

Apple Inc.	
Ticker MyBolsa/website BiG	AAPL
Ticker BiGlobal Trade	AAPL
Ticker BiTrader24	AAPL
Ticker BiG Power Trade	AAPL
P/E Ratio 2021E	32,44
P/BV Ratio	33,42
EV/EBITDA	6,69

Source: BiG Research;

Price and Performance (Values in USD)	
Price	128,61
52 Week High	138,79
52 Week Low	53,15
YTD	-3,1%
Average Daily Volume (mn)	143.639.408
Market Cap (mn)	2.163.640
Beta	1,01
Dividend	0,80
EPS	3,31

Source: BiG Research;

Consensus (last 5m)	
Buy	30
Hold	11
Sell	3

Source: BiG Research;

Financial Information	
Sales (USD mn)	274.515
EBITDA (USD mn)	78.844
Nº of Employees	147.000
ROA	17,3%
ROE	73,7%
D/E	0,1%
Dividend Yield	0,6%

Source: BiG Research;

Notes:

All quotes were updated in Bloomberg at 16h35 of January 12nd, 2020.

Relevant Information:

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<https://www.big.pt/pdf/Newsletters/nld.pdf>

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With the contribution of:

Francisco Fonseca

Research:

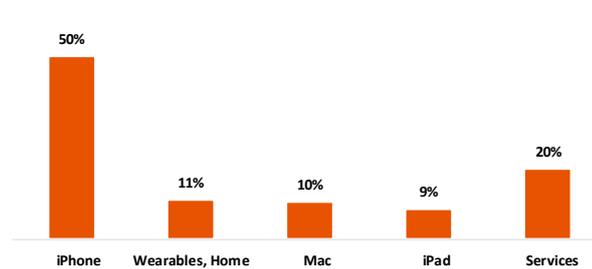
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Apple (Ticker: AAPL US)

Description

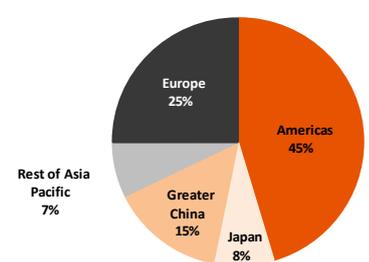
Apple is one of the largest companies by market capitalization and the maker of the iPhone, which represents its largest source of revenues. Apple began as a manufacturer of personal computers, but currently operates in a vast range of segments. The company divides its operations into 5 segments: iPhone (its flagship product); Services (a unit that includes the AppStore, iCloud, Apple TV+, Apple Pay, etc.); Mac (PC segment); iPad (Apple’s tablets); and Other Products (a unit that includes Apple TV, Apple Watch, AirPods, Beats headphones, HomePod and iPod). iPhone is still the main source of revenues, nevertheless, over the past years, Apple has been increasing its focus on services (and subscriptions), which helps to generate a more predictable and stable income.

Revenue Division (2020)



Source: Company's data (2020)

Revenue Division



Investment Points

Services Growth: As iPhone’s revenues are losing momentum, Apple has been trying to diversify its revenue sources. One of the options chosen was to expand the segment unit which nowadays is already the 2nd largest by revenue and one of the most fast-growing segments. This unit includes growth drivers such as Apple Music, iCloud and App Store, nevertheless, Apple has been expanding its portfolio by introducing new services as Apple Arcade, Apple News+, Apple TV+, etc.

Subscriptions: Apple added 35 mn paid subscriptions per quarter in the first nine months of 2020 (vs 30 mn per quarter over the last nine). There were 585 million paid subscriptions by the end of Q3 (30% yoy) and the company has the target to achieve a total of 600 mn by the end of 2020. Apple has been able to convert its “product consumers” (purchases from time to time) also into regular “subscription consumers” (through services). This way, the company can enlarge its ecosystem and generate steady regular payments.

Ecosystem: Apple products can be connected to each other very easily, which is one of the most important factors for its continuing success. Everything is connected and shared between the devices and the Ecosystem offers lots of services that tie the consumer and create barriers to leave. Having an Apple product disconnects the user from using products from third-party companies, since those products normally are not compatible with Apple products. This way, every time a consumer acquires a new Apple product (or service) it gets “harder” to exit this universe (even though there could be cheaper alternatives in the market).

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Constant pursue of new markets/technologies: The American company is constantly developing new technologies and entering innovative markets. For example, Apple is aiming to release an augmented-reality headset in 2022 and a sleeker pair of AR glasses by 2023, according to the international press. Also, international sources state Apple is already developing an autonomous car to be launched within the next 5 years.

5G Phone transition: One of Apple's difficulties is to keep consumer motivated to regularly acquire the new iPhone models, which has been decreasing over the past years. Yet, with the introduction of the 5G technology the company expects a demand rebound.

Strong Balance Sheet: The giant tech has more than USD 190 bn in cash and equivalents, and a net cash position close to USD 85 bn. This extraordinary pile of cash gives the company considerable financial stability.

Cash Flow Generation: Due to its high margins and relative low capex requirements, Apple is able to generate considerable amounts of cash – free cash flow in 2020 was USD 73 bn (3.7% yield).

Strategic Acquisitions: Over the past years, Apple has been doing small to medium acquisitions, comparing to its pile of cash. The company's largest acquisition to date was Beats for "only" USD 3 bn. Apple has the great ability to obtain a certain technology and integrate it extremely well within its business (Siri, Shazam, Touch ID, Apple News+, several iPhone's improvements, etc.). Due to Apple's stability, the company has the financial resources necessary to continue that path.

Chinese Slowdown: High prices, fierce competition and consumers keeping their phones for longer are causing sales decline in China. In this market, Apple competes against local rivals such as Huawei, Vivo and Xiaomi which have captured Apple's market share since, in consumers' view, their phones exceed the iPhone, and at a lower price. With the new 5G iPhones, demand is expected to increase as customers are more willing to update their models.

iPhone slowdown: Between the fiscal year 2018 and 2020, iPhone revenues decreased 9% annually. As consumer cycles are getting longer and the technological improvements seem less revolutionary launch after launch, people's willingness to acquiring the new models is decreasing.

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Income Statement (USD mn)	2018	2019	2020
Revenues	265.595	260.174	274.515
Cost of Sales	163.756	161.782	169.559
Gross Profit	101.839	98.392	104.956
R&D	14.236	16.217	18.752
SG&A	16.705	18.245	19.916
Total Operating Expenses	30.941	34.462	38.668
EBIT	70.898	63.930	66.288
Other income (expense), net	2.005	1.807	803
Taxes	13.372	10.481	9.680
Net Income	59.531	55.256	57.411
EPS (basic)	2.98	2.97	3.28

Source: Company's data

Income Statement

- **Revenues:** Over the past years, it has been occurring a clear revenue transition from iPhones to Wearable, Home and Accessories as well as Services. iPhone is still the main product of the company, but the other two segments just mentioned are the two new growth catalysts (which represent already 30% of total revenues).
- **Gross Profit:** The improvement in services gross margin has been offsetting the decrease in the products gross margin.
- **Operational Expenses:** both R&D (development of new and updated products and services) and SG&A (headcount-related expenses, spending on marketing and advertising, etc.) represent 7% of total revenues.
- **Effective tax:** 14.4% (vs 15.9% in 2019) due to onetime adjustment of US foreign tax credits.

