

A Work Project presented as part of the requirements for the Award of a Master's
degree in Finance from the Nova School of Business and Economics.

Alibaba – A Chinese Giant Planning to Take on The World of Retail, Cloud
Computing and Others

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Abstract

In this report, we are going to research on one of the largest companies in terms of market capitalization in the world, Alibaba Group. Under its huge size, Alibaba is also growing rapidly, especially in cloud computing and other new business segments. We will forecast its revenues, costs and other relevant elements that have an influence on the company's valuation, for a period from 2020 to 2029. We evaluate that the stock price of Alibaba in March 2021 will be around \$233, 6% higher than its current price, so we would like to suggest a "Hold" strategy.

Keywords

Alibaba, Retail, IT, growth

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ALIBABA GROUP HOLDING

COMPANY REPORT

IT

03 JANUARY 2020

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BABA Equity Research Report

A Chinese giant planning to take on the world of retail, cloud computing and others

- Alibaba has continued to grow its business with a solid increase in revenues, especially for its core activities such as e-commerce sales and cloud computing. Total revenue grows at more than 50% since 2017.
- Alibaba has been benefiting from the economic development of the Chinese affluent and middle classes, as well as the increase in online shopping in the country, and is expected to benefit from this going forward
- Its cloud computing business was incorporated in 2018 and is expected to grow drastically inside China given the country's large population and technology development. Alibaba now holds an almost 50% stake in the Chinese market.
- When it comes to the international cloud business, Alibaba still has a small stake of 5%, but it is already among the top 5 cloud service providers worldwide.
- Its business advantages are its size when it comes to international markets, with Amazon being the largest competitor, and its geographical advantage in terms of access to the Chinese market where International players have trouble getting in, competing mostly with Tencent there. A major factor in a country with +1bn potential consumers.

Company description

Alibaba Group Holdings Limited is a Chinese holding company with subsidiaries and core business operating mainly in retail and e-commerce, cloud computing, entertainment and media, and innovation initiatives. It is currently the 6th largest company in the world by market cap and it achieved revenues of RMB 377bn in FY2019. Its main competitors include companies such as Amazon, Walmart, JD.com, eBay and Tencent.

Recommendation: **HOLD**

Vs Previous Recommendation **HOLD**

Price Target March 2021: **233.08 \$**

Vs Previous Price Target - \$

Price (as of 6-Jan-20) **219.73 \$**

Reuters: BABA.N, Bloomberg: BABA

52-week range (\$) 129.77-195.72

Market Cap (\$m) 569,000

Outstanding Shares (m) 2,603.53

Source: Alibaba SEC Filings

BABA vs INDEXNASDAQ (6M range)



Source: Yahoo Finance

(Values in RMB millions)	2019	2020F	2021F
Revenues	376,844	506,977	666,025
EBITDA	82,773	110,606	142,605
EBIT	57,084	76,557	97,873
Net Profit	80,234	83,212	104,117
EPS	30.59	31.72	39.69

Source: Company data; authors estimates

THIS REPORT WAS PREPARED EXCLUSIVELY FOR ACADEMIC PURPOSES BY PEDRO LEÃO AND ZHOU YATING, MASTER IN FINANCE STUDENTS OF THE NOVA SCHOOL OF BUSINESS AND ECONOMICS. THE REPORT WAS SUPERVISED BY A NOVA SBE FACULTY MEMBER, ACTING IN A MERE ACADEMIC CAPACITY, WHO REVIEWED THE VALUATION METHODOLOGY AND THE FINANCIAL MODEL. (PLEASE REFER TO THE DISCLOSURES AND DISCLAIMERS AT END OF THE DOCUMENT)

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Executive summary

Executive summary

Alibaba ADSs are currently trading at USD 219.73 and we expect them to increase in value to 233.08 by March 2021. We expect investors will collect their returns from price appreciation as the company states in their financial statements that it does not intend to distribute dividends over the next couple of years. Revenues in FY2019 were of RMB 377bn and we expect them to be at RMB 1,230bn in FY2024 and RMB 2,284bn in FY2029, growing at a CAGR of 19.7% in the 2020-2029 period. A slowing down of the business when compared to the CAGR of the 2015-2018 period of 49.1% but still a high growth rate for a business of its size and that has already 20 years of existence.

▪ Sector expectations breakdown

Alibaba Revenues 2015-2019 CAGR	49.1%
International Retail Market 2014-2018 CAGR	20.0%
Alibaba's China commerce retail business 2015-2019 CAGR	42.7%
Alibaba's China commerce retail business 2020-2029 CAGR	16.3%
Alibaba's International retail business 2015-2019 CAGR	82.4%
Alibaba's International retail business 2020-2029 CAGR	22.3%
International Cloud Business 2013-2018 CAGR	25.0%
Alibaba's Cloud computing business 2015-2019 CAGR	110.0%
Alibaba's Cloud computing business 2020-2029 CAGR	25.4%

Figure 1 – Growth rates table

The international retail market grew at a CAGR of 20% in the 2014-2018 period and the e-commerce retail market grew at a CAGR of 22%¹ in the same period, with Alibaba being well positioned to continue to benefit from this trend. Its China commerce retail business grew from RMB 60bn in revenues in FY2015 to RMB 248bn in FY2019 (at a CAGR of 42.7%), we expect it to reach RMB 1121bn by 2029 (growing at a CAGR of 16.3% in the 2020-2029 period) and its international retail business grew from 1.8bn in 2015 to 19.6bn in 2018 (at a CAGR of 82.4%), and we expect it to reach 146.4bn in 2029 (growing at a much inferior CAGR of 22.3% for the 2020-2029 period as competition with international players intensifies and expansion to new countries becomes more challenging).

In the international cloud computing business that grew at a CAGR of 25% over the last 5 years² we expect Alibaba to increase its current share of the market of 5% and maintain its dominance of the Chinese market in which it currently holds approximately 47%. Its revenues in the cloud computing business grew from RMB 1.3bn in FY2015 to RMB 24.7bn in FY2019 (at a CAGR of 110% for the period), and we expect them to reach 237bn by 2029 (growing at a CAGR of 25.4% for the period).

Company overview

¹ <https://fesrvsd.fe.unl.pt:2099/statistics/379046/worldwide-retail-e-commerce-sales/>

² <https://fesrvsd.fe.unl.pt:2099/statistics/510350/worldwide-public-cloud-computing/>

Company description

Alibaba Holdings Limited is a holding company based in Hangzhou and registered in the Cayman Islands since June 28, 1999, that has its ADSs listed in the NASDAQ stock exchange since September 19th, 2014 under the symbol “BABA”. Since November 2019, Alibaba also has been listed on Hong Kong stock exchange under ticker symbol “9988”. It conducts business activities through its subsidiaries in the People’s Republic of China and Internationally, operating mainly in the following sectors: e-commerce, retail and logistics; cloud-computing; digital media and entertainment; and innovation initiatives and others.

With 2,603,531,693 shares outstanding and ADSs (corresponding to 8 shares each) traded publicly in the NASDAQ at USD 219.73 and a corresponding market cap of USD 569bn, it is currently the 6th largest company in the world and it has the second largest retail/e-commerce business (just behind Amazon). The company stock has been rising steadily displaying an appreciation of 18% in the past 12 months and 97% since its IPO in September 14th, 2014. In the year ending in March 2019 it had RMB 377bn in revenues, the majority of those revenues coming from its core commerce business (see figure 2).

