of our other fillings with the Securities and Exchange Commission (SEC). Readers are cautioned not to

place undue reliance on these forward-looking statements, which speak only as of the date specified or the date of this report. We undertake no obligation to publicly update or revise any forward-looking statements as a result of new information that we receive about conditions that existed upon issuance of this report, future events, or otherwise unless we are required to do so by law.

This report includes statistical data about the IT industry and global economic trends that comes from information published by sources including IDC, the ECB, and the IMF. This type of data represents only the estimates of IDC, ECB, IMF, and other sources of industry data. SAP does not adopt or endorse any of the statistical information provided by sources such as IDC, ECB, IMF, or other similar sources that is contained in this report. The data from these sources is subject to risks and uncertainties, and subject to change based on various factors, including those described above, in the *Risk Management and Risks* section, and elsewhere in this report. These and other factors could cause our results to differ materially from those expressed in the estimates made by third parties and SAP. We caution readers not to place undue reliance on this data.

All of the information in this report relates to the situation as at June 30, 2020, or the half year ended on that date unless otherwise stated

Non-IFRS Financial Information

This half-year report contains non-IFRS measures as well as financial data prepared in accordance with IFRS. We present and discuss the reconciliation of these non-IFRS measures to the respective IFRS measures in the *Supplementary Financial Information* section. For more information about non-IFRS measures, see our Web site www.sap.com/investors/sap-non-ifrs-measures.

Additional Information

Financial Calendar

October 26, 2020

Third-quarter 2020 earnings release, conference call for financial analysts and investors

January 29, 2021

Fourth-quarter and full-year 2020 preliminary earnings release, conference call for financial analysts and investors

May 12, 2021

Annual General Meeting of Shareholders, Mannheim, Germany

Investor Services

Additional information about this half-year report is available online at www.sap.com/investors, including the official quarterly statement, a presentation about the quarterly results, and a recording of the conference call for financial analysts.

The "Financial Reports" tab contains the following publications:

- SAP Integrated Report (IFRS, PDF, www.sapintegratedreport.com)
- SAP Annual Report on Form 20-F (IFRS, PDF)
- SAP SE Statutory Financial Statements and Review of Operations (HGB, German only, PDF)
- Half-Year Report (IFRS, PDF)
- Quarterly Statements (IFRS, PDF)

www.sap.com/investors is also the place to look for in-depth information about stock, debt, and corporate governance; financial and event news; and various services designed to help investors find the information they need fast (see "Investor Services"). These include an e-mail and text message news service, and a Twitter feed. For sustainability reasons and faster distribution, SAP decided to refrain from printing reports.

Only a limited number of the Integrated Report was printed for the Annual General Meeting of Shareholders.

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Corporate Financial Reporting

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