

An Analysis on Business Risk of Jingdong and Meituan

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Abstract. The development of the Internet has brought huge market development and expansion opportunities for e-commerce companies, especially the largest e-commerce platform companies in the market today. Therefore, many investors attach great importance to the investment of these firms. This article mainly uses the CAPM model together with other valuation equations to provide valuation data, and then combines realistic factors to evaluate the e-commerce platforms, represented by two B2C self-operated platform e-commerce companies with different service contents, JD and Meituan. Results shows that compared to Jingdong, Meituan has a lower business risk. We will try to elaborate the difference in business risk in terms of these three causes related to target customers: products and services, internal company decisions and the impact of real factors, i.e. COVID-19. Through the research on the two e-commerce companies' risk, this article provides implications for investors to have a lucid investment understanding of distinct types of e-commerce platform companies, to make their investment alternatives scientifically.

Keywords: E-commerce; Target Market; B2C Companies; Business Risk; Impacts of COVID-19 Epidemic; Technological Innovation.

1. Introduction

Electronic commerce (E-commerce) is the buying and selling of products and services and the transmitting of funds or data over Internet. Therefore, customers can access an online store to order for products or services via their phones or computers. These business transactions occur as a lot of types. For example, business-to-business (B2B) like automobile industry, business-to-consumer (B2C), consumer-to-consumer (C2C) like eBay. And next, consumer-to-business (C2B), business-to-administration (B2A), consumer-to-administration (C2A), and finally Mobile e-commerce (M-commerce) [1]. What we are going to discuss in this article is about two B2C companies, Jingdong and Meituan. The term business-to-consumer (B2C) refers to sell products and services directly between the end-users, a business and a consumer. Hence, companies that sell directly to consumers can be defined as B2C companies.

Currently, the e-commerce industry is growing and expanding rapidly and innovating intensively. E-commerce has played a leading role in driving consumer demand, promoting the upgrading of traditional industries, and developing modern service industries. Therefore, companies in the e-commerce industry will receive the favour of many investors, which is of great research value. In the last decade, widespread use of e-commerce has contributed to substantial growth in online retail. In the US, e-commerce has increased from 5.1% of total retail sales in 2007 to 16% in 2019.

Jingdong and Meituan are the companies that we choose to discuss in this article since they are both leading companies in China. The e-commerce is a really huge field such that it has a huge amount of subsections under it. Jingdong and Meituan are two massive online B2C platforms in the world, but there are still some differences between them. The products and services they offer to customers are quite diverse. The operating model of Jingdong is similar to Amazon, which majorly sells electronic items. However, on-demand delivery is the service that Meituan most succeeds in. Hence, comparison of data of these two leading companies provides some implications on their business strategies and capital structure.

Jingdong is a Chinese e-commerce company who is headquartered in Beijing. It is one of the two leading online B2C retailers in China, the other one is Alibaba-run Tmall. It is also a member of the Fortune Global 500. Jingdong was founded by Liu Qiangdong in 1998, and its retail platform went online in 2004 as a magneto-optical store, but soon diversified to sell electronic products and similar items. JD operates the largest drone delivery system and infrastructure in the world and currently has started to test robotic driverless delivery services and build drone delivery airports [2]. In 2014, JD became the China's first major e-commerce company to list on New York's NASDAQ stock exchange.

Meituan is one of the world's largest online shopping and on-demand delivery platform to offer locally-found retail products and services such as traveling, dining, entertainment, and delivery by operating different apps and websites. The company was headquartered in Beijing and founded in 2010 by Wang Xing. There were more than 290 million monthly active users and 600 million registered users by April 2018 [3]. In 2018, Meituan debuted on the Hong Kong stock exchange.

While existing articles have preferred to study different e-commerce companies, this article subdivides e-commerce companies into two types by commodities and services, providing a more refined analysis and drawing clear and useful conclusions on the differences in business risks of companies, enriching related literature and helping investors in the market to make better decisions. The article also presents the impact of the epidemic risk on different e-commerce companies and their response to the changes in the external environment, which can be referred for other e-commerce companies in the market today.

This article is mainly organised by two large sections, business models and conclusion. The business models section is divided into three major parts: products and services, corporate strategies, and impacts of epidemic. Those are what we will focus on by comparing the difference between Jingdong and Meituan in these fields.

2. Business Models

2.1 Products and Services

A target market that is constituted by a group of individuals who share similar needs for products or services is important for the company to develop its efficient marketing communication strategies and to reduce its business risk. The company needs to spend a lot of time to determine its target market to make sure they can focus their marketing efforts in the most cost-effective way.

