



NETEASE LONG THESIS

Current Price

\$91.99

Target Price

\$123.71 - \$140.07

1. RECOMMENDATION

I recommend longing NetEase, Inc. (NTES), a leading internet technology company dedicated to providing premium online services centered around innovative and diverse content, community, communication, and commerce. NetEase develops and operates some of China's most popular mobile and PC-client games. In my view, the stock is at least 37.4%-55.6% undervalued. NetEase last traded at about \$91.99 per share.

Catalysts to increase the company's share price include international expansion, the growth of China's e-learning industry and NetEase's e-learning platform, and the industrial, manufacturing, and middle class boom in China.

2. COMPANY BACKGROUND

NetEase is a Chinese internet technology company providing online services centered on content, community, communications, and commerce. The company was founded in 1997 by Ding Lei. NetEase develops and operates online PC and mobile games, advertising services, email services, and e-commerce platforms in China. It is one of the largest Internet and video game companies in the world. A few of NetEase's PC games are the Westward Journey series (Fantasy Westward Journey, Westward Journey Online II, Fantasy Westward Journey II, and New Westward Journey Online II), Tianxia III, Heroes of Tang Dynasty Zero, and Ghost II. NetEase also has a partnership with Blizzard Entertainment to run local versions of its most popular

games. The company is in the process of developing its first self-developed VR multiplayer online game, Nostos, with an open world setting. Besides online games, NetEase provides services like cloud music, media, advertising, email, and e-commerce.

In the most recent fiscal year, NetEase generated \$9.2 billion of revenue, \$2.5 billion of EBITDA, and Cash from Operations of \$2.9 billion. Its current market cap is \$63.6 billion, and its Enterprise Value is \$52.32 billion. NetEase's P/E, EV/Revenue, and EV/EBITDA ratios are as follows: 28.6x, 5.6x, and 20.6x, respectively, all expressed in terms of LTM results.

We are projecting a conservative 15% annual revenue growth over the next five years and expect NetEase to improve slightly on its current EBITDA margins. We assume an average EBITDA margin of 27% (based on TTM data).

3. INVESTMENT THESIS

My investment thesis derives from two main assumptions. The first assumption is that China's economy is still scaling rapidly and that the Chinese companies listed in the stock exchange have accurate accounting. The second assumption is that the cloud computing sector, specifically online and mobile games, is also growing rapidly with no signs of slowing down. Thus, we considered two popular ETFs - SKYY (cloud computing space) and CHIK (large Chinese companies)

Since March, global stock markets have seen what could be described as a K-shaped recovery, whereby some parts of the economy have benefitted from the COVID-19 pandemic, while others have been badly affected. Given record low interest rates and unprecedented government stimulus, risk assets have become the only game in town. The end result is that large growth, primarily technology companies, have benefitted and become overpriced by some measures relative to fundamentals, while on the other side of the market, especially tourism and companies whose business models rely on confined spaces (restaurants, cinemas, gyms, and airlines), have become very cheap and are faced with existential risk. As a result, my attention gravitated towards non-FAANG technology companies that are positioned to take advantage of the pandemic and the secular trend in cloud computing. Cloud-based applications and hardware have seen very strong growth over the past few years, and I expect this growth to continue given trends in other areas like the Internet-of- Things and Artificial Intelligence.

The approach I took was to filter the list of securities in each of these ETFs and then pick a stock, primarily based on valuation metrics. However, I started by focusing on metrics related to Quality. Specifically, Return on Capital, Gross Margin, Leverage, and composite measures of financial health including the Piotroski F-Score and Altman's Z-Score.

After eliminating some of the companies from the universe, I turned to growth metrics to remove companies that have sub-par recent growth. Specifically, I focused on 3-year Sales CAGR. Finally, I turned to valuation metrics. While most metrics focus on earnings or free cash flow, I need to be aware that high-growth companies may not have positive earnings or any free cash flow. Therefore my preferred approach was to filter companies based on price-to-sales (trailing twelve month sales). After having applied these filters, I was left with 16 stocks, including NetEase, Cisco, JD.com, and Citrix, among others.

I now turned to two important aspects of stock selection: competitiveness in the form of margin pressure and management efficacy in the form of return on capital employed. Additionally, investors prefer companies that are able to both maintain or grow their margins (indicating pricing power) and reinvest capital intelligently (since this eventually leads to the compounding of investment returns).

I finally turned to technical patterns, including momentum. Momentum is an important quantitative consideration: I specifically preferred companies with positive six-month momentum and negative one-month momentum. This pattern is useful for timing an entry point, especially when the prevailing investment paradigm is 'buy the dip'. NetEase currently has both the strongest momentum and the strongest reversal

signal, which made it one of my top picks.