Revenues (USD mn)	2018	2019	2020	CAGR 2018/20	% Sales	Gross Margin
Products	225.847	213.883	220.747	-1%	80%	32%
iPhone	164.888	142.381	137.781	-9%	50%	-
iPad	18.380	21.280	23.724	14%	11%	-
Mac	25.198	25.740	28.622	7%	10%	-
Wearables, Home and Accessories	17.381	24.482	30.620	33%	9%	-
Services	39.748	46.291	53.768	16%	20%	66%
Total Revenue	265.595	260.174	274.515	2%	-	38%

Source: Company's data

Free Cash Flow (USD mn)	2018	2019	2020
Operational Cash Flow	77.434	64.691	80.674
Net Income	59.531	55.256	57.411
D&A	10.903	12.547	11.056
Changes in WC	- 3.373	- 3.488	5.690
Others	10.373	376	6.517
Investment Cash Flow	16.066	45.896	- 4.289
Change in Fixed & Int. Assets	- 13.313	- 10.495	- 7.309
Proceeds from marketable securities	32.363	57.460	5.453
Other	- 2.984	- 1.069	- 2.433
Financial Cash Flow	- 87.876	- 90.976	- 86.820
Debt change	432	- 1.842	3.462
Share buyback	- 72.069	- 66.897	- 72.358
Dividends	- 13.712	- 14.119	- 14.081
Others	- 2.527	- 8.118	- 3.843
Change in free cash flow	5.624	19.611	- 10.435
Cash in the end	25.913	45.524	35.089

Source: Company's data

Free Cash Flow

- In 2020, Apple was able to generate an **operational cash flow of USD 80 bn**, of which invested in USD 7 bn in capex. Thus, the company was able to generate a **free cash flow of USD 73 bn - yield: 3.7%**.
- Currently, Apple distributes a quarterly **dividend** of USD 0.205 per share (**yield: 0.7%**). Since 2015, the company has increased its dividend distribution by around 10% annually.
- Apple also **repurchases around USD 70 bn** in common stock (**yield: 3.5%**).

Balance Sheet (USD mn)	2019	2020
Cash & Equivalents	48.844	38.016
Marketable securities	157.054	153.814
Vendor non-trade receivables	22.878	21.325
Receivables	22.926	16.120
Inventories	4.106	4.061
Property Plant & Equipment	37.378	36.766
Other Assets	45.330	53.786
Total Assets	338.516	323.888
Short term Debt	10.260	8.773
Long term Debt	91.807	98.667
Payables	46.236	42.296
Other liabilities	99.725	108.813
Total Liabilities	248.028	258.549
Total Equity	90.488	65.339
Equity + Liabilities	338.516	323.888

Source: Company's data

Balance Sheet

- Apple has USD 191 bn in cash and cash equivalents and total debt of USD 107 bn. Thus, the company has a strong **net cash position of USD 84 bn**.
- The company's **marketable securities** investment portfolio is primarily invested in **highly rated securities**, with the primary objective of minimizing the potential risk of principal loss. As of September 2020, Apple had **USD 78.6 bn invested in corporate debt securities** and **USD 20 bn in US Treasury securities**. The company also invests in other government securities, mortgage- and asset-backed securities, commercial paper, etc.
- Apple's **debt is well distributed** (average maturity of 9.6 years) and has a **low cost** (weight average fixed coupon of 2.65%).

Debt Review

2021	\$	8,750
2022		9,569
2023		11,389
2024		10,115
2025		10,914
Thereafter		55,341
Total term debt	\$	106,078

Source: Company's data

Maturities (calendar year)	2020	
	Amount (in millions)	Effective Interest Rate
2013 – 2019 debt issuances:		
Floating-rate notes	2021 – 2022	\$ 2,250 0.60% – 1.39%
Fixed-rate 0.375% – 4.650% notes	2020 – 2049	87,487 0.28% – 4.78%
First quarter 2020 debt issuance of €2.0 billion:		
Fixed-rate 0.000% – 0.500% notes	2025 – 2031	2,341 0.03% – 0.56%
Third quarter 2020 debt issuance of \$8.5 billion:		
Fixed-rate 0.750% – 2.650% notes	2023 – 2050	8,500 0.84% – 2.72%
Fourth quarter 2020 debt issuance of \$5.5 billion:		
Fixed-rate 0.550% – 2.550% notes	2025 – 2060	5,500 0.60% – 2.59%
Total term debt		106,078

Source: Company's data

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▲ Last Results 4th Semester

	Three Months Ended		Twelve Months Ended	
	September 26, 2020	September 28, 2019	September 26, 2020	September 28, 2019
Net sales:				
Products	\$ 50,149	\$ 51,529	\$ 220,747	\$ 213,883
Services	14,549	12,511	53,768	46,291
Total net sales ⁽¹⁾	64,698	64,040	274,515	260,174
Cost of sales:				
Products	35,197	35,238	151,286	144,996
Services	4,812	4,489	18,273	16,786
Total cost of sales	40,009	39,727	169,559	161,782
Gross margin	24,689	24,313	104,956	98,392
⁽¹⁾ Net sales by reportable segment:				
Americas	\$ 30,698	\$ 29,322	\$ 124,556	\$ 116,914
Europe	16,900	14,946	68,640	60,288
Greater China	7,946	11,134	40,308	43,678
Japan	5,023	4,982	21,418	21,506
Rest of Asia Pacific	4,131	3,656	19,593	17,788
Total net sales	\$ 64,698	\$ 64,040	\$ 274,515	\$ 260,174
⁽¹⁾ Net sales by category:				
iPhone	\$ 26,444	\$ 33,362	\$ 137,781	\$ 142,381
Mac	9,032	6,991	28,622	25,740
iPad	6,797	4,656	23,724	21,280
Wearables, Home and Accessories	7,876	6,520	30,620	24,482
Services	14,549	12,511	53,768	46,291
Total net sales	\$ 64,698	\$ 64,040	\$ 274,515	\$ 260,174

Source: Company's data

4th Quarter (July to September):

Apple achieved revenue of USD 64.7 bn despite the anticipated absence of new iPhone availability during the quarter, and the ongoing impacts of COVID-19, including closures at many of our retail locations.

iPhone: decreased -20.7% yoy due to the absence of a new iPhone launch.

Services: grew 16.5% yoy to an all-time revenue record of USD 14.5 bn. App Store, Cloud Services, Music, Advertising and Payment Services grew strong double digits. Paid subscriptions were over 585 mn paid subscriptions across the services (vs 450 mn a year ago). Forecast: 600 mn paid subscriptions in the last quarter of 2020.

Wearables, home and accessories (+21% yoy to USD 7.9 bn): Apple set records in every geographic segment and for each of the three product categories. Wearables business is now the size of a Fortune 130 company and 75% of the customers purchasing an Apple Watch were new to the product.

Mac (+29% yoy to USD 9 bn): Grew strong double digits in each geographic segment and there was a strong customer response to the new MacBook Air and MacBook Pro and very strong demand during the back to school season. Around 50% of the customers purchasing a Mac were new to that product

iPad (+46% yoy to USD 6.8 bn): Grew very strong double digits in every geographic segment and also around 50% of the customers purchasing an iPad were new to that product

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▲ **Earnings Call (4th in FY20)** Oct. 29, 2020**ESG**

“We’ve committed to be **fully carbon neutral by 2030** across our entire supply chain and device usage”

iPhone 12 Demand?

“We just started shipping iPhone 12 and 12 Pro, and we’re off to a great start. We are also excited to start preorders on iPhone 12 Mini and 12 Pro Max next Friday. Given the tremendously positive response, **we expect iPhone revenue to grow during the December quarter**, despite shipping iPhone 12 and 12 Pro four weeks into the quarter, and iPhone 12 Mini and 12 Pro Max seven weeks into the quarter”.

Results in China?

“the last quarter, what we saw was our **non-iPhone business was up strong double digit for the full quarter**. Not shipping new iPhones for the last two weeks of September makes that number in the aggregate a negative but the net is the underlying business in China last quarter was very strong and perhaps very different than you might think from just a quick look at the stated number.