The marketing position of Jingdong Mall is the China's largest digital products, communications, daily necessities, home appliances, cosmetics, and online shopping mall, and the target customers of it is those who are enthusiastic to network and online shopping with stable incomes. Due to its position, most of competitors of Jingdong mall are successful and famous companies in China and overseas such as Tmall and Taobao from Alibaba, Amazon, Suning and other similar online shopping platform. Their enterprise advantages are designed to fit perfectly for their customers. For example, Taobao can adapt to different level of customers since the variable prices can meet their needs, and Amazon is capable to satisfy the need of imported product for Chinese consumers. Therefore, Jingdong Mall must invest plenty of its costs on quality of products, pricing strategy, development of its own delivery system, marketing and publicity to expand its market share for competition with multitudinous competitors [4].

Meituan is a uniquely diversified one-stop service platform to covers customers' whole day lifestyle to access the various needs of customers. There is not much competition compared with Jingdong since the marketing position of Meituan is dining and on-demand delivery, which is still a brand new business in China. It continuously upgrades its product by leveraging its platform strategy through innovative technology and boosts industry efficiency through digital, internet and mobile solutions, which make Meituan become the largest and most comprehensive online delivery platform in China [3]. Therefore, the investment that Meituan put such as on technology, training program for deliver man and marketing publicity is less risky than Jingdong.

To compare the products or services that Jingdong Mall provide with those from Meituan, we can infer some difference types of demands between them. Jingdong Mall's merchandise categories are digital products and daily necessities such as computers, books and furniture, which are products that have unfixed demand so that people will buy the product only when they think they have that requirement to use it. However, Meituan provide food delivery that is related closely to everyone's daily life so that the frequency of costumers for ordering on Meituan is much higher than that of Jingdong Mall.

2.2 Corporate Strategies

Given the different target customers of the two companies, the impact target customers have on the capital structure of the companies is going to be discussed through the two main aspects. One being technological innovation. E-commerce companies, technology innovation is an important factor that can ensure their monopoly powers. At the same time, for Meituan and Jingdong, due to the differences in target customers, their demand for technological innovation shows difference.

On the other hand, financing strategy is also strongly associated with the target customers. Therefore, Jingdong and Meituan shows different financing strategy that impacts their capital structures.

2.2.1 Technological Innovation

Firstly, for Meituan, it targets the daily need of people, like catering. Consequently, its trades are frequent but relatively small compared to the other company mentioned. This strategy is often referred as "small profit with quick turnover". Meituan therefore wants to create a platform and a delivery system that can satisfy the need of billions of its customers every day. It focuses more on the technology of order management as well as innovative delivery system. Meituan is also one of the leading companies that touch the area of artificial intelligence [5]. AI has the potential to satisfy Meituan's need of mass management and personalized promotions. A great example will be the "man less" delivery system. As a matter of fact, Meituan has been giving its R&D department more and more funds every season in order to trigger potential and essential technological innovation [5]. On the other hand, the risk and uncertainty of novel technological area of AI cannot be neglected.

Secondly, for Jingdong, its goal is more focused. Its target customers don't trade as frequently as Meituan, but the trades are relatively tense in certain points of time. For example, shopping day when Jingdong use discounts to gain the attention of their potential customers and stimulate demands. For this reason, Jingdong wants technological support for its servers to have the ability to accept massive requests in a short time. Having a stable and low-cost system is the main technological demand of Jingdong [6].

In the case of technological innovation, the R&D can be seen as a fixed cost as well as a sunk cost, while number of patents can be seen as the outputs. From the above analysis, it can be observed the technological innovation of Meituan is more adventurous than Jingdong. Aside from technological innovation that can reduce costs and expand its market share, Meituan is also keen on developing monopolistic technologies. While Jingdong prioritizes lowering costs and seeks stability. To show it in number of patents applied by the two companies from 2018 to 2020, it can be observed from Table 1 [7,8]:

Table 1 Number of patents applied annually and percentage change of number of patents applied annually of Meituan and Jingding from 2018-2020

	Jingdong	Percentage Change(%)	Meituan	Percentage Change(%)
Number of New Patents Applied in 2018	1672	/	821	/
Number of New Patents Applied in 2019	2860	71.05	1246	51.77
Number of New Patents Applied in 2020	3850	34.62	1204	-3.37

The percentage is calculated in the following way (take the number of new patents applied by Jingdong from 2019 to 2020 as an example):

$$\% \textit{percentage}_{2019-2020} = \frac{n_{\textit{patents}2020} - n_{\textit{patents}2019}}{n_{\textit{patents}2019}} \times 100\% = \frac{3850 - 2860}{2860} \times 100\% \approx 34.62\% \quad (1)$$