Some of its businesses include the following: Alibaba.com, a wholesale B2B e-commerce platform; Alibaba Health Information and Technology, a pharmaceutical consumer healthcare e-commerce platform that uses advanced technologies such as Artificial Intelligence to improve its products and services; AliExpress, a B2C e-commerce platform made up of small businesses in China that sell their products to buyers all over the world; Taobao Marketplace, one of the largest C2C e-commerce platforms for individual entrepreneurs catering to Chinese-speaking regions (RMB 3.1bn in revenues); Tmall Global, one of the largest cross-border e-commerce platforms in the world, that allows international businesses to sell their products directly to Chinese consumers (RMB 2.6bn in revenues); Cainiao Logistics Network, the logistics network of Alibaba providing freight, transportation, tracking and warehousing services to its affiliate companies (RMB 8.2bn in revenues); Ling Shou Tong, a disruptive retail inventory management platform for product procurement and sales optimization by shop owners; Alimama, a marketing technology and big data platform; Taobao Ad Network and Exchange, an online marketing bidding platform that automates transactions of media impressions; Lazada, one of the largest online shopping platforms in Southeast Asia; Fliggy, an online travel agent platform; Ele.me, an online platform for food delivery services; Koubei, a restaurants and entertainment guide with guest reviews and local search services; and others.

Revenue Split (Year-End March 2019)

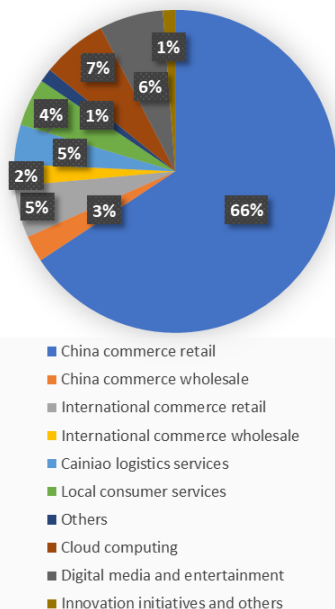


Figure 2 – Alibaba Revenue Split
Source: Company data

Stock price evolution in % since 2015

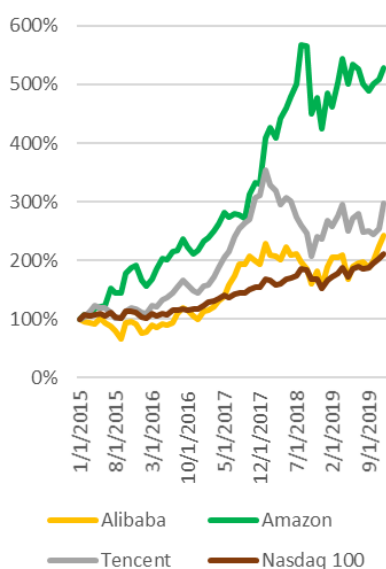


Figure 3 – Stock Price Evolution
Source: Yahoo Finance



Infrastructural Elements of Alibaba Digital Economy

Exhibit 4 – Brands map

Source: Alibaba Group Holdings Limited 2018 Annual Report

Shareholder structure

- SoftBank: 25.6%, corresponding to 673,758,371 ordinary shares beneficially owned, of which 490,934,571 are owned by SoftBank Group Corp., 12,823,800 are owned by West Raptor Holdings, LLC, and 170,000,000 are owned by Skywalk Finance GK.
- Altaba: 9.4%
- All directors and executive officers as a group Greater than 5% Beneficial Owners: 9.3%
 - Jack Ma: 6.2%
 - Joseph Tsai: 2.2%
 - Other directors and executives: 0.9%
- Others: 55.7%

Sector

As a business conglomerate Alibaba has subsidiaries operating in many different segments. The company splits its business operations into 4 core business segments: retail and e-commerce; cloud computing; media and entertainment; innovation and others. Of these, the two most important business segments right

now as well as in the future are retail and e-commerce, and cloud computing, that together account for more than 80% of Alibaba’s revenues.

Retail and E-commerce

International retail commerce has been growing steadily in the past decade and since 2014 has experienced a CAGR of 20% and is expected to continue at a similar rate for the next couple of years. Global B2B wholesale gross merchandise volume has grown at a CAGR of 8% for the past 5 years and is expected to continue to grow at a similar rate. As far as the Chinese economy is concerned, retail has been playing an increasingly more important role in its GDP, contributing 36% to its economy in 2015 and estimated to be increasing since that, given that from 2016 to 2017 the retail trade revenue for consumer goods grew at least 10% YoY in every month during that period. More recently, China commerce retail growth in 2018 was of 23% and Alibaba’s retail business has been growing at a significantly higher pace than that for the past couple of years. More significant to Alibaba’s retail business is the shift in consumers preferences in terms of the shopping platform. Retail online consumption of consumer goods in China has increased from 0.6% in 2007 to 12.4% in 2017. Unfortunately for Alibaba it is still a high fragmented market, and as recent as 2015, the 100 largest retail companies in the country only accounted for a 7% share of the whole market³. Nonetheless, we expect this trend to shift with more people adopting online shopping as their preferred mean of shopping, more people being constantly connected to the internet, a more generalized used of platforms such as Alibaba, Aliexpress, Tmall and other Alibaba subsidiaries and an increase in efficiency and decrease in prices due to technology innovation and economies of scale by large retail companies such as some of Alibaba’s subsidiaries. These companies are well positioned in terms of market share and financial and technological backing to become the dominant players in the local Chinese retail market and slowly increase their penetration in international markets. Nonetheless Alibaba’s share is still small in other giant economies such as the US, where Amazon dominates the market with almost 50% of the E-commerce market (representing 5% of the US retail market) and the current risks of a US-China trade war do not accelerate Alibaba’s businesses’ penetration into such economies.

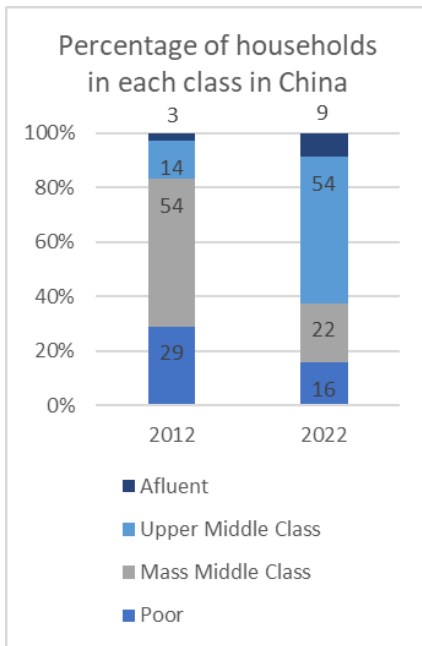


Figure 5 – Economic Classes in China

Source: McKinsey

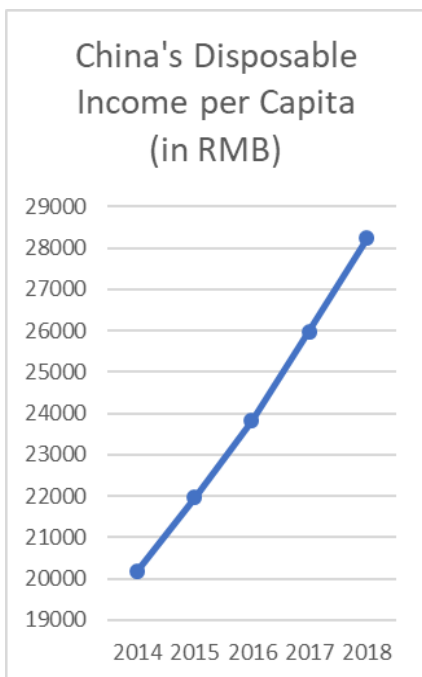


Figure 6 – Disposable Income

Source: CEIC

³ <https://www.statista.com/topics/1839/retail-in-china/>

Drivers

There are several factors behind the increase of the retail and e-commerce business of Alibaba over the past few years, and that will also play an important role in the future. First, the Chinese upper middle class and affluent class are both growing significantly (see Figure 4), and moreover China's Disposable Income per Capita has increased approximately 40% over the past 4 years (see Figure 5), and this trend is not expected to be reversed soon, while the percentage of online shoppers in China rose almost 70% over the last 5 years (see figure 6) which summarizing means that there are more money per person in China, the classes that are responsible for most of the consumption (upper class and affluent⁴) are increasing significantly, and the number of online shoppers is also increasing significantly, all factors that will support and drive the gross of the retail and e-commerce business of Alibaba.

