

# Comparison Between Business Model of Ecommerce Retail Segment of Amazon and Alibaba

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**Abstract.** In this digital era, ecommerce has been an essential element of the economy of most developed countries and a lot of developing countries. The US and China were pioneers in this industry and exhibited a significant amount of growth since the 1990s with Amazon and Alibaba being the current dominant firms. This paper compares the business model and past performances of Amazon and Alibaba primarily through examining their annual reports in 2022, supported by data from reports in 2020. This paper concluded that the two companies were similar in stem but adopted different strategies because of difference in business environment including demographics, legal restrictions and level of competition. The author believes that the ecommerce industry will gradually evolve into a monopolistic competition. Amazon and Alibaba shall keep up with the latest technologies to maintain their market shares from taking away by competitors, including advancements in big data computing and generative AI, as well as alternate business models as demand for online services became more diversified with the increasing reliance of ecommerce after covid.

**Keywords:** Ecommerce, business model, financial performance.

## 1. Introduction

One of the most influential inventions that shaped the modern era is the Internet. After several generations of advancement, it now serves as an invisible web that connects almost every corner of the world and nearly every aspect of daily life. Taking this advantage, ecommerce emerged in the 1990s with the original goal of only information transmission and communication [1]. Online shopping and retail were a later derivative and dragged logistics into this system [1]. As two of the biggest economies in the world, ecommerce has contributed a lot to the economy of the US and China. Ecommerce retail sales share was 16.8% in 2022 with computer and consumer electronics and apparel and accessories being the two biggest revenue-generating categories in the US [2]. In China, ecommerce generated 27.2% of total retail sales revenue [3]. The two major categories which consumers purchased online were clothing and textile and daily necessities [3]. This paper primarily examines the business model and strategies of the online retail sectors of Amazon and Alibaba, the two companies with a significant proportion of ecommerce market share in the US and China. Understanding the similarities and differences would facilitate the understanding of the future of ecommerce and global commercial interactions. In 1994, Amazon was founded by Jeffrey Bezo's with the idea of creating a website between book sellers and readers [4]. From 2006 to 2017, Kindle, Amazon Music, Amazon Instant video was launched and Wholefood and Twitch were acquired [4]. Additionally, Amazon Prime, the VIP of Amazon with a monthly subscription fee, originally launched in 2005, provided extra benefit to consumer not only in the retail sector, but also in the sectors that were later added to the Amazon business [4]. Amazon was also a pioneer in Cloud Computing by launching the Amazon Elastic Computing Cloud in 2006 to support data-processing and machine learning for other sectors [5]. Amazon expanded into Europe as early as 1998 and conducted its business through two Luxembourg-based companies, LuxSCS and its wholly owned subsidiary Amazon EU Sàrl [6]. Amazon had its IPO in 1997 in NASDAQ (AMZN) and its current market capitalization was 15.0 trillion dollars with a price of 145.18 dollars per share (as of 4pm EST Nov. 17 2023) [7]. The stock has grown more than 300% since 2014 with an optimum performance

from 2020 to 2021 and a slight downfall in the last quarter of 2022. The stock price was rising since then.

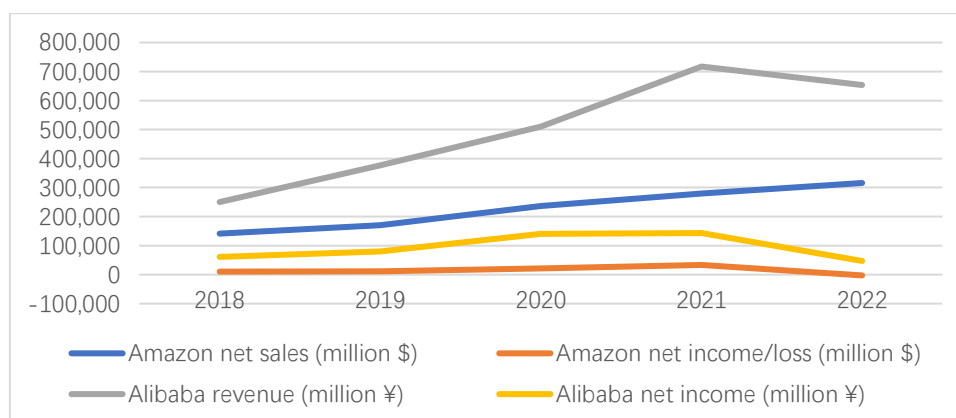
Amazon took 39.5% of total retail ecommerce sales in the US in 2022, far ahead of its near-competitors, Walmart, taking only 7.0% and Apple, taking only 4.2% [2]. Alibaba was founded in 1999 by eighteen founders led by Jack Ma when he sensed the opportunity of selling products away from its production site, which concentrated in Zhejiang Province [8]. Taobao, “search for treasure” in Chinese, was launched in 2003 to connect buyers and sellers with its online streaming features and mobile app launched in 2010 and 2016. [9] Tmall, the compliment of Taobao, Cainiao, the logistics sector and Freshippo, retail of primarily fresh groceries, were added to the portfolio later [8]. Alibaba also took a share of other businesses such as online map, online recreation, food order and online meeting platform [8]. Alibaba went public in NYSE (BABA) in 2014 with a current market capitalization of 191.27 billion dollars and stock price of 77.60 dollars per share (as of 4pm EST Nov. 17 2023) [10]. Alibaba was also listed on the main board of Hongkong Stock Exchange (9988.HK) in November 2019 with a current market capitalization of 1.49 trillion Hongkong Dollars (equivalent of 190.72 billion US dollars) and stock price of 73.250 Hongkong Dollars per share (equivalent of 9.36 US dollars) (as of 4pm CST Nov. 17 2023) [11]. The stock had its optimum performance in 2020 and experienced a gradual decrease since them. The current stock price is about a-third of its highest point. Alibaba (Tmall and Taobao combined) took 50.3% of total ecommerce retail sales in China where almost 50% of world’s transaction happened [12].