As the percentage changes show in diagram1, the number of patents of Jingdong every year is always increase, showing a stable and consistent technology innovation. While for Meituan, it experiences a large progress in technological innovation in 2018 to 2019 by an increasing number of new patents with yearly change at 51.77%. However, the technological innovation becomes weaker in year 2020, with number of newly applied patents decreasing. It shows that the technological innovation of Meituan is relatively less stable. From the following Table concerning annual change in business risks, it can be observed that:

Table 2 Business risk and percentage change of business risk of Meituan and Jingdong from 2018 to 2020

	Jingdong	Percentage Change in r_A	Meituan	Percentage Change in r_A
Business Risk in 2018	1.54%	/	1.07%	/
Business Risk in 2019	1.61%	4.55	1.22%	14.02
Business Risk in 2020	1.87%	16.15	2.14%	75.41

As both the companies have increasing business risk, through the percentage change, it can be observed that the business risk fluctuate more vigorously for business risk of Meituan. To draw a conclusion, the more unstable technological innovation leads to the more unstable business risk of Meituan.

2.2.2 Financing Strategy

In the case of Meituan, from the year 2018 when it had its IPO [9], it has been engaged in a rapid expansion through investing in different industries. However, it has failed to profit in 2018. From 2019, it received a first profit-making year since IPO and in 2020 it expanded rapidly due to pandemic. All of these positive performances stimulated it to continue investing. It can be also observed a continually increasing leverage ratio in these three years. It can be deduced that it is using leverage to encourage rate of returns on equity to some degree. Especially in 2020, the leverage ratio increases by 36.81%, this is because a massive borrowing from the bank of 12966341000RMB [10].

In the case of Jingdong, it is hard to ignore its constantly decreasing leverage ratio. It also obvious that the original leverage at 71.42% is extremely large compared to Meituan. It showed Meituan has fantastic ability to pay back the interest. However, the decrease in leverage ratio also signaled its decline in this ability. It can be assumed that Jingdong has become more conservative in financing.

2.3 Impacts of Epidemic

In the COVID-19 epidemic, the e-commerce industry has been affected to varying degrees. In terms of sales, e-commerce platforms have increased the demand for suppliers, since COVID-19 has disrupted and changed the business landscape because the reduction of in-person contact has caused managers to thrust into the position of operating online supplies [11]. Therefore, sellers are more willing to transfer products to online products after offline sells becoming progressively worse. Selling, subsequently brings opportunities and challenges to e-commerce platforms simultaneously. First, e-commerce platforms can strengthen cooperation with suppliers, increase the scale of online sales, and expand their entity economy. However, the presence of many suppliers on the platform will also increase the burden on the platform, causing maintenance and management pressure. At the same time, from the perspective of consumers, during the epidemic, consumer demand caused by isolation policies will increase opportunities for the rise of e-commerce marketing, but e-commerce

platforms must face more advertising work, which also increases the difficulty of company resource allocation. Nevertheless, different e-commerce companies are affected differently by the epidemic.

2.3.1 Meituan

As a platform provider, Meituan connects diverse food service providers and consumers via online transactions in the epidemic. Its open connectivity and service platform enables easy and convenient food deliveries without any time or location restriction [12]. Its products and services, catering, which is fixed requirement by almost everyone, offer Meituan obvious advantages in the epidemic. As an e-commerce platform, Meituan serves two types of target customers. One is the consumer, and the other is the supplier. Meituan needs to support the needs of both parties at the same time and obtain profits from it. Therefore, the activities of the target customers during the epidemic and their preference changes in specific situations are crucial.

2.3.1.1 Supplier Supports

Consumers will continue to consume at home instead of going to restaurants due to the fear of being infected without a vaccine and this can be a new opportunity for restaurateurs to maximize their delivery and pickup services [13]. In this situation, many food industry companies are "pivoting", at least in part, to e-commerce to reach consumers, to e-procurement, and some of them even went into specializing in e-commerce or regarding it as part of their portfolio [14]. They flock to a safer and with better potential development online sales model, and Meituan is one of the biggest beneficiaries. From the perspective of take-out and catering suppliers, many catering companies have begun to register on Meituan and cooperate with the platform.

Moreover, since Meituan is a self-operated e-commerce platform, it conducts unified management of online stores, so the quality of stores is basically guaranteed by the platform, and there will be no uneven quality and the flood of fake and defective products. The overall business environment of the platform is high-quality and stable. Therefore, under the epidemic situation, the good management of the stores has also added a lot of competitiveness to Meituan.

Finally, Because of the complex employment situation during the epidemic, many workers work part-time in the food delivery industry and provide short-distance cargo delivery services. The increase in the number of large-scale takeaway riders has brought huge profits to the company under the advantages of Meituan's self-management, and at the same time has filled the void in the market.