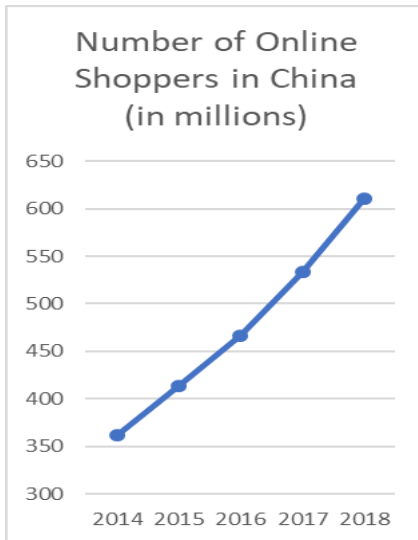


Figure 7 – Online Shopping in China

Source: Statista

Cloud Computing

The global cloud computing market has been rapidly expanding in the past decade, growing at a CAGR of 40% in the 2008-2018 period, reaching a value of USD 178bn in 2018. More recently, the market has been growing at a CAGR of 25% in the last 5 years⁵. This high growth rate is expected to be maintained going forward and estimates for 2019 place the global cloud computing market value around USD 210bn. This value is expected to grow to around USD 340bn over the next 5 years. In the Asia-Pacific Market, the public cloud computing market has grown in revenues from USD 3.6bn in 2014 to an estimated USD 10.7bn in 2019, with Software as a Service (SaaS), Platform as a Service (PaaS) and Infrastructure as a Service (IaaS) growing in the same period at a CAGR of 18% (from USD 1.9bn in 2014 to USD 4.4bn in 2019), 24% (from USD 0.2m in 2014 to 0.6m in 2019) and 30% (from USD 1.5bn 2014 to 5.6bn) respectively⁶.

In the Chinese cloud market, Alibaba is the dominant player with a share of almost 50% of the market, distantly followed by Tencent and Amazon Web Services with 15% and 9% respectively. Nonetheless, when it comes to international markets Alibaba only recently made it to the list of the top 5 cloud services providers, led by Amazon Web Services with 33% of the market, and followed by Microsoft Azure (16%), Google Cloud (8%) and IBM (6%). Alibaba currently holds a 5% share in this market. Tencent currently holds 2%⁷.

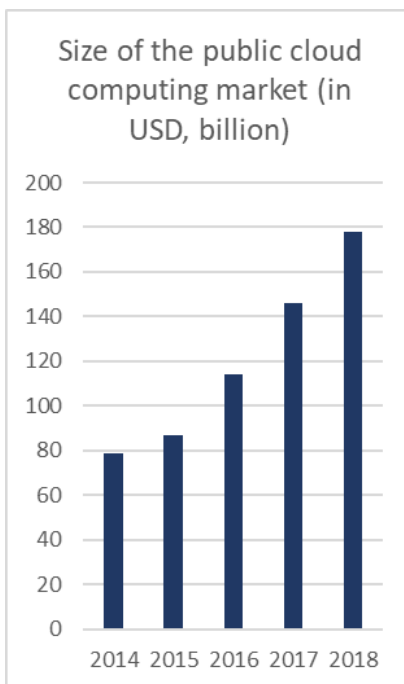


Figure 8 – Cloud computing market

Source: Statista

⁴ <https://www.mckinsey.com/industries/retail/our-insights/mapping-chinas-middle-class>

⁵ <https://fesrvsd.fe.unl.pt:2099/statistics/510350/worldwide-public-cloud-computing/>

⁶ <https://fesrvsd.fe.unl.pt:2099/statistics/270817/projected-cloud-computing-revenue-in-asia-since-2008/>

▪ Drivers

The growth in recent years has been fuelled by the increasing number of companies that utilize cloud services as a safe and efficient alternative to store its data and run computer-heavy tasks in cloud servers, renting storage and computing power instead of spending money on their own technological infrastructures, hardware devices and hired professionals that can manage both. These services are growing in popularity specially among small and medium enterprises, given the flexibility that cloud services provide to companies who cannot afford to invest heavily in technological resources. The adoption and usage of cloud-connect devices by most companies' employees has been helping sustain this trend, as anyone with a smartphone or laptop can easily access its company cloud storage to access any documents they need.

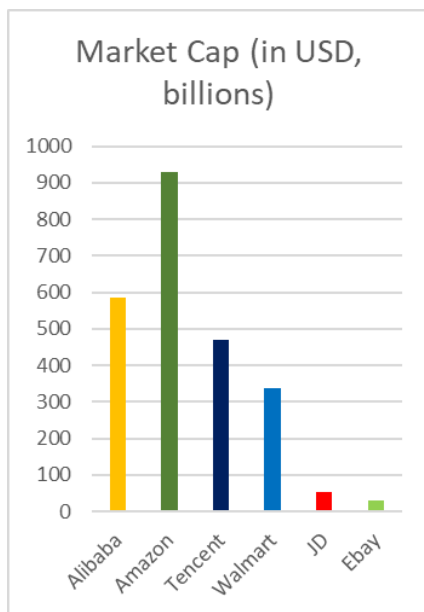


Figure 9 – Comparables Market Cap

Source: Yahoo Finance

Comparables

▪ Amazon

Amazon is currently the 4th largest company in the world by market capitalization⁸ and is probably the most similar comparable that Alibaba has in terms of its main businesses. Amazon main business are its retail and e-commerce business, competing directly with Aliexpress and Alibaba in the Western Markets such as the US and Europe; its cloud computing business, likely to compete directly with Alibaba Cloud Computing Business as both companies expand and their cloud businesses mature; its fresh food service system through AmazonFresh, similar to some of the business owned by Alibaba, but without competition given the local nature of fresh food and products businesses; its streaming services of video and audiobooks through Amazon Prime Video and Audible services; its hardware business selling Fire tablets, Kindle E-readers and Fire TVs, and intelligent devices such as Echo smart speakers and digital assistant Alexa. Similar to Alibaba, Amazon is a company that relies heavily on technology development, data collection and analysis, and artificial intelligence and machine learning to improve all of its products and services, developing in-house many of the groundbreaking technologies the company uses to improve its businesses.