## 2. Comparison

### 2.1. Social Responsibility and Mission Statement

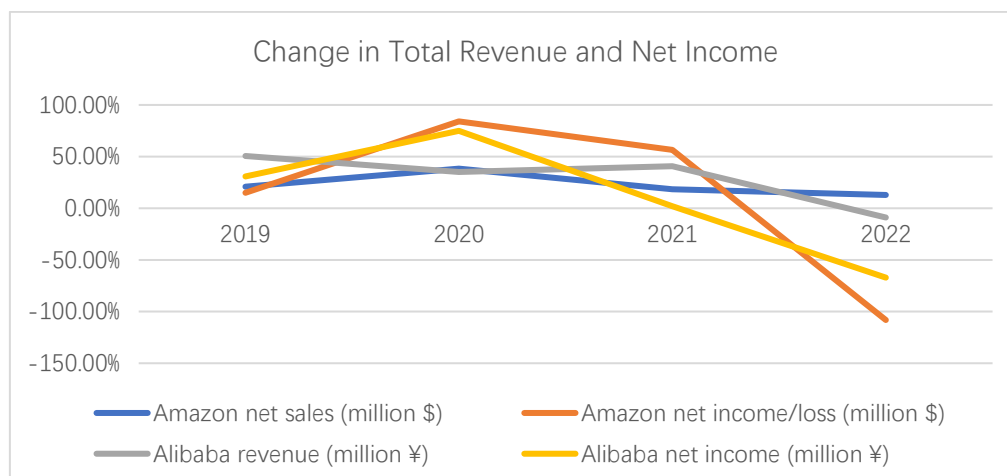
As leaders of the ecommerce industry, both Amazon and Alibaba demonstrated their social responsibility by participating in ESG projects and funding SEMs (Small and medium enterprises) [13, 14]. Daniel Gao, Alibaba Group Chairman and CEO, stated in the letter to shareholders that “ESG will become a governance mechanism and value linkage between Alibaba Group and the major business groups and various businesses, helping Alibaba to continue to be a “good company” and a leader in sustainable development” [9]. The mission statements also displayed similarities including earning trust, prioritize the need of costumers and active inventions to follow changes [8, 15]. Those guiding principles fostered the expansion of businesses and left the public with positive images.

### 2.2. Overall Revenue Distribution



**Figure 1.** Total revenue and net income of Amazon and Alibaba (Photo credit: Original)

Based on data from annual reports of Amazon and Alibaba, the two companies exhibited a similar trend in revenue and net sales. According to graph 1, revenue of both companies increased overtime and the revenue in 2022 was more than pre-covid period. However, the revenue growth rate became negative since 2021 when restrictions were gradually eliminated. Net income achieved a maximum in 2021 for both companies and declined drastically in 2022, as displayed in Figure 1.