2.3.1.2 Reputation Management

Improving reputation influences the bottom-line behavior of relevant stakeholders and contributes to the achievement of overall organizational goals and there is a clear correlation between reputation and financial performance according to the research [15]. Hence, owing to Meituan's good reputation, consumers, as the main target customers, are more willing to spend on this e-commerce platform during the epidemic, which has brought core financial support to Meituan.

2.3.2 JD

For the JD e-commerce platform, it also received the advantage of online sales during the epidemic. However, due to the different target customers of JD and Meituan, the impact on the company is also different than that of Meituan.

2.3.2.1 Commodities

As a traditional retail e-commerce platform, JD.com also had many target customers during the epidemic. However, compared with Meituan's fixed demand for food delivery, JD's demand is not as competitive as Meituan since most of its retail products doesn't satisfy people's daily meals requirements.

In addition, the distribution of JD and Meituan's suppliers are also not the same. Meituan's products are directly delivered by merchants to nearby customers, while JD needs to carry out long-distance transportation of goods due to the sellers and suppliers' distribution all over China. Many challenges in this process such as difficulty face during movement control, social distance and

lockdown in this disaster exist [16]. Among them, it takes a long time to send goods from merchants to centralize arrangements for logistics management and transportation in large warehouses, and then to deliver them to consumers.

The logistic distribution process also involves more high-tech, such as block chain and big data. As a result, JD's logistics employment threshold is relatively high, and there are extraordinary requirements for logistics organization and technology use. Therefore, it is difficult for most part-time workers to enter JD.com during the epidemic as if they entered Meituan for transportation work. JD then loss this method to earn revenue.

2.3.2.2 Policy Conditions

In the severe period of the epidemic, the Chinese government enacted strict social distancing measures in many provinces to halt the spread of COVID-19, with a wide lockdown in cities, including public transport and individual movement limitation [17]. Due to government restrictions, most logistics are in a state of suspension, and orders cannot be effectively reached. This is also a hard point for JD.com under special circumstances. Therefore, in the epidemic situation, JD's operations are not as successful as Meituan's.

2.3.3 Comparison

In the case of JD's weaker profit model during the epidemic, the company will naturally face more risks, and JD has a higher debt ratio than Meituan, and its return on assets is 5-10 of Meituan. On the contrary, a large amount of profit makes Meituan's stock market less risky, investors even do not need to consider the cost of equity, and the company's debt cost is also very low. But compared to JD, it is relatively conservative. These common factors have led to Meituan's low business risk and more stable return on investment. Therefore, we have reason to believe that JD's business risks are greater, and investors will be relatively riskier when investing in this company than in Meituan.

3. Conclusion

Concerning target customers, it can be concluded primarily that there exist several differences between Meituan and Jingdong. Jingdong targets customers who are keen to shop online with stable incomes and provides them with a variety of products at diverse prices. Having several multitudinous corporations as competitors, it focuses more on its quality of products, delivery system developments, pricing, and publicity. While Meituan, mainly provides dining and on-demand delivery, which is a relatively new business in China. As a result, it faces less competition. It seeks innovative technologies and digital, mobile, and internet solutions. It is generally less risky than Jingdong. Company internal strategies differ base on targets.

For technology innovation, Jingdong seeks lower cost and more market share by constantly improving their system supports. While Meituan also focuses on more innovative technology, like AI. Along with increasing investment in R&D every year, Meituan has a more fluctuated business risk because its technological output is less stable. This conclusion is also supported by a comparison of the annual number of new patents of two firms. Jingdong has more and is increasing the number every year at 71.05% and 34.62%, while Meituan has a year when the number is decreasing at 3.37% from 2019 to 2020, proving the unstable outputs.

For financial strategies, Meituan is more willing to increase its value by borrowing as its leverage is always increasing. It can be observed that it borrowed a massive amount of money from the bank in the year 2020. While Jingdong has decreasing leverage due to its more conservative strategies. On the other hand, it is found that depending on different target customers, the impact of the epidemic is different.

For Meituan, both consumers and suppliers, which are both its target customers, increase because Meituan focuses on people's fixed demand. Meituan becomes one of the biggest beneficiaries as catering firms go online. With a good self-management ability, an increasing number of part-time employments and a good reputation, Meituan is gaining competitiveness and larger profits.

For Jingdong, its demand is relatively less competitive as it's not fixed. The logistic distribution is long-distance and along with government intervention which has made most logistics suspended, Jingdong is operating less successfully than Meituan. Additionally, Jingdong requires employments with high technological skills, which makes part-time employments more difficult for it than for Meituan.

In conclusion, the epidemic has given Jingdong a higher business risk, which is 5-10 of Meituan's, since its profit model is weaker. While Meituan is having low business risk and more stable return on investment also for its increasing profits.

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