“Why wouldn't you also take that rationale (use bundle also in products) perhaps in hardware, perhaps maybe AirPods and iPhone? Because if it makes sense to bundle services, would it also make sense to bundle hardware?”

“And we do view that people like to pay for their hardware are at least some substantial portion of it monthly. And so that's the reason that we have implemented installments in our stores and online. If that begins to look like a subscription, perhaps to some buyers because they're used to holding the phone for a fixed period of time and then turning it over and using the residual value of that phone in a way that gives them a de facto kind of subsidy on a new phone. And so, there is something today in the market that works somewhat similar. On the services side, we had customers coming to us and asking for an easier way to buy all of our services. “

“Our data would suggest replacement cycles are getting elongated, what do you think about the next cycles?”

“We're very bullish on this cycle, because there is an iPhone for everyone there. We've got a once in a decade opportunity with 5G.”

“Do you think this level at 67% (services gross margin) is sustainable? And what do you think are the two or three factors that are enabling these gross margins to remain?”

“We're very pleased with the level of gross margins in services. They've been expanding almost 300 bps on a yoy basis. We have a portfolio of services that got different margin profiles. But we're also launching new services that where we need to invest heavily up front. And but we think we've been able to show, for example, this year that we've launched a lot of new services, made all the necessary investments and still being able to expand gross margin.”

“You had mentioned that iPhone sales were seeing an uptake with stimulus checks going out, helping in the consumer spending overall. Are you seeing anything change on the consumer spending side as a macro impacting? How you think about iPhone sales?”

“Prior to mid-September, we were seeing double digit growth in customer demand on iPhone. So there's a lot of momentum there. And there is a lot of momentum even much more so now given the launch of the 12 Pro and the iPhone 12.”

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“When you think about the Google antitrust pressure, what's the risk that you see some shrinkage in your licensing and others segment within services?”

“I have no idea how the DOJ suit will go, but I think it's a long way from a conclusion”

“How you think of your whole payments ecosystem including Apple Card, Apple Pay, Apple Cash”

“We continue to be **very enthusiastic about the whole Payment Services area**. As you can imagine in this environment, people are less available to hand over a card. The US has been lagging a bit in contactless payment. And I think that the pandemic may well get put the US on a different trajectory there.”

“Given your latest start from manufacturing to the flagship phone line of this year, do you think that supply will be able to meet demand through the end of the calendar?”

“If you look at iPhone, we are constrained today and how long we will be supply constrained, it's hard to predict. But right now, we are supply constrained on Mac, on iPad and on some Apple watches as well. At this point, I can't estimate when we'll be out of that.”

“How do you think about the durability of the strength you've seen there with Mac and iPad? Is there any potential for stronger than seasonal pullback?”

“We continue to be **bullish on what Mac and iPad can do** (grow in the double digits). I think the moves that have taken place to remote learning and remote work are not going to go back to normal, normal will become something different.”

“Can you talk through the thought process behind pricing (iPhone 12 pricing)?”

“Well, the iPhone 12 family start at \$699. Many people are paying very different than that through a carrier plan. And of course, those offers are much more aggressive. And so the price that our customers paying is probably the most important one.”

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▲ **Management Team**

Tim Cook (CEO):



Tim Cook

- Before being named **CEO in August 2011**, Tim Cook was Apple’s **COO** and was responsible for all the company’s worldwide sales and operations, including end-to-end management of Apple’s supply chain, sales activities, etc. He also **headed Apple’s Macintosh division** and played a key role in the continued development of strategic reseller and supplier relationships, ensuring flexibility in response to an increasingly demanding marketplace.
- **Before joining Apple**, Cook was VP of Corporate Materials for **Compaq** and was responsible for managing all of Compaq’s product inventory.
- Before that, Tim Cook was the COO of the Reseller Division at **Intelligent Electronics**.
- Tim Cook also spent 12 years with **IBM**, most recently as director of North American Fulfillment where he led manufacturing and distribution functions for IBM’s PC Company
- Cook earned an MBA from Duke University, where he was a Fuqua Scholar, and a Bachelor of Science degree in Industrial Engineering from Auburn University.

GlassDoor Review

4.2 ★★★★★



Tim Cook
10,600 Ratings
Top CEOs 2019

Pros

"Apple has **great benefits** for students even as a part-time employee" (in 1842 reviews)

"nice place to work **great people** around you" (in 797 reviews)

Cons

"**Long hours** tend to make one tired" (in 522 reviews)

"**Retail hours** are not fun at all" (in 333 reviews)

Luca Maestri (CFO & Senior VP):



Luca Maestri

- As **CFO**, Luca Maestri oversees the accounting, business support, financial planning and analysis, treasury, investor relations, etc. Luca **joined Apple in 2013** as **VP of Finance** and corporate controller.
- Luca Maestri has over **25 years of experience** building and **leading finance teams** in global companies with significant operating scale and complexity. Before joining Apple, Luca was **CFO at Xerox** and previously at **Nokia Siemens Networks**.
- He began his career with **GM** and spent **20 years in finance and operating roles** in the Americas, Asia Pacific and Europe. While at GM, Luca was part of the team that established GM’s regional Asia Pacific operations, including manufacturing investments in China and Thailand. He later became CFO for all of **GM’s operations in Europe**, which spanned over 45 countries with annual net revenue of approximately USD 40 bn.
- Luca graduated from Luiss University in Rome with a bachelor’s degree in Economics and earned a master’s degree in Science of Management from Boston University.

Jeff Williams (COO):



Jeff Williams

- **He oversees Apple’s entire worldwide operations**, as well as **customer service and support**. He leads Apple’s renowned design team and the software and hardware engineering for Apple Watch. Jeff also drives the company’s health initiatives, pioneering new technologies and advancing medical research to empower people to better understand and manage their health and fitness.
- Jeff Williams played a **key role in Apple’s entry into the mobile phone market with the launch of the iPhone**, and since 2010 **has led worldwide operations for all products**. He also led the engineering development of the Apple Watch. Jeff joined Apple in 1998 as head of Worldwide Procurement.
- **Prior to Apple**, Jeff worked for **IBM** for 13 years in several **operations and engineering roles**.
- He holds a bachelor’s degree in Mechanical Engineering from North Carolina State University and an MBA from Duke University.

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▲ **Main segments**



iPhone 12 Family

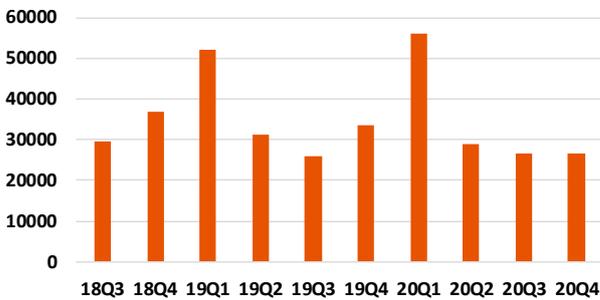
iPhone: is the company's line of smartphones based on its iOS operating system.