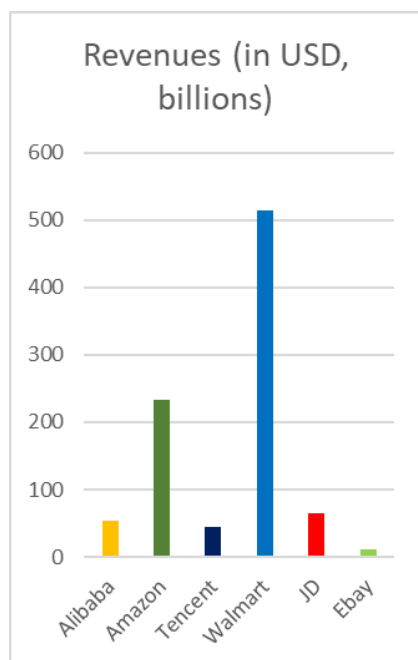


Figure 10 – Comparables Revenues

Source: Companies Data

▪ JD.com

⁷ <https://www.parkmycloud.com/blog/alibaba-cloud-market-share/>

⁸ <https://www.dogsofthedow.com/largest-companies-by-market-cap.htm>

Headquartered in Beijing and listed on the NASDAQ with a market capitalization of USD 47.6bn, JD.com is the largest retail B2C competitor in China of Tmall (one of Alibaba's subsidiaries). Although its businesses are mostly focused on retail, JD.com is one of the biggest local competitors that Alibaba has, since the core business of Alibaba is also retail, and given the geographical overlapping nature of the two businesses. Amazon is also a giant in the retail market, but its presence in China is non-existent. The implication of this being that in the short-run JD.com is a much more serious threat to Alibaba's core business, although Amazon will continuously increase in importance as Alibaba expands worldwide and its penetration internationally increases and the market approaches maturity.

- Walmart

Walmart is a giant chain of hypermarkets, retail, grocery and discount stores across the United States. It also operates e-commerce websites such as Walmart.com although on a much smaller scale than Alibaba's or Amazon's platforms. Nonetheless, it is the company with the largest annual revenue worldwide with an annual revenue in 2018 of more than USD 500bn, and a current market cap of USD 341bn. Although the company is present internationally in approximately 30 countries with more than 10,000 stores through its Walmart International Business, it does not pose a huge threat to Alibaba's core businesses since WalMart (China) number of retail stores in the country has been stagnant at 420 for the 4th consecutive year now, and wholesale stores have been growing steadily but are still under 25 stores⁹, a very small number for such a large economy.

- Ebay

Ebay is an e-commerce B2B, B2C and C2C retail platform with a strong brand name and international presence and recognition, but with a market capitalization of just USD 28.5bn it does not pose a significant threat to Alibaba. Ebay is likely to be the one of the most close comparables to some of Alibaba's businesses such as Alibaba.com, Aliexpress and Tmall, but its scale and lack of technology, logistics and cloud development (when compared to Alibaba and Amazon) makes it a small player in a difficult position in the online/e-commerce retail market. The stock price reflects this trend, with Ebay shares trading in the Nasdaq at approximately the same level that they were trading two years ago in November 2017.

- Tencent

⁹ <https://fesrvsd.fe.unl.pt:2099/statistics/752119/china-walmart-store-number/>

Similar to Alibaba, Tencent is a Chinese conglomerate holding company, with various subsidiaries operating in different core businesses. Listed in the Hong Kong Stock Exchange, it was the first Chinese company to surpass a market value of 500bn, although it is currently worth approximately USD 410bn. Given its market capitalization and nature of the company (being a Chinese holding company of various different businesses, many of which focused mostly in the Chinese market) it is the largest direct competitor to Alibaba of all the companies mentioned in this report. Where it differs significantly from Alibaba is in its actual businesses. Although Tencent is also a very technological firm that invests heavily in operational efficiency and business development through artificial intelligence, big data and technological innovation, the core focus of its business deviates from Alibaba's core businesses, with a focus in communications and social media, through platforms such as QQ and WeChat. An area where there is a strong indirect competition between the two companies is in the financial payments and transactions sector, where Alipay services (owned by Ant Financial - in which Alibaba has a 33% stake) are the biggest competitor to Tencent financial transactions business.

- Geography and size considerations

Some of Alibaba's competitors mentioned above illustrate a couple of important points that will play a major role in the development of Alibaba's future. The first is that all these companies are still very focused on their specific Western and Eastern parts of the globe (Walmart China number of stores is not increasing; Amazon is shutting down its marketplace business in China¹⁰; while Amazon dominates the global cloud computing market, Alibaba only has a 5% stake in that market, despite having almost a 50% stake in China; and even other international big name companies that are not competitors such as Apple are having trouble selling in the Chinese market and not being able to compete with Chinese counterparties such as Huawei, seeing their sales in China slow down¹¹). With the constant US-China trade war being referred on the news, it does not seem likely that over the next couple of years this trend will shift and that suddenly US businesses will have an easy entry or expansion in Chinese markets and the same about Chinese companies in US (or US-allies') markets. This does not represent so far an existential threat to Alibaba's businesses since most of its business sectors are focused in the Chinese market (although the exact breakdown of revenues by geography is not available on Alibaba's Annual Reports) but moving further into the future it can put a cap on Alibaba's growth in

¹⁰ <https://www.cnn.com/2019/04/18/amazon-china-marketplace-closing-down-heres-why.html>

¹¹ <https://www.forbes.com/sites/zakdoffman/2019/11/24/apple-warned-over-new-huawei-threat-in-china-despite-iphone-11-sales-success/#5cda809f1875>

international markets. The bottom line is that although Amazon is the most similar company to Alibaba in terms of their main businesses, they are not likely to pose a huge threat in the short-term, and the short-term threats will come from local players, being Tencent the largest. Small players like JD and Ebay may compete directly with Alibaba in some segments but do not have the size to compete directly with the Chinese conglomerate in the long run. Size, demography and geographical advantages are the biggest contributing factors to Alibaba's success, but geography can also be one of the main drawbacks when investing heavily in the expansion to international markets in a couple of years from now.

Valuation

DCF Model

In order to evaluate Alibaba, we choose to use discounted cash flow model (DCF). Our valuation time period is fiscal year 2020 to 2029, after that we assume that the company grows at a certain rate until perpetuity. We assume in our forecast horizon that from 2020 to 2024 the company will continue its high growth and after that (2025-2029) the growth rate will have to slow down.

Revenue Forecasts

Alibaba operates mainly in the IT industry, however, offers a variety of products or services in different geographies. The nature of its products/services differ one from the other, capturing different growth rates and market shares.

	2017	2018	2019
Core commerce:			
China commerce retail			
- GMV	3,767,000	4,820,000	5,727,000
- Monetization Rate	3.03%	3.66%	4.32%
China commerce retail	114,109	176,559	247,615
China commerce wholesale	5,679	7,164	9,988
International commerce retail	7,336	14,216	19,558
International commerce wholesale	6,001	6,625	8,167
Cainiao logistics services	-	6,759	14,885
Local consumer services	-	-	18,058
Others	755	2,697	5,129
Total core commerce	133,880	214,020	323,400
Cloud computing	6,663	13,390	14,702
Digital media and entertainment	14,733	19,564	24,077
Innovation initiatives and others	2,997	3,292	4,665
Total	158,273	250,266	366,844

Figure 11 – Revenue by segment (in millions of RMB)

Source: Company data

Same as what the company did in its annual report disclosures, we divide its total revenue into ten business segments to better evaluate and forecast their growths. Research into all of these markets allowed us to determine the expected growth and size of each market, and since Alibaba is expanding at a faster growth rate in all of them, we expect Alibaba to steadily but surely converge from its high growth rates to these markets' individual growth rates over the next couple of years.



