

Questions to ask to ChatGPT and FinGPT

1. When did Apple's stock have the most cumulative total return between 2016 and 2021?
 - a. 2020
2. (Follow up question to #1) Why was there a jump in Apple's cumulative total return during from 2020 to 2021?
 - a. Total net sales increased 33% or \$91.3 billion during 2021 compared to 2020, driven by growth in all Products and Services categories.
3. Can you give me the products Apple sells?
 - a. iPhone, Mac, iPad, Wearables, Home and Accessories
4. Can you give me the services that Apple offers?
 - a. AppleCare, Cloud Services, Digital Content, Payment Services
5. Between August 29, 2021, and September 25, 2021, could you tell me the total number of shares purchased?
 - a. 35,041
6. Between 2020 and 2021 which Apple product had the highest increase in net sales?
 - a. iPhone
7. (Follow up question to #6) Why did this product have the highest increase in the percentage of their net sales?
 - a. iPhone net sales increased during 2021 compared to 2020 due primarily to higher net sales from the Company's new iPhone models launched in the first quarter and fourth quarter of 2021 and a favorable mix of iPhone sales.
8. Between 2020 and 2021 which country had the highest increase in net sales for Apple?
 - a. Greater China
9. (Follow up to question #8) Why did Apple's net sales increase so much from this one country?
 - a. Greater China net sales increased during 2021 compared to 2020 due primarily to higher net sales of iPhone, iPad and Services. The strength of the Chinese renminbi relative to the U.S. dollar had a favorable impact on Greater China net sales during 2021.
10. What was Apple's total gross margin and percentage during 2020 and 2021?
 - a. Total gross margin and its percentage 2020: \$104,956 million and 38.2%
 - b. Total gross margin and its percentage 2021: \$152,836 million and 41.8%
11. (Follow up to question #10) Why did the total gross margin percentage increase more in 2021 than it did in 2020?

- a. Products gross margin increased during 2021 compared to 2020 due primarily to higher Products volume, a different Products mix and the strength in foreign currencies relative to the U.S. dollar. Products gross margin percentage increased during 2021 compared to 2020 due primarily to a different Products mix, improved leverage and the strength in foreign currencies relative to the U.S. dollar.
12. What were Apple's operating expenses in research and development during 2019?
- a. \$16,217 million
13. What was Apple's total other income/(expense), net from 2019 to 2021?
- a. 2019: \$1,807 million
 - b. 2020: \$803 million
 - c. 2021: \$258 million
14. What were Apple's effective tax rate in 2020 and 2021?
- a. 2020: 14.4%
 - b. 2021: 13.3%
15. (Follow up to question #14) Why was the effective tax rate for 2020 lower than the statutory federal income tax rate for Apple?
- a. The Company's effective tax rate for 2021 was lower than the statutory federal income tax rate due primarily to a lower effective tax rate on foreign earnings, tax benefits from share-based compensation and foreign-derived intangible income deductions. The Company's effective tax rate for 2020 was lower than the statutory federal income tax rate due primarily to the lower tax rate on foreign earnings, including the impact of tax settlements, and tax benefits from share-based compensation.
16. (Follow up to question #13) Why was the effective tax rate for 2021 lower than in 2020 for Apple?
- a. The Company's effective tax rate for 2021 was lower compared to 2020 due primarily to higher tax benefits from foreign-derived intangible income deductions and share-based compensation and the favorable impact of changes in unrecognized tax benefits, partially offset by a one-time adjustment in 2020 of U.S. foreign tax credits in response to regulations issued by the U.S. Department of the Treasury in December 2019.
17. What was the provision for income taxes for Apple during 2019 and 2020?
- a. 2019: \$10,481 million
 - b. 2020: \$9,680 million
18. What were Apple's lease agreements as of 2021?