4. CATALYSTS

4.1. GROWTH OF CHINESE ONLINE EDUCATION & E-LEARNING SECTOR

Frost & Sullivan projects China's e-learning market will reach 696 billion yuan (\$99.3 billion) in 2023, approximately a 53% increase in market size from 2020 end project totals of 453.8 billion yuan (\$64.1 billion). Further, surveys by the Chinese Academy of Science show that 61% of families are willing to spend at least 10,000 yuan a year on their children's K12 e-learning. Due to the pandemic, the model of education has changed indefinitely. It has shifted from physically studying to a learn-from-home environment. With the learn-from-home model slowly becoming the new norm and Chinese families willing to purchase online learning for their children, NetEase's e-learning branch, Youdao, should rapidly grow.

Through Crunchbase, I was able to build a query of all the major e-learning, EdTech, and education companies in China. After finding 1612 companies, we then filtered by company size and estimated annual revenue. The data showed that though NetEase does not have the highest market share in the Chinese e-learning industry (TAL, GSX, New Oriental, VIPKid comprise most of the E-Learning market), NetEase is by far the largest and most cash-rich company. Thus, NetEase can scale Youdao at will

with no issues at all. Even bullying smaller e-learning companies to sell themselves to NetEase is a legitimate tactic. NetEase could use some of the cash at hand to market Youdao to its massive online and mobile game user base. NetEase already sees signs of platform growth through releases of new intelligent learning devices such as Dictionary Pen 2.0 pro and more premium educational content, and also through expansion internationally. Along with this, NetEase is in a new year-long process of rolling out more interactive extensive class features to more subjects and higher grades. NetEase is undervalued due to the sheer size of the Chinese Online Learning market and has a strong possibility of becoming China's number one educational platform.

4.2 INTERNATIONAL EXPANSION

4.2.1 NETEASE ONLINE EDUCATION EXPANSION TO JAPAN

NetEase is starting to expand its e-learning platform internationally to Japan with new Japanese language support. Japanese students can now prepare for their exams and take courses on NetEase's educational platform while their public schools are closed indefinitely.

Currently, in Japan, there is a stigma behind online learning and education. Only 5% of local government bodies in Japan have launched online classes for public schools that have shut down, and many colleges and universities do not count online courses towards graduation.

Furthermore, no online learning programs for K-12 students are planned or executed in Tokyo's 23 wards and 12 prefectural capitals and large cities. Hence, public school students in Japan currently do not have a proper learning environment due to COVID and have no choice but to wait for schools to reopen. With no sizable online learning platform in Japan and NetEase's current mobile & online game expansion in Japan, NetEase can quickly become the leader in the online learning industry in Japan due to the amount of cash at hand. Further, once NetEase expands its online gaming sector to Japan fully, it will then become a much simpler task to expand its educational platform there as NetEase will already have a large and loyal customer base it can market too.

4.2.2 NETEASE OVERSEAS GAMING GROWTH & EXPANSION

Overseas gaming contributions have been rising, reaching more than 10% of total online gaming revenue in 2Q. Encouragingly, management plans to build on the 2Q strength with one or two new launches of blockbuster titles in markets like the US and Japan going forward. To facilitate these launches, the company will boost its in-house development capabilities, while also driving increased collaboration with global game developers and IP holders such as Marvel and Pokémon.

4.3 Industrial and Middle Class Boom in China

4.3.1 CHINA'S INVESTMENT IN FRONTIER RESEARCH AND TECHNOLOGY

Owing to significant economic reforms, China's middle class has witnessed an incredible rise in the past decades. Today, nearly half of its 1.4 billion population comprises the country's middle class with an income bracket of between \$3,660 to \$36,600. China is expected to grow rapidly as economic policies such as tax cuts and 'Made in China 2025' are being implemented to grow the middle class by modernizing its manufacturing and technology sectors to increase productivity and create millions of jobs. By 2025, McKinsey estimates the middle-class population could reach 70%. As the middle class grows, China's purchasing power increases, which leads to higher retail activity and consumption. Additionally, with COVID creating a whole new learn-from-home environment, online learning platforms such as NetEase are poised to scale rapidly as purchasing power from the middle class in the upcoming years will be at an all-time high.

In October, China is releasing its 14th five-year plan ('Made in China 2025'). According to UBS Chief China economist Wang Tao, technology, innovation, and digitization are critical areas that China is focusing on in this five-year plan. With more resources being allocated to chips & semiconductors, software, precision machinery, fine chemicals, advanced

robotics, new materials, aerospace, and aviation technology, data centers, 5G networks, internet, and machine learning innovations will lead the way to an improved online and mobile gaming, educational, and e-commerce experience. The impact is as follows:

Mobile Phone Growth – Technological and manufacturing innovation will inevitably cheapen the smartphone's cost, making it affordable to millions of people who could not afford it previously. Additionally, China has already proven how efficient they are at building and rolling out cellular networks, as almost 98% of internet users are currently from mobile phones. Thus, innovations and advancements in cellular networks will also allow China to roll out cellular networks even in the most rural areas of China. With the inevitable decline in smartphone prices and cellular network advancements, I believe that China's 61% mobile phone penetration rate will snowball allowing NetEase to unlock millions of new customers that it could not reach before.