Figure 12 – Alibaba 2015-2019 China commerce retail GMV
Source: Company Data

Regarding China commerce retail, we deeper estimate that its revenue equals Gross Merchandise Volume (GMV) times monetization rate. GMV is the value of confirmed orders of products and services on Chinese retail marketplaces, regardless of how or whether the buyer and seller settle the transaction. Monetization rate refers to revenue expressed as a percentage of GMV for a given period. During 2015 and 2019, both Alibaba's GMV and monetization rate went through constant growth, leading to significant growth of its China commerce retail revenues. As the past GMV data can be well explained by a linear regression ($R^2=0.948$), we forecast future GMV based on that, meaning that it will grow steadily every year. As for monetization rate, we assume that the growth rate will go through a linear reduction from 18% in 2019 to 3% in 2025 and will keep stable until 2029.

Another segment that drives our attention is cloud computing. Alibaba's cloud computing service has grown rapidly since 2017 and is now one of the most important players in Asia-Pacific, even globally. Alibaba mainly operates in Infrastructure as a Service (IaaS) and Platform as a Service (PaaS) markets, and among them IaaS revenue accounts for approximately 96% of overall cloud computing revenue in 2018. We assume that the weight of IaaS and PaaS will not significantly change until 2025. Further, we assume that due to the rapid market change and the entry of new and well-funded competitors, every year Alibaba will find it harder to grow and extend its market share thus both its IaaS and PaaS revenue growth rates will drop to 2025 global vendor revenue growths respectively and will keep those rates until 2029.

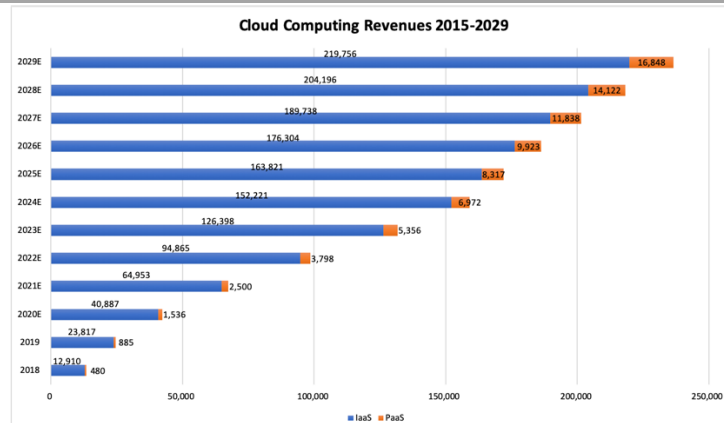


Figure 13 – Alibaba Cloud Computing Revenues 2018-2029 (in millions of RMB)
Source: Company Data, Authors estimates

commerce retail, international commerce wholesale, Cainiao Logistics services, local consumer services, others, digital media and entertainment, innovation initiatives and others – the forecast we made is mainly based on historical revenue growth rate since 2015 and respective global/China forecast growth rate.

	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
(in RMB millions, except per share data)	High growth period					Low growth period				
Core business										
Revenue	506,977	666,025	846,678	1,039,096	1,230,541	1,393,629	1,576,520	1,782,801	2,016,848	2,284,014
Core Commerce:										
China commerce retail	322,437	410,833	504,969	599,945	689,875	768,417	850,666	936,763	1,026,857	1,121,099
China commerce wholesale	13,739	18,643	24,950	32,926	42,838	54,936	70,451	90,347	115,862	148,583
International commerce retail	26,033	33,489	41,583	49,775	59,580	71,318	85,367	102,185	122,315	146,411
International commerce wholesale	9,858	11,646	13,458	15,206	16,791	18,109	19,531	21,064	22,717	24,501
Cainiao logistics services	22,179	30,385	41,627	57,029	78,130	95,319	116,289	141,872	173,084	211,162
Local consumer services	25,281	34,112	44,298	55,279	66,180	75,876	86,991	99,736	114,347	131,099
Others	9,050	14,728	21,946	29,691	36,096	38,930	41,986	45,281	48,836	52,670
Total Core Commerce	428,578	553,835	692,831	839,851	989,491	1,122,904	1,271,280	1,437,248	1,624,018	1,835,524
Cloud computing	42,423	67,454	98,663	131,754	159,193	172,138	186,226	201,576	218,318	236,604
Digital media and entertainment	29,631	36,466	44,878	55,231	67,971	83,651	102,947	126,695	155,921	191,889
Innovation initiatives and others	6,345	8,270	10,307	12,260	13,885	14,936	16,067	17,282	18,590	19,997

Figure 14 – Revenue Forecast by Segment (in millions of RMB)
Source: Authors estimates

Operational Costs Forecast

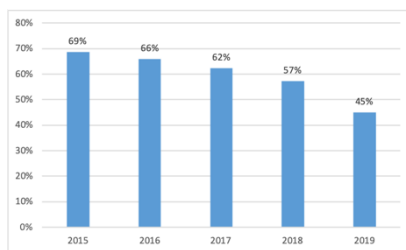


Figure 15 – Gross Margin 2015-2019

Source: Company data

Like other companies, Alibaba’s operational costs mostly come from costs of revenue. During 2015 and 2019, gross margin has decreased from 69% to 45%, possibly because of intense competition both in domestic and global markets. As Alibaba will have to face more and more competitors in all segment markets, we assume that its gross margin will gradually decrease in the future. Different segments’ costs and expenses will increase in proportion to their revenue growths, the costs structure in terms of segments is not expected to go through significant changes in next 10 years.

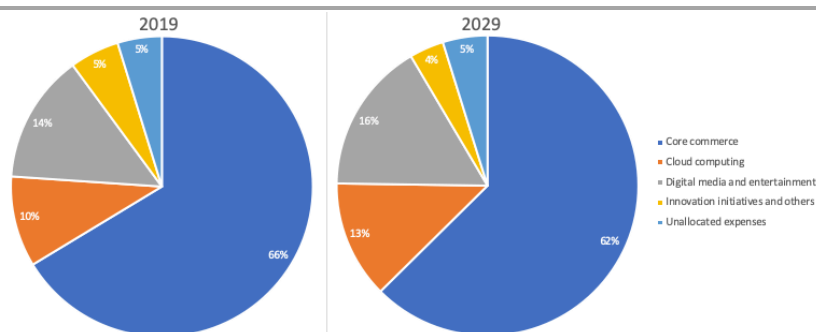


Figure 16 – Operating costs allocation by segment, 2019 VS 2029

Source: Company data, authors estimates

As for other expenses, such as product development expenses, sales and marketing expenses and general and administrative expenses, we assume that they will grow in proportion to company's total revenues.

	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Sum of cost of revenue, SG&A and other expenses	(413,115)	(545,416)	(696,416)	(856,717)	(1,013,685)	(1,163,246)	(1,314,015)	(1,485,435)	(1,681,517)	(1,907,170)
Cost of revenue	(268,511)	(358,383)	(461,206)	(568,973)	(671,174)	(716,804)	(810,688)	(916,992)	(1,038,238)	(1,177,987)
Gross Margin	47%	46%	46%	45%	45%	49%	49%	49%	49%	48%
Product development expenses	(50,362)	(66,162)	(84,108)	(103,222)	(122,240)	(194,915)	(220,494)	(249,345)	(282,079)	(319,445)
Sales and marketing expenses	(53,517)	(70,306)	(89,376)	(109,688)	(129,897)	(147,113)	(166,419)	(188,194)	(212,900)	(241,103)
General and administrative expenses	(40,724)	(50,565)	(61,726)	(74,834)	(90,375)	(104,414)	(116,413)	(130,904)	(148,300)	(168,635)

Figure 17 – Costs Forecast 2020-2029 (in millions of RMB)

Source: Company data, authors estimates

Tax Reconciliation Forecast

Under the PRC Enterprise Income Tax (EIT) Law, the statutory enterprise income tax rate is 25%. In the adjustments to the reported tax, there are some items that we made special estimation. Under Chinese tax regulations, Chinese companies operating in the high-technology and software industry that meet relevant requirements may enjoy several kinds of tax reduction and tax holidays. Tmall China, Taobao China and Alibaba China were recognized as Key Software Enterprises and enjoy corresponding tax reduction policies. These three companies mainly operate in China commerce retail and wholesale segments, so we forecast the effect tax holiday and preferential tax benefit as a certain percentage of China commerce retail and China commerce wholesale revenue.