**Figure 2.** Change in total revenue and net income of Amazon and Alibaba (Photo credit: Original)

The revenue generating activities include retail, subscription, advertising services, cloud computing and video contents. The increase could be explained by the global and regional trend of increasing popularity of ecommerce as well as the inability with in-person activities during the global pandemic in 2020. Total net sales and revenue increased throughout the entire interval even as the world entered the post-covid period since people had been more used to online shopping after lockdowns. As a result, both companies were confident with the future prosperity so that Amazon conducted an 8-for-1 stock split in 2020 and Alibaba did a 20-for-1 split in 2019 for expansion purposes as displayed in Figure 2 [9, 15]. With a lower per-unit stock price, more investors would be able to invest and thus popularity of the company would increase [16]. However, the net income for both companies decreased even though their revenue increased. Increasing cost could account for this inverse relationship. Net cash provided by operating activities of Alibaba decreased by 38.4% and more cash was used than gained in financing activities [9]. Amazon endured a loss of 2,722 million dollars in 2022 as a result of drastic increase in operating expenses in North America as well as the change from positive non-operating income to negative (which turned into extra expense) [15]. This change can partially be accounted to inflation as a result of governmental subsidy during the first few months of the pandemic. The monetary value of the cost factors, such as production cost, logistics, maintenance and repairment increased faster than expansion of sales. Advertisement and promotion were also a major outflow of money as one of the risks mentioned by both companies was the emergent competitors [6, 9]. Additionally, change in sales throughout the year was worth mentioning. Both revenue records of Amazon and Alibaba displayed seasonality that sales tended to be higher in the fourth quarter with the same reason of special promotion [9, 15]. Thanksgiving, Black Friday, Cyber Monday and Christmas all clustered in the fourth quarter on the calendar of the Americans. With the incentives of gift purchases along with discount from a wide range of sellers, it is reasonable that Amazon made lots of profit because of the large amount of transactions. Alibaba had a similar case. When Tmall started the 11.11 Global Shopping Festival in 2009, it sparked the emergence of other shopping festivals and massive participation. The purpose of a discount for increasing sales was not only a result of the standard economics supply-and-demand model, but also taking the advantage of anchoring effect, the phenomenon that first presented information has strong effect in deviating one's decision [17]. The regular price got consumers anchored that value to the product and gave them a stronger push when price fell. Along with the effect of loss aversion and accumulated savings throughout the year, those shopping festivals at the end of the year became more successful in terms of the amount of revenue generated.

### 2.3. Revenue by Sectors

At the current stage of development, both Amazon and Alibaba had entered lots of ecommerce segments: online retail, online services and cloud computing. Amazon gained 42.8% of its annual revenue from online stores and 15.6% from AWS (Amazon Web Service, its cloud computing sector)

comparing to 72% (67% domestic and 5% international) and 9% for Alibaba [9, 15]. This difference could be explained by the difference between the countries. China had a population size approximately four times in the past decades that of the US with most highly-populated cities clustered in the eastern area. The convenience in logistics in those places along with popularity of mobile transaction with only two major apps drove the online retail revenue of Alibaba much more than Amazon. The partnership between Alibaba and the Ant Group (owner of Alipay) provided strong support for the massive amount of online transaction [9]. Alibaba's cloud computing grew quickly with the technological development of China [9]. Although the US used to be a pioneer in mobile transaction, its popularity was not as high and the co-dominance of many platforms, such as Applepay, Googlepay, Venmo and Paypal, made it difficult to use. Because of the difference in national demographics, Amazon had a different expanding strategy than Alibaba. Amazon was characterized by its aggressive expanding strategy that in 1998, Amazon launched its website in Germany, the UK and India [18]. Amazon had created its sphere of influence internationally, primarily in Europe, by establishing offices in major cities. The international sales generated 30.7% of sales revenue (not including AWS) in 2022 and this proportion was fairly stable in the past five years [14, 15]. The international segment also suffered greater operating loss in 2022 despite its relatively smaller proportion of net sales because of legal restrictions and higher costs [15]. Alibaba's proportion of revenue generated by international commerce was 7% from 2020 to 2022 [9]. Aliexpress, Alibaba's first international ecommerce platform, was launched in 2010, much later than Amazon [8]. In addition, the Chinese government imposed more restrictions on foreign investment, which indirectly protected native enterprises. This law will be discussed more in the next section. Another major difference would be its branding strategy. Amazon took advantage of platform effect, a positive correlation between number of users and the utility or satisfaction a user gain from goods or services [19]. Advertisement for Amazon had penetrated into daily lives. For example, there are delivery trucks with Amazon logo, Amazon gift cards sales in local stores, its advertising emails to subscribers, etc. As more users participate, Amazon would be able to offer more options and improve the quality. Additionally, the Amazon Prime is a critical feature that connects its different sectors. Amazon Prime members can not only get free delivery in retail sector, but also access lots of video contents. They could also purchase groceries from Wholefood from the Amazon online retail website.

By contrast, the connection between different sectors of Alibaba was much weaker so that the sectors were not restricted to be in service for one another. For example, Cainiao was established in 2013 to meet consumer demand of ordering at any time of the day [8]. Cainiao pickup centers in neighborhoods not only received packages from Tmall or Taobao, but also the ones from other delivery services. Sellers in those online platforms were also not restricted to use Cainiao delivery services so that they could decrease their variable cost if there were other cheaper options. Taobao also successfully follow the trend of increasing popularity of livestreaming since 2016 [20]. The seller would continue marketing even when the livestream was over by publishing recordings to other popular social medias, such as TikTok [20]. Amazon did not adapt such mean because of the lack of popularity for livestreaming in the US.