Last Releases: Almost every year, Apple tends to release new iPhone models. In 2020, the models released were the following:

- iPhone 12 mini
- iPhone 12
- iPhone 12 Pro
- iPhone 12 Pro Max
- iPhone SE (2nd generation)

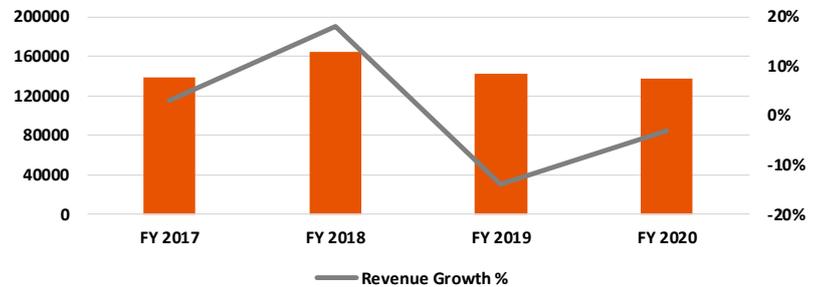
2020 results: iPhone net sales decreased during 2020 compared to 2019 due primarily to the absence of new iPhone models in the fourth quarter of 2020 and the weakness in foreign currencies relative to the U.S. dollar, partially offset by the introduction of iPhone SE in the third quarter of 2020.

iPhone Revenue (USD mn)



Source: Company's data

iPhone Revenue (USD mn)



Source: Company's data



new 16-inch MacBook Pro

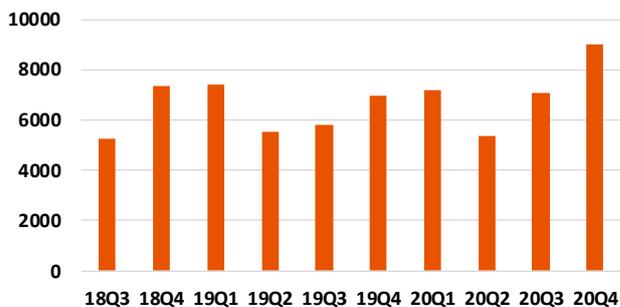
Mac: is the Company's line of personal computers based on its macOS operating system.

Last Releases: Almost every year, Apple tends to release new personal computers. In 2020, the models released were the following:

- new 16-inch MacBook Pro (fully redesigned Mac Pro)
- MacBook Air (updated version)
- 13-inch MacBook Pro (updated version)
- 27-inch iMac (updated version)

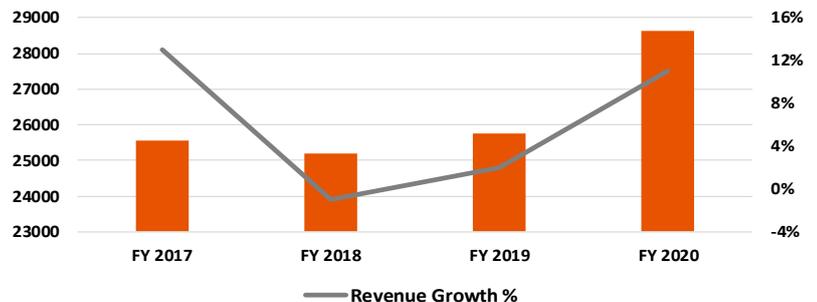
2020 results: Mac net sales increased during 2020 compared to 2019 due primarily to higher net sales of MacBook Pro.

Mac Revenue (USD mn)



Source: Company's data

Mac Revenue (USD mn)



Source: Company's data

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iPad Air

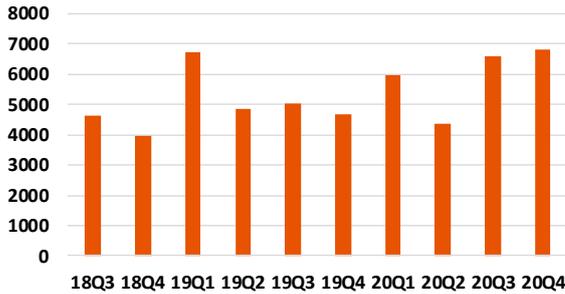
iPad: is the company’s line of multi-purpose tablets based on its iPadOS operating system.

Last Releases: Almost every year, Apple tends to release new tables. In 2020, the models released were the following:

- iPad Pro (updated)
- iPad Air (8th generation iPad)

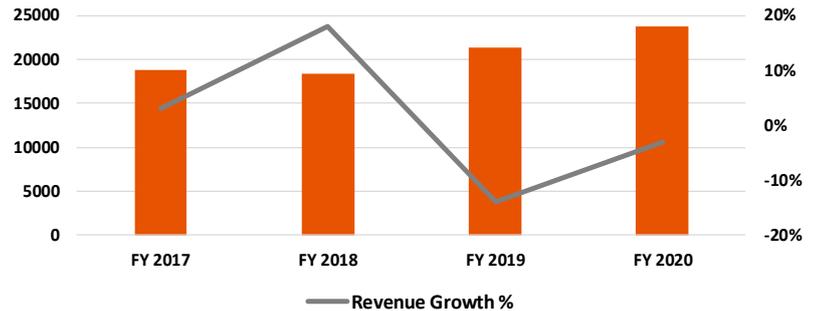
2020 results: iPad net sales increased during 2020 compared to 2019 due primarily to higher net sales of 10-inch versions of iPad, iPad Air and iPad Pro.

iPad Revenue (USD mn)



Source: Company’s data

iPad Revenue (USD mn)

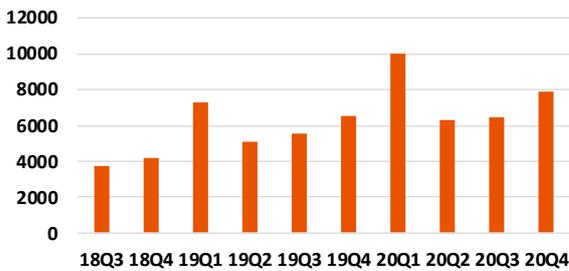


Source: Company’s data

Wearables, Home and Accessories: includes AirPods, Apple TV, Apple Watch, Beats products, HomePod, iPod touch and other Apple-branded and third-party accessories.

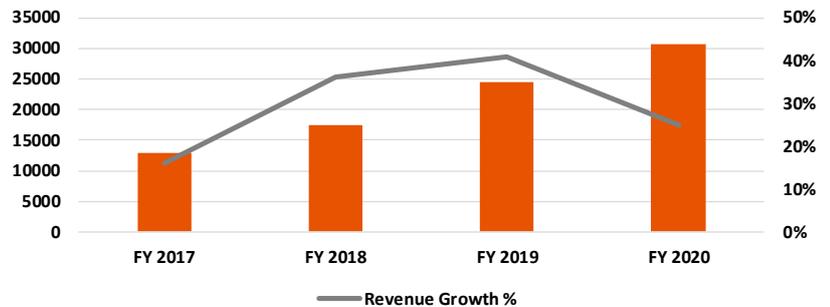
2020 results: net sales increased during 2020 compared to 2019 due primarily to higher net sales of AirPods and Apple Watch.

Wearables, Home and Accessories Revenue (USD mn)



Source: Company’s data

Wearables, Home and Acces. Revenue (USD mn)



Source: Company’s data



AirPods



Apple TV



Apple Watch



HomePod

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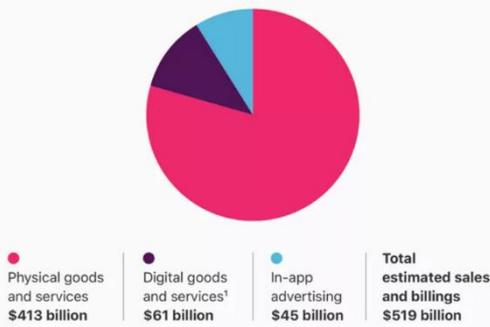
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Services: Over the years Apple has been increasing its offer, and Services is now one of the major growth catalysts of the company. The current services portfolio is the following:



Estimated Commerce Facilitated by the Apple App Store Ecosystem Worldwide, 2019



- **App Store:** Apple online shop to download apps. It includes more than 2 million apps with over half a billion people visiting each week. Apple currently takes a 30% fee from the total price of paid apps and in-app purchases from the App Store.
 - o Apple doesn't disclose the total amount of revenue its App Store generates per year but reveals how much it pays to developers.
 - o App developers have earned USD 155 bn on the App Store since its inception in 2008, with 25% of that total coming in 2019 alone. Knowing that Apple takes a 30% cut on most App Store sales, that means the company earned around USD 10 bn and USD 15 bn in App Store commissions alone in 2019.
 - o In the beginning of 2020, Apple announced that customers spend USD 1.42 bn on the App Store between Christmas Eve and New Year's Eve (+16% yoy) and New Year's Day alone generated USD 386 mn in sales on the App Store (the biggest day on record).
 - o Over the last months of 2020, App Store continued to show strong revenue growth. In December, revenues increased 31% yoy, representing the third straight month with growth above 30% (vs 25% yoy through September quarter).