Pursuant to the EIT Law, all dividends declared by companies in China to their non-resident enterprise investors are subject to withholding tax. Considering that Alibaba is a Cayman Islands holding company and itself has no de facto business activities, it generates revenues mainly from dividends paid by subsidiaries. The withholding tax is expected to be related with Alibaba's total revenues.

	2015	2016	2017	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Statutory Tax Rate	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%
Reported Taxes	(6,416)	(8,448)	(13,776)	(18,199)	(16,533)	(8,477)	(10,444)	(11,204)	(12,399)	(14,395)	(5,499)	(6,788)	(7,875)	(9,037)	(10,251)
Core Taxes computed at statutory ETR rate (25%)	(5,744)	(7,276)	(12,014)	(17,329)	(14,271)	(19,139)	(24,468)	(30,340)	(36,727)	(43,712)	(45,703)	(52,172)	(59,127)	(66,621)	(74,719)
Adjustments to core taxes:															
Effect of different tax rates available to different jurisdictions	(93)	869	772	(992)	1,568	557	557	557	557	557	557	557	557	557	557
Effect of tax holiday and preferential tax benefit on assessable profits of subsidiaries incorporated in the PRC	5,881	6,680	10,507	14,782	17,687	26,894	34,958	42,395	50,630	58,617	65,868	73,689	82,169	91,418	101,575
Tax savings from additional deductions on certain research and development expenses available for subsidiaries incorporated in the PRC	1,096	1,205	1,694	2,330	5,774	5,501	7,227	9,187	11,275	13,353	21,291	24,085	27,237	30,812	34,894
Withholding tax on the earnings distributed and anticipated to be reinvested	(1,898)	(1,573)	(3,093)	(6,393)	(3,954)	(10,140)	(13,320)	(16,934)	(20,782)	(24,611)	(27,873)	(31,530)	(35,656)	(40,197)	(45,880)
Change in valuation allowance, deduction of certain share-based compensation expense and others	(12)	(27)	(2,643)	(5,845)	(5,405)	(4,826)	(6,314)	(8,027)	(9,851)	(11,666)	(13,312)	(14,946)	(16,591)	(18,229)	(19,853)
Total Core (Recomputed) Taxes	(790)	(652)	(4,663)	(8,443)	2,209	(1,210)	(1,961)	(1,540)	(4,496)	(7,463)	929	(9,379)	(12,712)	(16,282)	(19,827)
Non-Core Taxes computed at statutory ETR rate (25%)	(2,985)	(13,578)	(3,661)	(8,664)	(11,082)	(8,771)	(9,379)	(10,032)	(10,734)	(11,490)	(12,303)	(13,177)	(14,117)	(15,120)	(16,217)
Adjustment: Non-deductible expenses and non-taxable income, net	(1,368)	4,994	(6,090)	(1,780)	(8,168)	(2,882)	(2,882)	(2,882)	(2,882)	(2,882)	(2,882)	(2,882)	(2,882)	(2,882)	(2,882)
Total Non-Core Taxes	(6,353)	(8,584)	(9,751)	(10,444)	(13,250)	(11,654)	(12,261)	(12,914)	(13,617)	(14,372)	(15,185)	(16,059)	(17,000)	(18,011)	(19,100)
Financial Tax Shield	688	487	668	892	1,298	3,310	3,779	4,819	6,316	7,440	8,797	9,988	10,846	12,266	13,876
Effective Core Business Tax Rate	3%	1%	18%	22%	2%	2%	2%	3%	3%	4%	4%	5%	5%	5%	5%

Figure 18 – Tax consideration, 2015-2029

Source: Company data, authors estimates

Capital Expenditure

The book value of property, equipment and land use rights as percentage of total revenue rose from 2015 to 2018 and decreased for the first time in the past 5 years in fiscal year 2019. As business matures, investment pace in tangible assets is likely to mitigate comparing with total revenue. As lighter segments such as cloud computing and new retail business are developing rapidly and increasing their weight in the company’s business profile, for the forecast period, we assume that value of PP&E will grow gradually, but at a smaller weight of group’s total revenue comparing to 2018 and 2019.

Net Working Capital and Other Assets

As for receivables, average collection period has been in a small range between 88 and 106 in the past 5 years. However, regarding accounts payable, average payable periods has dropped significantly in 2019, meaning that Alibaba needs to pay its outstanding accounts earlier than before, which affects the company’s cash holding position. For the forecast period we estimate both those periods as average number of the last 5 years, given that from 2015 to 2018, both of the periods did not change significantly.

Alibaba has made and intends to continue to make strategic investments and acquisitions to strengthen their business economy and create strategic synergies. For example, in fiscal year 2019, Ele.me, a leading on-demand delivery and local services platform in China became Alibaba’s consolidated subsidiary, which is expected to contribute to the future growth of local consumer services segment. Therefore, we assume that at least in the short term, Alibaba’s goodwill will increase at a high growth. After the high growth period (2020-2024), the economy will tend to mature and goodwill may grow at a relatively small rate.

In addition, we assume from historic data that all other components of net working capital and other assets will increase gradually so that net working capital and other assets went through a steady growth from 2015 to 2018 and is expected to keep on increasing in the future.

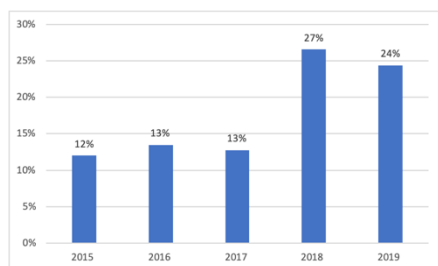


Figure 19 – PP&E as % of total revenues, 2015-2019

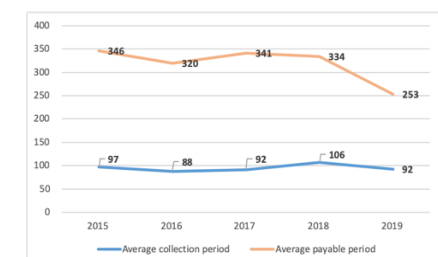


Figure 20 – Average Collection/Payable Period (in days)