- a. The Company has lease arrangements for certain equipment and facilities, including retail, corporate, manufacturing and data center space.
19. (Follow up question to #17) What were the fixed lease payment obligations as of 2021?
- a. As of September 25, 2021, the Company had fixed lease payment obligations of \$14.6 billion, with \$1.8 billion payable within 12 months.
20. What was Apple's company quarterly cash dividend per share as of 2021?
- a. As of September 25, 2021, the Company's quarterly cash dividend was \$0.22 per share. The Company intends to increase its dividend on an annual basis, subject to declaration by the Board of Directors.
21. What were Apple's outstanding floating- and fixed-rate notes with varying maturities for an aggregate carrying amount between 2020 and 2021?
- a. As of September 25, 2021, the Company had outstanding floating- and fixed-rate notes with varying maturities for an aggregate principal amount of \$118.1 billion (collectively the "Notes"), with \$9.6 billion payable within 12 months. Future interest payments associated with the Notes total \$39.5 billion, with \$2.9 billion payable within 12 months.
22. What was Apple's difference in price between the basic earnings per share and the diluted earnings per share in 2021? (September 25, 2021)
- a. Basic earnings per share: \$5.67
 - b. Diluted earnings per share: \$5.61
 - c. $5.67 - 5.61 = \$0.06$
 - i. So the difference is 6 cents.
23. What was Apple's non-current marketable debt securities by contractual maturity which was due after 1 year through 5 years for 2021?
- a. \$ 83,755 million
24. How does Apple protect its foreign currency-denominated term debt from fluctuations in the foreign currency exchange rate?
- a. To protect the Company's foreign currency-denominated term debt or marketable securities from fluctuations in foreign currency exchange rates, the Company may enter into forward contracts, cross-currency swaps or other instruments. The Company designates these instruments as either cash flow or fair value hedges. As of September 25, 2021, the Company's hedged term debt- and marketable securities-related foreign currency transactions are expected to be recognized within 21 years.
25. What were Apple's carrying amounts of current and non-current marketable securities as of 2020?
- a. \$16,270 million

26. What was the total provision for income taxes for 2021, 2020, and 2019 for federal, state, and foreign?
- a. 2019: \$10,481 million
 - b. 2020: \$9,680 million
 - c. 2021: \$14,527 million
27. (Follow up question to #25) What was the foreign provision for income taxes based on?
- a. The foreign provision for income taxes is based on foreign pretax earnings of \$68.7 billion, \$38.1 billion and \$44.3 billion in 2021, 2020 and 2019, respectively.

Copilot's response to these questions:

1. Apple's stock had the most cumulative total return in 2020, with an impressive 82.31% return. This was a standout year for Apple, driven by strong product sales and market performance.
2. The jump in Apple's cumulative total return from 2020 to 2021 can be attributed to several factors:
 - a. Strong Product Sales: Apple saw significant growth in sales across all its product categories, including the iPhone, Mac, and services.
 - b. Services Growth: Apple's services segment, which includes the App Store, Apple Music, and iCloud, continued to grow and contribute significantly to its revenue.
 - c. Market Performance: The overall market performance and investor confidence in Apple's ability to innovate and maintain its market position played a role.
 - d. Economic Recovery: The global economy started to recover from the COVID-19 pandemic, leading to increased consumer spending and business investments. These factors combined to drive Apple's impressive performance and increase in cumulative total return during that period
3. Products:
 - a. iPhone: A series of smartphones known for their sleek design, advanced technology, and powerful performance.
 - b. iPad: A range of tablets that offer versatility for both work and play, including the iPad Pro, iPad Air, and iPad Mini.
 - c. Mac: A line of personal computers and laptops, including the MacBook Air, MacBook Pro, iMac, Mac mini, and Mac Pro.
 - d. Apple Watch: Smartwatches that provide fitness tracking, health monitoring, and seamless integration with other Apple devices.
 - e. Apple TV: Streaming media players that allow you to access TV shows, movies, and apps, with the Apple TV HD and Apple TV 4K models.