- **Apple Music** (USD 9.99): an online platform to stream or download music, live radio, podcasts, etc.

- **Apple TV+** (USD 4.99): streaming service with Apple original shows and movies.



- **Apple Arcade** (USD 4.99): is a game subscription service in collaboration with some of the world's most innovative game developers that deliver over 100 new games.

- **iCloud:** is the company's cloud service, which stores music, photos, contacts, calendars, mail, documents and more, keeping them up-to-date and available across multiple Apple devices and Windows personal computers. Available in 175 countries and regions, iCloud comes with 5GB of free storage and offers affordable 50GB, 200GB, and 2TB plans.



- **Apple Fitness+** (USD 9.99): is a fitness streaming subscription that gives guided workouts using the workout metrics from Apple Watch. The service is similar to Peloton Digital, but this is the first that's been built explicitly for the Apple Watch. Includes guided yoga, cycling, dance, treadmill walking, treadmill running, dance, strength, core and rowing workouts.



- **Apple News+** (USD 9.99): subscription that gives access to hundreds of magazines and leading newspapers.

- o In January 2020, Apple disclosed that Apple News had over 100 million monthly active users in the US, UK, Australia and Canada



- **Apple Care:** includes AppleCare+ (AC+) and the AppleCare Protection Plan, which are fee-based services that extend the coverage of phone support eligibility and hardware repairs. AC+ offers additional coverage for instances of accidental damage and is available in certain countries for certain products.

- **Licensing:** Apple licenses the use of certain of its intellectual property and provides other related services.

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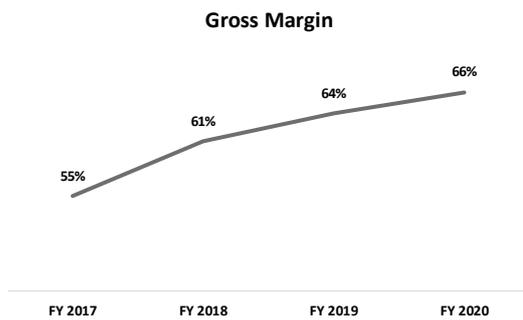


Apple One:

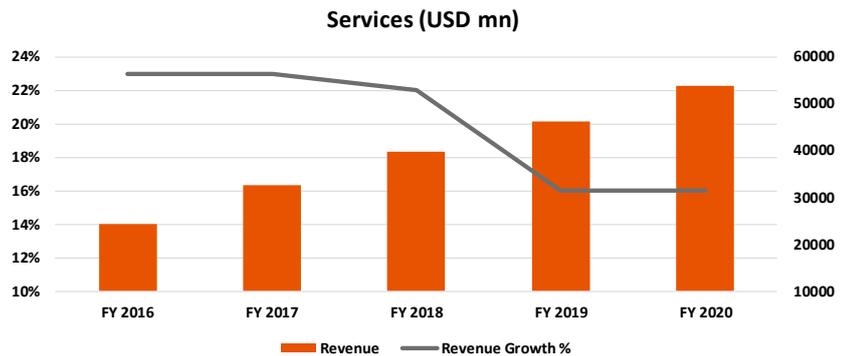
- Pack with the main four Apple services: Apple Music, Apple TV+, Apple Arcade and iCloud.
- Price:
 - o Individual (1 person): USD 14.95 month
 - o Family (max. 5): USD 19.95 month
 - o Premium (max 5): USD 29.95 month and also includes Apple News+ and Apple Fitness+ (coming late 2020)

2020 Results: net sales increased during 2020 compared to 2019 due primarily to higher net sales from the App Store, advertising and cloud services.

Source: Company's data



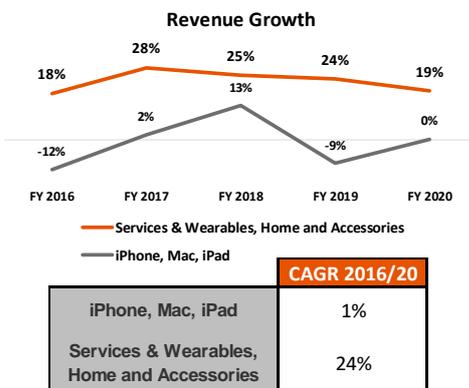
Source: Company's data



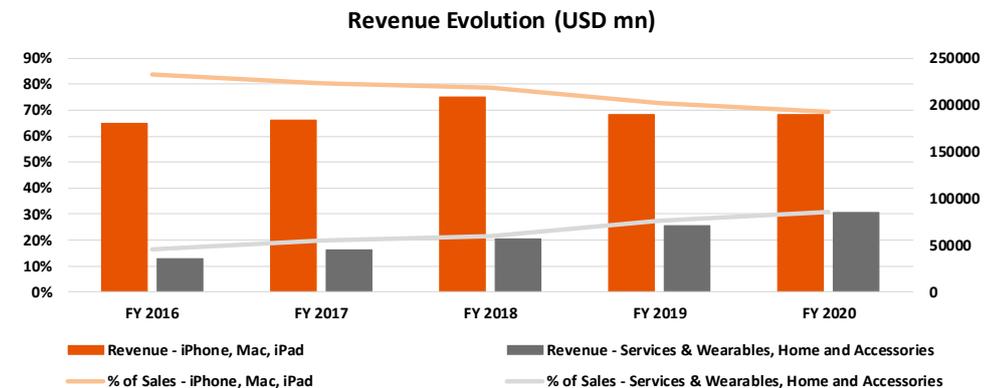
Source: Company's data

Revenue Transition

Apple has the capacity to consistently find new opportunities. Over the past years, iPhone revenue growth decelerated considerably, nevertheless, that was more than compensated by the Services' as well as the Wearable, Home and Accessories' growth. Together, these two divisions already account for more than 30% sales, when four years ago aggregated less than 17%. With the increasing importance of Services (characterized by consistent monthly payments), Apple's overall earnings become less seasonal and more predictable.