Internet Growth – According to Statista, only 64.5% of China's population (approximately 802 million) are actively using the internet. With a total population of about 1.4 billion people, this leaves an enormous untapped market. The technological innovations stated in (b) will allow for people in China who were not connected to the internet before to be online finally. This creates a massive new opportunity for NetEase as it unlocks

millions of new customers for all its different ventures.

4.3.2 FAST-GROWING ONLINE MUSIC PLATFORM, POSITIONED FOR FUTURE GROWTH AND PROFITABILITY

NetEase Cloud Music growth is essential as it is increasingly becoming a larger and larger portion of NetEase's revenue every quarter. For instance, in 1Q 2020, cloud music made up around 17.6% of NetEase's revenue, whereas in 2Q 2020, cloud music made up 20.5% of NetEase's revenue. Its rapidly-growing online music venture is already the number one platform in China and with the growth of China's middle class and the subsequent consequence of an increase in purchasing power, NetEase's online music platform looks well-positioned for serious revenue growth down the road. Upcoming quarters could even see an acceleration as NetEase just signed a multi-year licensing agreement with Universal Music Group and is actively exploring exciting and innovative monetization methods beyond subscriptions and live streaming. In the longer term, this will lead to a healthier user 6 experience on the platform, resulting in a much healthier financial profile for NetEase Cloud Music.

5. VALUATION

Over the past five years, NetEase revenue has been growing at an average of 38.3%. However, I do not believe that NetEase can sustain this revenue growth for the next five years. I take a conservative number for its average revenue growth for

the next five years at 15%. Based on TTM data, EBDITA margin is chosen to be an average of 27% for the next five years. My base case assumes a discount rate of 9% (NetEase's beta is 0.807). Under this scenario, the DCF estimates NetEase's intrinsic value to be around \$123.71, or 37.4% above the current share price. As mentioned before, these revenue growth assumptions are conservative. For a nonconservative approach, I chose revenue growth for the next five years to be, on average, 18%. With a discount rate of 9% and an EBITDA margin of 27%, NetEase's intrinsic value is estimated to be around \$140.07, or 55.6% above the current share price. Hence, I believe the intrinsic value of NetEase is between \$123.72 and \$140.07. In terms of forward-looking PE ratio, it ranks 93rd out of the 268 companies in its industry (with a PE ratio of 21.8). The price for a tangible book value stands at 4.85. By way of comparison, Amazon has a forward-looking PE ratio of 75.4 and a price-to-tangible book ratio of 26.29. These growth and valuation metrics together place the company in the 'growth at a reasonable price' category. 24 brokers currently rate it a 'buy' or a strong 'buy'.

6. RISKS AND HOW TO MITIGATE:

6.1 QUALITY OF FINANCIAL REPORTING

Over recent years, Chinese companies, though being "audited," have been caught in numerous accounting frauds where they have been manipulating their

financial data to increase their earnings drastically. The biggest one to date has been the Luckin Coffee, it reported over \$309M worth of fake sales last year. These past fraudulent activities have increased investor concerns about the amount of trust they can place in China's audited financial results. To make matters worse, Beijing does not allow U.S. regulators to inspect audits of Chinese companies that are listed on the U.S. stock exchanges. These risks will always be present unless China opens up to allow U.S. regulators to inspect audits. However, to mitigate these risks, I took a conservative number when projecting revenue growth.

6.2 TRUMP RE-ELECTION AND POSSIBLE DELISTING OF NETEASE

Due to the long-running inability of U.S. regulators to inspect Chinese companies' audits, Trump outlined a plan that would increase investor protection and level the playing field for all companies listed on the U.S. exchange. However, the U.S. and China are still negotiating these plans. If Trump gets re-elected and there is no agreement between the countries and Chinese companies do not follow the outline, there is a high possibility that these companies will get delisted from the stock exchange, which could lead to their stock dropping and companies going private at a lower price. NetEase has already mitigated the risks by recently launching an IPO and listing on the Hong Kong Stock Exchange; thus, if NetEase ends up getting delisted on NASDAQ, it is still a public company listed on the HKSE.

6.3 INCREASING CENSORSHIP IN CHINA

According to FreedomHouse, a nonprofit organization that focuses on democratic issues, internet freedom in China is at an all-time low, and censorship is at an all-time high. Even accessing websites that antagonize China or spreading rumors can lead to prosecution and extended jail time. Furthermore, China will require all telecommunications companies to obtain facial scans of new internet or mobile phone users as part of the real-name registration process. Internet censorship has also translated into China's video game industry. China recently made it so that 7 video game makers such as NetEase have to get full approval from the Chinese government before releasing it. With the current trends of censorship in China, I believe that video game approval might get much harder in the near future. However, NetEase is mitigating these risks by expanding its video game business internationally and diversifying its portfolio by focusing on other ventures such as e-learning (YouDao) and its cloud music business.