Source: Company data; authors estimates

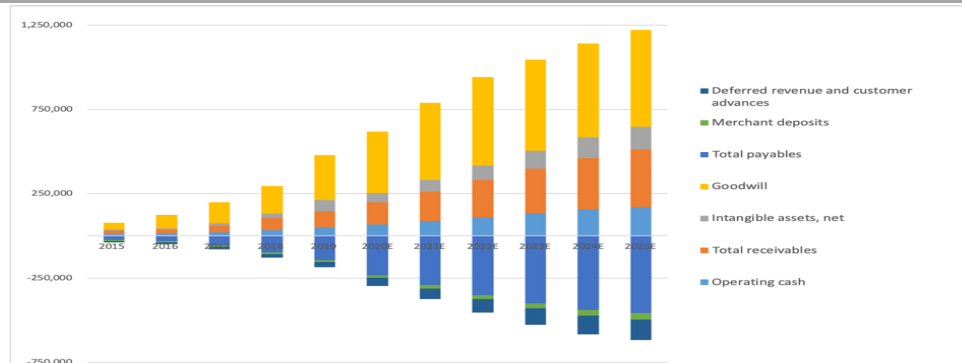


Figure 21 – Net working capital and other assets (in millions RMB)

Source: Company data; authors estimates

WACC Calculation

For the WACC calculations, we started by computing the Beta using 2-year periods of weekly data from the past 4 years and computing the average of all those 2-year periods coming up with both an average Beta value and a 95% confidence interval. With a Beta of approximately 1.39 (and 95% confidence interval of [1.03 ; 1.73]), an Equity Risk Premium of 5.6% (US Market Risk Premium in 2019 since Alibaba is listed on the NASDAQ for international investors) and a risk-free rate of 3.16% (10y Chinese treasury bond rate) this leads to an expected cost of equity of 10.9%. For the cost of debt, we used the risk-free rate and the default spread correspondent to the credit rating of Alibaba and arrived at a cost of debt of 4.4%. Coupling the data mentioned above with the debt-to-equity ratio of the firm of 0.126 and the statutory corporate tax-rate in China of 25% we arrive at a WACC of 10.1% (95% Confidence Interval: [8.3%; 12%]).

Valuation Result

Assuming a growth rate in perpetuity of 7.6%, which is the Chinese economy growth rate, this leads us to conclude that the Net Present Value of Alibaba is RMB 4483.87 billion, with RMB 3936.91 billion of those attributed to the Discounted Terminal Value. With an estimated debt of RMB 116.873 billion, this implies an equity value of RMB 4367.00 billion. At an RMB-USD exchange rate of 0.14 (as of 2nd January 2020) and 2,623 million shares outstanding, the result implies a price per share of USD 233.08. With expected total return of 9.9%, the results would suggest a hold strategy.

Financials

As far as financials are concerned, Alibaba has a P/E ratio of 29.3 while competitors ratios range from 17.6 to 92.0, positioning Alibaba on the low side of this interval, nonetheless this multiple is very sensitive to expected growth rates and therefore not all of these comparables are useful for comparing P/E multiples (as an example Walmart has much smaller growth potential than Alibaba and that will have a big effect on the P/E ratio, and companies like JD although exposed to the Chinese economy as well, are very small to be compared to Alibaba in its potential for future growth). Because of this factor it is important to compare Alibaba with the most similar comparables in terms of growth prospectus, and that would only be Tencent, since it has similar geographic exposure to the Chinese market whose economic growth is very different from the US and European markets, and also has similar market size. When comparing the PE ratio of Alibaba of 29.29 with Tencent's of 31.53 we can see that Alibaba seems to be fairly priced; Alibaba has an EV/Sales ratio of 7.85 while competitors' range between 0.52 and 8.51. Having an EV/Sales ratio on the high end of the range suggests Alibaba may be highly overvalued, which we believe is not the case, since some of those competitors such as Walmart have enormous sales revenues (more than USD 500bn) but very thin margins and low growth potential when compared to Alibaba, so we believe this metric does not represent accurately the company value if we look at all the comparables. But if we look again just at the Tencent multiple (8.51), we can see that Alibaba (7.85) seems again fairly priced; Alibaba has a EV/EBITDA of 24.3 while competitors range from 11.0 to 27.6, being on the high end of this metric. Given the high potential for growth in EBITDA we do not believe this metric accurately represents the picture of the company when using all comparables data. But again, if we look for companies that are the most similar to Alibaba and have the most similar EBITDA margins (Alibaba has 18% EBITDA margin) such as Amazon (13% EBITDA margin) and Tencent (32% EBITDA margin), we can see that Alibaba seems to be fairly priced with an EV/EBITDA of 24.27, between the EV/EBITDA of Amazon at 25.2 and the EV/EBITDA of Tencent at 23.7.

Below (see Figure 22) are highlighted the different financial metrics for Alibaba and its competitors as well as valuations implied by each metric.

Figure 22 – Multiple ratios compared to peers (in USD m as of 22 Nov, except ratios)
Source: Bloomberg

Multiple	Peers Average	Metric	Implied EV
EV/EBITDA	20.6	17,072	351,740
P/E	44.21	11,422	504,949
EV/Sales	4.07	52,758	214,835

Company	Mkt Cap	Enterprise Value	Sales	EBITDA	EV/Sales	EV/EBITDA	P/E
Alibaba	441,253	414,307	52,758	17,072	7.85	24.27	29.29
Amazon	852,995	877,611	252,063	34,820	3.48	25.2	71.09
JD	41,896	37,272	71,535	1,349	0.52	27.63	91.99
Walmart	330,818	398,801	517,989	33,772	0.77	11.81	23.75
Ebay	31,525	35,749	10,856	3,247	3.29	11.01	17.59
Tencent	401,552	404,994	47,569	17,087	8.51	23.7	31.53