Source: Company's data



Source: Company's data

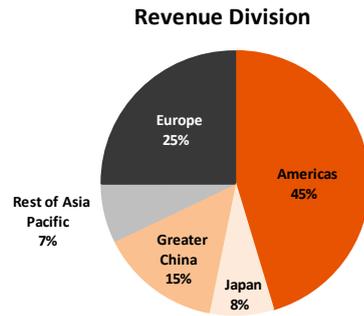
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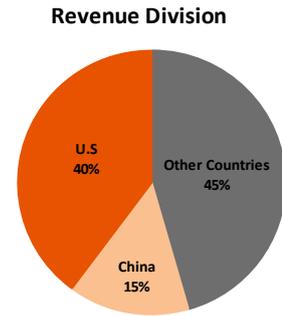
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▲ **Main Markers**

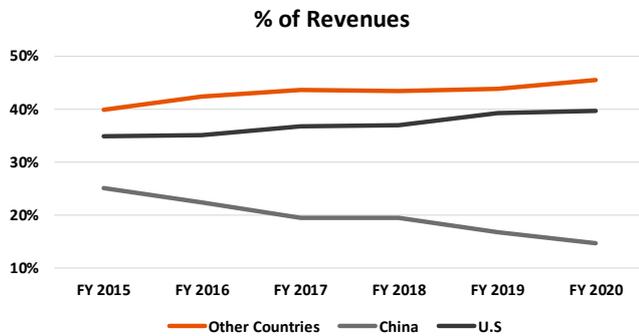


Source: Company's data

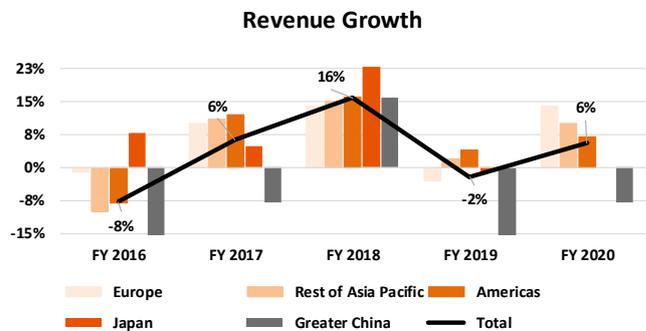


Source: Company's data

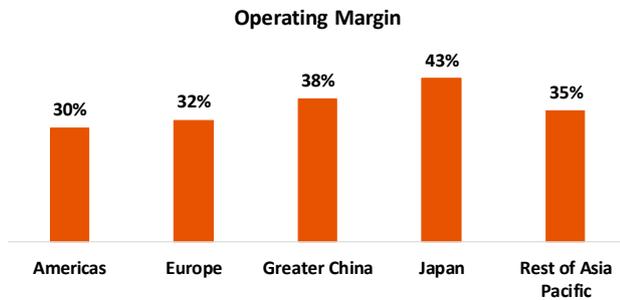
- **Americas** (45% of revenues) is the main market, followed by **Asia** (30%) and then **Europe** (25%).
- **US** (40% of revenues) is the largest national market, followed by **China** (15%) and **Japan** (7%).



Source: Company's data



Source: Company's data



Source: Company's data

Markets	CAGR	
	2015-2020	2017-2020
Europe	6,4%	7,7%
Rest of Asia Pacific	5,4%	8,8%
Americas	5,8%	8,8%
Japan	6,4%	6,5%
Greater China	-7,2%	-3,4%
Apple	3,3%	6,2%

Source: Company's data

- Since 2015, China has been losing weight over total revenues, falling from 10 p.p. to 15%. That portion was mainly captured by US, increasing 5 p.p to 40%, and by Europe, growing 3 p.p. to 25%.
- Over the last years, the **Chinese market** has clearly lagged the remaining ones as the decline of consumer confidence has impacted the smartphone industry and the tensions between China and US have increased. Increasing prices and slower improvements in capability are severe problems for Apple in China, and cheaper brands as Vivo and Huawei have captured Apple's market share. A study conducted by Financial Times found that Chinese consumers are less willing to pay to upgrade to newer iPhones. Nevertheless, with the launch of the new 5G iPhones, demand is expected to recover.

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2020 Results:

- **Americas:** net sales increased during 2020 compared to 2019 due primarily to higher net sales of Services and Wearables, Home and Accessories.
- **Europe:** net sales increased during 2020 compared to 2019 due primarily to higher net sales of iPhone, Wearables, Home and Accessories and Services.
- **Greater China:** net sales decreased during 2020 compared to 2019 due primarily to lower net sales of iPhone, partially offset by higher net sales of Services and iPad.
- **Japan:** net sales were flat during 2020 compared to 2019 due primarily to lower net sales of iPhone, offset by higher net sales of Services and Wearables, Home and Accessories. The strength of the Japanese yen relative to the U.S. dollar had a favorable impact on Japan's net sales during 2020.
- **Rest of Asia Pacific:** net sales increased during 2020 compared to 2019 due primarily to higher net sales of Wearables, Home and Accessories, Services and iPhone.

▲ Autonomous Cars

- According to Reuters, Apple plans to **build a self-driving car for consumers** and is targeting **2024 to produce the vehicle**. The company is **developing its own battery technology** that could reduce the cost of power packs and extend the vehicle's range. **Project Titan started in 2014** with Apple designing its own vehicle from scratch but reverted back to a software push at one point and reassessed its goals.
- Throughout the last few years, rumors indicated Apple had shifted its focus to autonomous driving software, but Apple in **August 2018 rehired Tesla engineer Doug Field**, leading to speculation that Apple was again exploring a car option. In December 2020, international press revealed that Apple is indeed still working on a full car, and right now, plans to release a vehicle in three to six years.
- Apple is said to be planning to **rely on a manufacturing partner to build the vehicles** and is working with outside partners for car components, such as LiDAR sensors. Apple is rumored to be in early negotiations with well-known automotive electronics suppliers for components for a potential upcoming vehicle-related product, and Apple is also said to be working to establish a factory in the United States.

▲ Augmented Reality

- Apple is aiming to release an augmented-reality headset in 2022 and a sleeker pair of AR glasses by 2023, according to the international press.
- As of January 2021, Apple is said to have entered the second phase of its glasses development. This could last a couple of months, after which a third phase is expected to kick off before the finished prototype will be tested for six to nine months.
- AR is sometimes confused with Virtual Reality. Virtual reality refers to a fully immersive experience in a virtual world, while augmented reality refers to a modified view of the real world.

▲ Main clients

- Apple customers are primarily in the **consumer**, small and mid-sized business, education, enterprise and government markets. The company sells its products and resells third-party products in most of its major markets **directly to consumers through its retail and online stores** and its direct sales force. Apple also employs a variety of indirect distribution channels, such as third-party cellular network carriers, wholesalers, retailers and resellers.
- During 2019, the company's net sales through its **direct** and indirect **distribution** channels accounted for **31%** and **69%**, respectively, of total net sales. **No single customer accounted for more than 10%** of net sales in 2019, 2018 and 2017.

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▲ **Production**

Substantially all of the company’s hardware products are manufactured by **outsourcing partners** that are located primarily in **Asia**, with some Mac computers manufactured in the U.S. and Ireland.

In 2020, the company’s main suppliers were (all based in Taiwan):

- **Foxconn** (~40% of COGS): the company provides electronic manufacturing services for computers, communications, and consumer electronic products.
- **Pegatron** (~20% of COGS): is essentially a design, manufacturing and service company. Produces motherboards, desktop PCs, notebooks, broadband, etc. In November 2020, Apple suspended new business with the company after discovering labor violations at a student workers’ program, taking strong action to clean up a Chinese-based production chain long accused of worker abuse.
- **Quanta Computer** (~15% of COGS): is a manufacturer of notebook computers and other electronic hardware.
- **Taiwan Semiconductors** (~8% of COGS): world’s largest semiconductor manufacturer.

Other important suppliers are LG Display, Samsung Electronics, Intel, Jabil, etc.