Both Amazon and Alibaba took advantage of economies of scale and economies of scope to reduce their average total cost. As some economist of Solow's generation speculated the possibility of increasing returns which would push other companies that were less situated out of the industry, the government intervened [21].

## 2.4. Legal Proceedings

As ecommerce became a bigger and bigger part of the economy, the legal framework also became more and more mature in both the US and China. Laws regarding privacy and data protection, online transaction protection and consumer rights protection were established. Other legal restrictions differ by countries. Both Amazon and Alibaba had recognized the possibility of unintentionally disobeying laws as a risk when expanding their businesses internationally [9, 15].

The set of laws that was closely related to this paper was the anti-trust regulations. The government required companies making more than a certain revenue to file their documents. Amazon was sued by the US Federal Trade Commission along with seventeen other states for being an illegal monopoly that hindered innovation and seizing consumer surplus in September 26 2023 and the case was still undergoing [22]. On April 10, 2021, State Administration for Market Regulation (SAMR) issued an Administrative Penalty Decision of the anti-monopoly investigation on Alibaba and ended up imposing a fine of 18.2 billion RMB [9]. When a firm was growing towards a pure monopolist in an industry, it is not surprising that the government tried to restrict it.

As previously mentioned, the 2019 Foreign Investment Law stated that foreign investment would be granted pre-entry national treatment, foreign investment being treated just like domestic investment, while foreign investors shall not invest in industries on the negative list which includes cultivation of Chinese unique, rare, and precious varieties; rare earth, radioactive minerals, and tungsten, or in press, social surveys and legal affairs [23]. This law explains the reason why Amazon did not enter the Chinese market as much. Since Taobao was the pioneer of ecommerce in China, the habituation of shopping from Taobao as well as this protection from drastic competition from foreign companies shaped Alibaba's strategy to dive deeper into the Chinese market.

Amazon and Alibaba also experienced lawsuits from other companies for specific features of their businesses. According to the annual reports, both companies "dispute the allegations of wrongdoing and intend to defend vigorously in these matters" in all cases mentioned [9, 15].

## 2.5. Risk

Both Amazon and Alibaba were well aware of the risks that could adversely impact their businesses and brand identity. The similar fundamentals predetermined the similarity in the risk they were facing: Interest rate fluctuation could impact their investing and financing activities; foreign currency exchange rate could influence their performance in international sectors; uncertainties related to exploring new markets or products and services could bring potential losses, etc. [9, 15].

## 3. Conclusion

By examining the past performances of the two companies, Amazon and Alibaba shared the same basic development path but diverged because of multiple reasons. They both started with online retail as a compliment to physical stores, then expanded to other ecommerce domains, such as fresh grocery delivery and entertainment. Similar development pathway explained the similar financial performance during and after the pandemic as well as cost factors, revenue generating activities and risks. Amazon and Alibaba diverged in strategies mostly because of the different business environment they primarily operate. Amazon created a greater influence internationally while Alibaba got into more sectors and focus primarily on the Chinese market. The key differences included difference in national demographics; different level of governmental regulation and the performance of competitors.

As a global village, international interactions will be more frequent and extended. Ecommerce will exhibit greater influence with the advancement of technology and economic growth of the developing nations. The author believes that economic profit in the past decade has begun to attract more firms into this industry, which will become closer to economists' monopolistic competition model with a few codominant firms offering the same service with slightly different features. China is at a later phase in the development of the ecommerce industry with JD.com, Pinduoduo and Vipshop challenging the dominance of Tmall and Taobao. It is likely that the US will experience a transition like this in the near future as companies like Shopify and Apple expanding their online segment and as the new generation who lived in the digital era grows up.

In order not to lose too much market share, it's important for Amazon and Alibaba to keep up with the newest technology such as advanced data processing method and generative AI. It's also necessary to alter strategies because of the possible downfall of the entire ecommerce industry as a

result of people's dissatisfaction with the lockdowns during covid and their boasted desire of in-person interactions. Decreasing demand elasticity with better and more attractive services as well as expansion into newly-emerged spheres would be beneficial. Amazon and Alibaba shall continue to serve as a model in this industry to provide good-quality products and services, keep supporting inventions and try to make the world a better place. The limitation of this paper is the narrow range of data and limited degrees of the companies being compared because of limited availability. For future studies, it would be better to compare data from more ecommerce companies for at least a decade along with macroeconomic data such as GDP growth and inflation to better predict the future of this industry.

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