- f. AirPods: Wireless earbuds that offer high-quality sound and easy connectivity, including the AirPods, AirPods Pro, and AirPods Max.
 - g. HomePod: Smart speakers that deliver premium sound quality and smart home functionality, including the HomePod and HomePod mini.
 - h. Accessories: A range of accessories, including keyboards, mice, and cases, designed to complement Apple devices.
 - i. Software: Apple also develops software and operating systems like iOS, macOS, watchOS, and tvOS, as well as applications like Final Cut Pro, Logic Pro, and iWork.
4. Services
- a. iCloud: A cloud storage and computing service.
 - b. Apple Music: A subscription-based music streaming service.
 - c. Apple TV+: A subscription-based streaming service offering original TV shows and movies.
 - d. Apple Arcade: A subscription-based gaming service.
 - e. Apple News+: A subscription-based news service.
 - f. Apple Fitness+: A subscription-based fitness service with guided workouts.
5. I'm sorry, but I couldn't find the exact number of Apple shares purchased between August 29, 2021, and September 25, 2021. However, you can find detailed information about Apple's stock transactions and historical data on financial websites like Yahoo Finance or Nasdaq.
6. The iPhone had the highest increase in net sales between 2020 and 2021. Apple's iPhone revenue increased by 35% year-over-year to reach \$196 billion in 2021.
7. This growth was significantly driven by the high demand for the 5G-enabled iPhone 12 and 13 series
8. The country with the highest increase in net sales for Apple between 2020 and 2021 was China. Apple's net sales in Greater China, which includes mainland China, Hong Kong, and Taiwan, increased significantly during this period.
9. This growth was driven by higher sales of iPhones, iPads, and services, as well as the strength of the Chinese renminbi relative to the U.S. dollar
10. In 2020, Apple's total gross margin was \$104.58 billion, with a gross margin percentage of 38.19%. In 2021, the total gross margin increased to \$152.84 billion, with a gross margin percentage of 41.78%
11. The increase in Apple's total gross margin percentage in 2021 can be attributed to several key factors:

- a. Higher Average Selling Prices (ASPs): Apple increased the prices of its products, particularly the iPhone 12 and 13 series, which contributed to higher revenue per unit sold.
- b. Growth in Services: Apple's services segment, which includes the App Store, Apple Music, and iCloud, saw significant growth and higher margins. The gross margin for services increased to 70% from 65% the previous year.
- c. Efficient Supply Chain Management: Apple's strong control over its supply chain helped reduce costs and improve profit margins.
- d. Product Mix: A favorable sales mix with higher sales of premium products like the iPhone and Mac also contributed to the improved gross margin.
- e. These factors combined to boost Apple's gross margin percentage from 38.19% in 2020 to 41.78% in 2021

12. In 2019, Apple's operating expenses in research and development were \$16.22 billion. This represented a significant increase from the previous year, reflecting Apple's ongoing commitment to innovation and product development.

13. Here's a summary of Apple's total other income/(expense), net from 2019 to 2021:

- a. 2019: \$60,000
- b. 2020: -\$334,000
- c. 2021: -\$565,000

14. Apple's effective tax rate was 14.4% in 2020 and 13.3% in 2021

15. Apple's effective tax rate for 2020 was lower than the statutory federal income tax rate due to several factors:

- a. Foreign Earnings: A significant portion of Apple's income comes from foreign operations, which are taxed at lower rates than in the U.S. For example, Apple has substantial operations in Ireland, where the corporate tax rate is only 12.5%.
- b. Tax Credits and Deductions: Apple benefited from various tax credits and deductions, which reduced its overall tax liability.
- c. Tax Deferrals: Some of Apple's income was deferred to future years, reducing the taxable income for 2020.
- d. These factors combined to lower Apple's effective tax rate below the statutory federal income tax rate.

16. Apple's effective tax rate for 2021 was lower than in 2020 due to several factors:

- a. Foreign Earnings: A significant portion of Apple's income comes from international operations, which are taxed at lower rates compared to the U.S.
- b. Tax Credits and Deductions: Apple continued to benefit from various tax credits and deductions, which helped reduce its overall tax liability.
- c. Tax Deferrals: Some of Apple's income was deferred to future years, reducing the taxable income for 2021.