▲ **M&A activity**

Next Software (1996): Founded in 1985 by Steve Jobs during a period in which he had been forced out of Apple, NeXT developed hardware and software platforms. The company was perhaps best known for its NeXT computer, built for higher education and business use. Apple announced the agreement in 1996, which was followed by Jobs’ return to the company as CEO. Its technology played a key role in the development of Apple products. There is no official acquisition price, but the estimation is **USD 400 mn.**



Siri (2010): SRI International Artificial Intelligence Center originally developed Siri in conjunction with Nuance Communications, a company focused on speech technology. SRI International spun off Siri as an independent company in 2008. Early on, Siri was developed as an individual app to be used for everyday tasks like booking reservations at restaurants, getting weather reports, or buying tickets to a sports event. Apple integrated the voice-activated technology into its early iPhone models. Siri reflects Apple’s strategy of acquiring a tech company for a specific technology, then integrating that technology into its existing products. There is no official acquisition price, but the estimation goes over **USD 200 mn.**



Anobit Technologies (2011): the Israel-based semiconductor startup was acquired for **USD 500 mn** due to its flash memory components, a key part of many of Apple’s products, as well as for its large team of chip engineers.



AuthenTec (2012): At the time of its acquisition by Apple, the company held roughly 200 patents in computer and technology security applications and products. One of those turned out to be extremely useful to Apple: its biometric security tool which later became Apple’s Touch ID (unlock iPhones and other devices with the touch of a finger). As with many other Apple acquisitions, AuthenTec’s products have been integrated into Apple’s existing offerings as added features. The acquisition cost **USD 350 mn.**



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Beats Electronics and Beats Music (2014): corresponds to the largest acquisition to date with Apple paying **USD 3 bn** purchase in cash and stock for the audio product's maker Beats Electronics and its streaming service, Beats Music. The acquisition has allowed Apple to sell the Beats line of headphones in its retail stores and also with resellers. Apple used several elements of Beats Music to help build its Apple Music streaming service. Beats Music was shut in 2015 and its subscribers were transferred to Apple. The giant tech has been aggressive about making Beats Electronics products a key part of the company's offerings, including its Beats-branded headphones, earphones, and speakers



Dialog (2018): Apple paid **USD 600 mn** to license intellectual property, assets and talent from the English semiconductor manufacturer. Apple had accounted for 74% of Dialog's sales in 2016, and the chipmaker had been the exclusive supplier of power management integrated circuits (PMICs) for the iPhone, iPad and Apple Watch. Since PMICs are central to the operation of its devices, as a strategic element Apple wanted to control it directly. While Apple didn't acquire the entire business, it acquired 300 Dialog employees (mostly engineers) and took over some buildings that had been owned by Dialog.



Texture (2018): Apple acquired the digital newsstand app for USD 485 mn to bolster its publishing and news services. The service was shut down a few months following the launch of Apple News+ in March 2019.



SHAZAM

Shazam (2018): is the company behind the namesake music identifier app. Apple completed its purchase of Shazam in 2018 for an estimated **USD 400 mn** to integrate the technology into iPhones and other smart devices. The company announced that it would remove advertisements from all tiers of Shazam service, relying instead on revenue generated from song purchases made through the app (connect to Apple Music).

These major acquisitions illustrate Apple's strategy evolution, from focusing on the **Mac** platform (NeXT Computer) in the 90s, to focus on **mobile** (Intel, Dialog Semiconductor, Quattro Wireless), and most recently to a focus on **services** like Apple Music (Beats, Shazam). **Several** of these top **acquisitions** have been **aimed at building and developing** its largest success to date, the **iPhone**. Four of its largest acquisitions focus on chip performance, including Intel's smartphone modem business, Dialog Semiconductor, Anobit Technologies, and PA Semi.

Relative Valuation

Name	P/E Atual	P/E 2021E	ROA	Net Debt / EBITDA	EBITDA Margin	FCF / Price (%)	EV/EBITDA	CFO/Capex
SONY CORP	14,2	16,9	4%	-2,5	15,5%	7,3%	6,3	3,1
LENOVO GROUP LTD	15,0	13,8	3%	0,7	5,2%	11,6%	3,8	3,3
HP INC	11,0	9,8	8%	0,6	7,9%	11,2%	5,8	7,4
SAMSUNG ELECTRONICS	24,7	16,6	7%	-3,2	27,8%	4,4%	3,9	1,8
APPLE INC	39,5	32,4	17%	-1,0	28,7%	3,7%	23,3	11,0
Média exc. Apple	16,2	14,3	5%	-1,1	14,1%	8,6%	4,9	3,9

Source: BiG Research

Apple currently trades with a higher P/E when comparing to its peers (39.5 vs peers 16), and that may be explained by its superior ROA (17% vs 5%), higher profitability (EBITDA Margin 28.7% vs peers 14.1%) and lower capex requirement (CFO/Capex 11 vs peers 4). Yet, due to its high valuation, the FCF yield is lower relative to the peers' group average (3.7% vs peers 8.6%). The company's financial stability is in line with the competitors' stability (Net Debt/EBITDA -1 vs peers -1.1).

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Risks

Deceleration of iPhone revenues: The iPhone is still Apple's greatest source of income (50% of sales). Over the past years, consumers' willingness to acquire the new version launched diminish and consumer cycles started to get longer, which directly impacts revenues. Lack of disruptive invocations align with price are some of the main factors named by clients.

Chinese Market Slowdown: The contraction in the Chinese market may be explained by factors as high prices, cultural differences, fierce competition and consumers keeping their phones for longer. In US and many countries in Europe, Apple is not just another interchangeable smartphone since it locks-in exclusive services such as iMessage, Apple Photos and even the App Store. Yet, in China the market conditions are different since no brand dominates the market and services are device agnostic. In China Apple competes against local rivals such as Huawei, Oppo, Vivo and Xiaomi which, in consumers' view exceed the iPhone, and at a far lower price.

Apple Store Fees: Apple currently takes a 30% fee from the total price of paid apps and in-app purchases from the App Store, yet for software developers with less than USD 1 bn in annual net sales those fees drop to 15%. Companies as Epic Games and Spotify already complain about these fees, labeling it as anti-competitive behavior. In the beginning of August 2020, Epic Games updated Fortnite game across all platforms to reduce the price of "V-Bucks" (the in-game currency) by 20% if they purchased directly from Epic. Within hours, Apple removed Fortnite from AppStore stating the means of bypassing their payment systems violated the terms of service. Later in the month, Epic Games went further and sued Apple (and also Google). After, by September 2020, Apple filed a countersuit against stating that Epic breached their contract and was seeking to block the use of Epic's payment system from any app, including Fortnite, on the iOS storefront. U.S. District Court Judge Yvonne Gonzalez Rogers has set a trial date for the Epic Games v. Apple antitrust lawsuit to May 3, 2021.

**ESG****Environmental****Environmental Vision****Climate Change**

- Transition the entire manufacturing supply chain to 100% renewable electricity by 2030
- Reduce Emissions by 75% from 2015's level by 2030
- Balance the remaining emissions with high-quality carbon removal projects

Resources

- Use only recycled and renewable materials in products and packaging
- Eliminate plastic packaging by 2025
- Minimize use of freshwater resources in water-stressed locations
- Eliminate waste sent to landfill from corporate facilities and their suppliers

Smarter Chemistry

- Drive 100% transparency of chemical use in their supply chain and products
- Minimize exposure to chemicals that could be harmful to human health or the environment
- Integrate Smarter Chemistry innovation into the way we build and design our products

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10-year goals:

- Low-carbon design- products and manufacturing processes that are less carbon-intensive
- Energy efficiency- increase energy efficiency in corporate facilities and in the supply chain
- Renewable electricity- maintain the use of 100% renewable energies in corporate facilities and transition supply chains to 100% clean energy

Carbon Emission: Apple intends to become carbon neutral by 2030, 20 years ahead of the Intergovernmental Panel on Climate Change which called for the planet’s carbon neutrality until 2050. To meet this goal, the company has not only created a 10-year climate roadmap but has also issued USD 2.2 billion in green bonds (November 2019) with the purpose of financing several projects.