- d. These factors combined to lower Apple's effective tax rate to 13.3% in 2021, compared to 14.4% in 2020
- 17. In 2019, Apple's provision for income taxes was \$10.5 billion. For 2020, it was \$9.68 billion
- 18. As of 2021, Apple had significant lease agreements, including both operating and capital leases. Here's a summary:
 - a. Operating Leases Total Operating Leases: Approximately \$10.955 billion
Operating leases are treated like rental contracts and are not reported on the balance sheet. Instead, lease payments are recorded as rental expenses in the income statement.
 - b. Capital Leases Total Capital Leases: Approximately \$10.275 billion
Capital leases are treated as assets and liabilities on the balance sheet. They represent long-term lease agreements where the lessee assumes the risks and rewards of ownership³.
 - c. These lease agreements reflect Apple's strategy to manage its real estate and equipment needs efficiently.
- 19. As of 2021, Apple's fixed lease payment obligations were approximately \$10.275 billion for capital leases and \$10.955 billion for operating leases. These obligations reflect Apple's commitment to managing its real estate and equipment needs efficiently.
- 20. In 2021, Apple's quarterly cash dividend per share was \$0.22. This dividend was consistent throughout the year, with payments made in February, May, August, and November
- 21. As of December 25, 2021, Apple had outstanding floating- and fixed-rate notes with varying maturities for an aggregate carrying amount of \$117.8 billion. This included a mix of notes with different interest rates and maturity dates, such as:
 - a. 1.000% Notes due 2022
 - b. 1.375% Notes due 2024
 - c. 0.875% Notes due 2025
 - d. 1.625% Notes due 2026
 - e. 2.000% Notes due 2027
 - f. 3.050% Notes due 2029
 - g. 0.500% Notes due 2031
 - h. 3.600% Notes due 2042
 - i. These notes are part of Apple's strategy to manage its capital structure and take advantage of favorable interest rates. These notes are part of Apple's strategy to manage its capital structure and take advantage of favorable interest rates.
- 22. As of September 25, 2021, the difference between Apple's basic earnings per share (EPS) and diluted EPS was:

- a. Basic EPS: \$1.25
 - b. Diluted EPS: \$1.23
 - c. The difference between the two was \$0.02
23. As of December 25, 2021, Apple's non-current marketable debt securities, by contractual maturity due after 1 year through 5 years, were approximately \$18.5 billion. These securities are part of Apple's strategy to manage its cash reserves and ensure liquidity.
24. Apple protects its foreign currency-denominated term debt from fluctuations in exchange rates primarily through the use of derivative instruments, such as Foreign Exchange Contracts (FECs), also known as currency forward contracts. These contracts lock in the exchange rate for the purchase or sale of a currency on a future date, helping to mitigate the risk of currency fluctuations. By using these hedging strategies, Apple can better manage its exposure to foreign currency risk and ensure more predictable financial outcomes.
25. As of 2020, Apple's carrying amounts for marketable securities were as follows:
- a. Current Marketable Securities \$24.7 billion
 - b. Non-Current Marketable Securities \$120.8 billion
 - c. These figures reflect Apple's strategy to maintain a strong liquidity position and manage its cash reserves efficiently.

Here are the total provisions for income taxes for Apple Inc. for the years 2021, 2020, and 2019:

Year	Federal	State	Foreign
2021	\$9,680M	\$2,228M	\$1,884M
2020	\$10,481M	\$2,441M	\$1,867M
2019	\$14,527M	\$2,697M	\$2,625M

- 26.
27. The foreign provision for income taxes is based on the income earned from Apple's international operations. This includes the taxes Apple must pay to foreign governments on the income generated in those countries. The provision is calculated by considering the varying tax rates and regulations in each country where Apple operates, as well as any tax credits or deductions for which Apple may be eligible.

Notes for number 4, 7, 9:

- The information was given in the previous question so no need to ask it the new question

LINK: [aapl-20210925](#)