Renewable Energy: In order to reach 100% renewable energy in its own facilities Apple has had to invest in renewable energies, or the so-called Apple-created renewable energies. With a range of energies including wind (25.5%), solar (73.1%), micro-hydro (0.3%) and biogas fuel cells (1.1%). Apple has the capacity to produce 1579 MW of clean energy, being able to support Apple facilities’ energy use.

Social

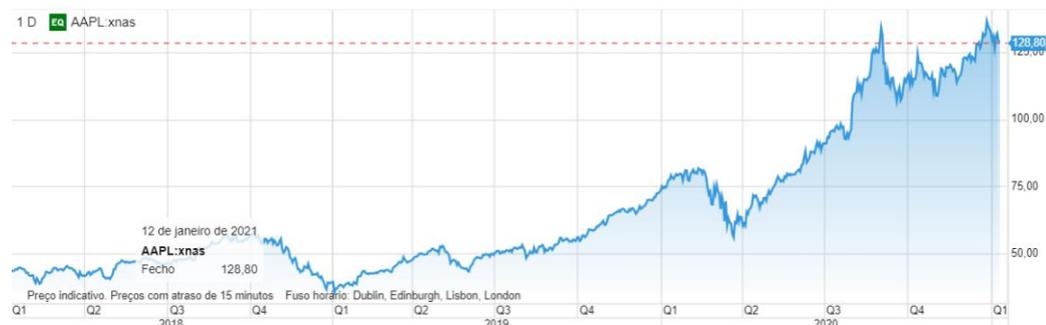
Diversity:

- Since 2014, Apple has continued to hire people who belong to the underrepresented minorities in tech such as women and people who identify as Black, Hispanic, Native American or Native Hawaiian & other Pacific Islanders - 53% of new hires belong to the group described above.
- Apple’s employees age ranges from 18 to 87 and employees under 30 represent 1/3 of the total workforce.
- 45% of the leaders under 30 are women and 17% belong to an underrepresented minority

Pay gap:

- Apple states that they have achieved pay equity in every country they operate, meaning that women and men earn the same when doing similar work.
- In the US, underrepresented minorities earn one dollar for every dollar earned by white employees.
- Every year employees’ compensations are examined to make sure that there is pay equity and if that is not the case, adjustment measures are taken.

Graph



Source: BiGlobal Trade (partner Saxo Bank); BiG Research

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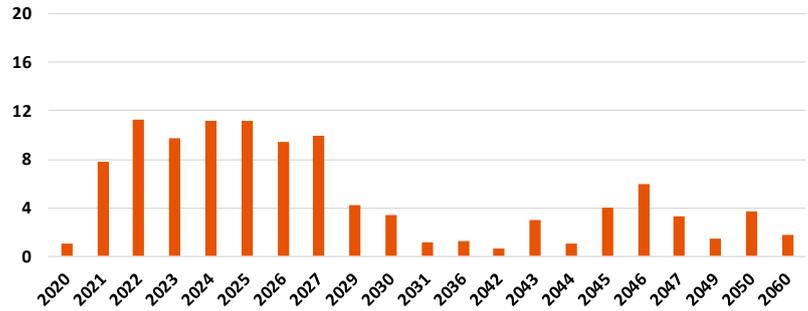
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Appendix

Date	Models
2007	iPhone
2008	iPhone 3G
2009	iPhone 3GS
2010	iPhone 4
2011	iPhone 4S
2012	iPhone 5
2013	iPhone 5S & 5C
2014	iPhone 6 & 6 Plus
2015	iPhone 6S & 6S Plus
2016	iPhone SE; iPhone 7 & 7 Plus
2017	iPhone 8 & 8 Plus; iPhone X
2018	iPhone XS & XS Max; iPhone XR
2019	iPhone 11, 11 Pro, 11 Pro Max
2020	iPhone 12, 12 Pro, 12 Pro Max, 12 Mini

Source: Company's Data

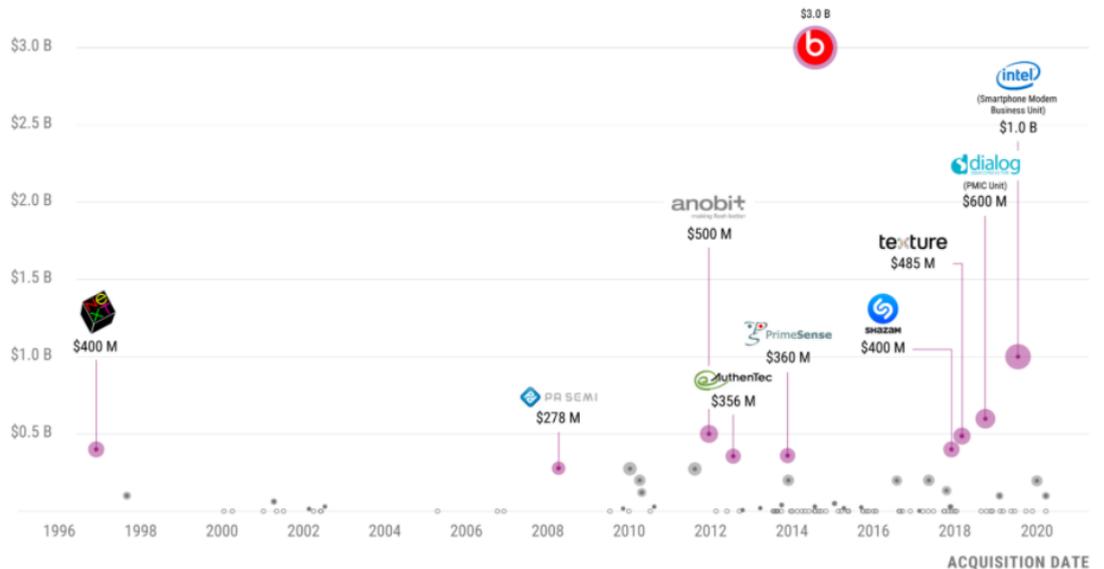
Debt Maturity (USD bn)



Source: Company's Data

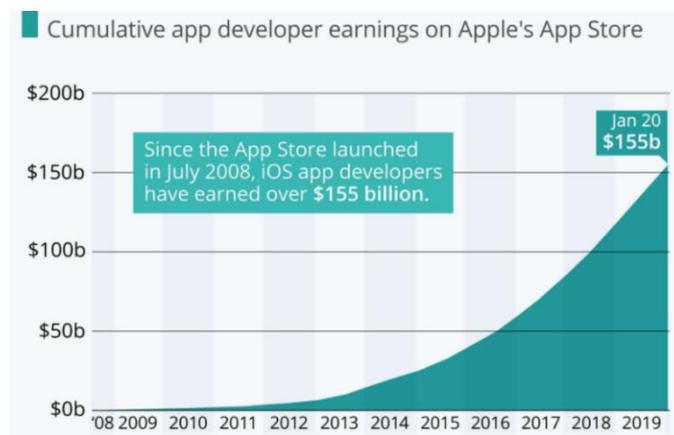
APPLE'S ACQUISITION TIMELINE

MAX VALUATION OF ACQUIRED COMPANY



Source: CBInsights

Apple Store



Source: Statista

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- Clarification of the qualitative terms implied in the recommendations:
 - Buy, expected absolute return above 15%;
 - Accumulate, expected absolute return between +5% and +15%;
 - Hold/Neutral, expected absolute return between -5% and +5%;
 - Reduce, expected absolute return between -5% and -15%;
 - Sell, expected absolute return below -15%;The investment framework aforementioned is merely indicative and not globally strict.
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- The update of the investment recommendations models and respective price-targets will occur, usually, in a period of 6 to 12 months.
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