Appendix

Financial Statements

(in RMB millions, except per share data)	Forecast of Reformulated Income Statement														
	Year ended March 31,														
	2015	2016	2017	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Revenue	76,204	101,143	158,273	250,266	376,844	506,977	666,025	846,678	1,039,096	1,230,541	1,393,629	1,576,520	1,782,801	2,016,848	2,284,014
Core Commerce:															
China commerce retail	59,732	80,033	114,109	176,559	247,615	322,437	410,833	504,969	599,945	689,875	768,417	850,666	936,763	1,026,857	1,121,099
China commerce wholesale	3,205	4,288	5,679	7,164	9,988	13,739	18,643	24,950	32,926	42,838	54,936	70,451	90,347	115,862	148,583
International commerce retail	1,768	2,204	7,336	14,216	19,558	26,033	33,489	41,583	49,775	59,580	71,318	85,367	102,185	122,315	146,411
International commerce wholesale	4,718	5,425	6,001	6,625	8,167	9,858	11,646	13,458	15,206	16,791	18,109	19,531	21,064	22,717	24,501
Cainiao logistics services	0	0	0	6,759	14,885	22,179	30,385	41,627	57,029	78,130	95,319	116,289	141,872	173,084	211,162
Local consumer services	0	0	0	0	18,058	25,281	34,112	44,298	55,279	66,180	75,876	86,991	99,736	114,347	131,099
Others	113	385	755	2,697	5,129	9,050	14,728	21,946	29,691	36,096	38,930	41,986	45,281	48,836	52,670
Total Core Commerce	69,536	92,335	133,880	214,020	323,400	428,578	553,835	692,831	839,851	989,491	1,122,904	1,271,280	1,437,248	1,624,018	1,835,524
Cloud computing	1,271	3,019	6,663	13,390	24,702	42,423	67,454	98,663	131,754	159,193	172,138	186,226	201,576	218,318	236,604
Digital media and entertainment	2,191	3,972	14,733	19,564	24,077	29,631	36,466	44,878	55,231	67,971	83,651	102,947	126,695	155,921	191,889
Innovation initiatives and others	3,206	1,817	2,997	3,292	4,665	6,345	8,270	10,307	12,260	13,885	14,936	16,067	17,282	18,590	19,997
Cost of revenue, SG&A and other expenses per business segment															
Cost of revenue	(23,834)	(34,355)	(59,483)	(107,044)	(206,929)	(268,511)	(358,383)	(461,206)	(568,973)	(671,174)	(716,804)	(810,688)	(916,992)	(1,038,238)	(1,177,987)
Product development expenses	(10,658)	(13,788)	(17,060)	(22,754)	(37,435)	(50,362)	(66,162)	(84,108)	(103,222)	(122,240)	(194,151)	(220,494)	(249,345)	(282,079)	(319,445)
Sales and marketing expenses	(8,513)	(11,307)	(16,314)	(27,299)	(39,780)	(53,517)	(70,306)	(89,376)	(109,688)	(129,897)	(147,113)	(166,419)	(188,194)	(212,900)	(241,103)
General and administrative expenses	(7,800)	(9,205)	(12,239)	(16,241)	(24,889)	(40,724)	(50,365)	(61,726)	(74,834)	(90,375)	(104,414)	(116,413)	(130,904)	(148,300)	(168,635)
Amortization of intangible assets	(2,089)	(2,931)	(5,122)	(7,120)	(10,727)	(17,306)	(22,735)	(28,902)	(35,470)	(42,006)	(47,573)	(53,816)	(60,857)	(68,847)	(77,967)
Impairment of goodwill	(175)	(455)	0	(494)	0	0	0	0	0	0	0	0	0	0	0
Core business results before tax	23,135	29,102	48,055	69,314	57,084	76,557	97,873	121,361	146,909	174,850	182,810	206,900	236,508	266,484	298,777
Adjusted taxes	(750)	(352)	(4,693)	(8,647)	1,399	(1,133)	(1,961)	(3,163)	(4,898)	(7,462)	929	(317)	(1,722)	(3,291)	(5,027)
OCI: foreign currency translation	52	333	(2,147)	(805)	1,068	(1,011)	(1,328)	(1,689)	(2,073)	(2,454)	(3,780)	(5,145)	(6,233)	(6,558)	
Core results	22,437	29,084	41,215	59,863	59,551	74,413	94,584	116,509	139,938	164,933	180,960	205,228	231,230	259,170	289,295
Non core business															
Interest and investment income, net	9,455	52,254	8,559	30,495	44,106	32,085	34,514	37,126	39,935	42,958	46,209	49,706	53,467	57,514	61,866
Other income, net	2,486	2,058	6,086	4,160	221	3,002	3,002	3,002	3,002	3,002	3,002	3,002	3,002	3,002	3,002
Non core business results before tax	11,941	54,312	14,645	34,655	44,327	35,088	37,516	40,128	42,937	45,960	49,211	52,708	56,470	60,516	64,869
Adjusted taxes	(6,353)	(8,584)	(9,751)	(10,444)	(19,250)	(11,654)	(12,261)	(12,914)	(13,617)	(14,372)	(15,185)	(16,059)	(17,000)	(18,011)	(19,100)
Share of results of equity investees	(1,590)	(1,730)	(5,027)	(20,922)	566	(5,715)	(5,715)	(5,715)	(5,715)	(5,715)	(5,715)	(5,715)	(5,715)	(5,715)	(5,715)
OCI: Available-for-sale securities	3,102	1,433	2,105	1,211	0	1,570	1,570	1,570	1,570	1,570	1,570	1,570	1,570	1,570	1,570
OCI: Share of other comprehensive income of equity method investees	0	0	780	(930)	582	0	0	0	0	0	0	0	0	0	0
Non core results	7,100	45,431	2,752	3,700	25,225	19,289	21,110	23,069	25,176	27,443	29,881	32,504	35,225	38,360	41,625
Financing															
Interest expense	(2,750)	(1,946)	(2,671)	(3,566)	(5,190)	(13,240)	(15,114)	(19,491)	(24,463)	(29,758)	(35,027)	(38,352)	(43,385)	(49,062)	(55,503)
Adjusted taxes	688	487	668	892	1,298	3,310	3,779	4,873	6,116	7,440	8,757	9,588	10,846	12,266	13,876
OCI: Interest rate swaps under hedge accounting and others	(36)	0	433	143	(295)	0	0	0	0	0	0	0	0	0	0
OCI: Forward exchange contracts under hedge accounting	0	(168)	169	(85)	0	0	0	0	0	0	0	0	0	0	0
Financial results	(2,099)	(1,627)	(1,401)	(2,616)	(4,187)	(9,930)	(11,336)	(14,618)	(18,347)	(22,319)	(26,270)	(28,764)	(32,539)	(36,796)	(41,627)
Comprehensive Result	27,439	72,887	42,566	60,946	81,589	83,771	104,358	124,960	146,768	170,058	184,571	208,968	234,017	260,734	289,292

(in RMB millions, except per share data)	Forecast of Reformulated Balance Sheet														
	Year ended March 31,														
	2015	2016	2017	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Core Invested Capital															
Operating cash	9,990	13,260	20,750	32,810	49,404	66,465	87,316	111,000	136,226	161,324	182,705	206,682	233,725	264,409	299,434
Total receivables	20,195	24,381	39,766	72,919	95,126	131,927	173,314	220,324	270,396	320,214	362,653	410,245	463,924	524,828	594,351
Property and equipment, net	9,139	13,629	20,206	66,489	92,030	90,468	118,849	151,086	185,422	219,585	248,687	281,323	318,133	359,898	407,573
Land use rights	3,105	2,876	4,691	-	-	-	-	-	-	-	-	-	-	-	-
Intangible assets, net	6,575	5,370	14,108	27,465	68,276	52,668	69,191	87,959	107,948	127,837	144,779	163,779	185,209	209,524	237,279
Goodwill	41,933	81,645	125,420	162,149	264,935	375,937	507,634	650,613	789,193	903,105	971,452	1,044,971	1,124,054	1,209,123	1,300,629
Total payables	22,567	30,124	55,633	97,907	143,646	234,560	313,068	402,890	497,030	586,308	697,591	826,764	963,558	1,109,724	1,267,735
Merchant deposits	7,201	7,314	8,189	9,748	10,762	14,478	19,020	24,180	29,675	35,142	39,800	45,023	50,914	57,598	65,227
Deferred revenue and customer advances	7,914	10,297	15,052	22,297	30,795	47,815	62,816	79,854	98,002	116,058	131,439	148,689	168,144	190,218	215,415
Deferred revenue, non-current	(36)	0	433	143	(295)	0	0	0	0	0	0	0	0	0	0
Deferred tax liabilities	4,493	6,471	10,154	19,312	22,517	32,853	43,160	54,867	67,336	79,742	90,310	102,162	115,530	130,696	148,009
Other liabilities	2,150	2,166	1,290	2,045	6,187	8,352	10,972	13,948	17,118	20,272	22,958	25,971	29,369	33,225	37,626
Total Core Invested Capital	46,167	84,371	133,982	209,700	354,397	377,432	504,676	641,948	775,980	889,752	1,122,752	1,216,256	1,317,592	1,427,470	1,546,361
Non Core Invested Capital															
Total Non Core Invested Capital	66,294	129,731	158,885	188,793	254,733	171,772	184,772	198,756	213,797	229,978	247,382	266,104	286,243	307,906	331,208
Total Invested Capital	112,461	214,102	292,867	398,493	609,130	549,204	689,448	840,704	989,777	1,119,730	1,370,135	1,482,360	1,603,835	1,735,375	1,877,569
Financial Assets															
Excess cash	98,203	93,558	122,986	166,499	140,572	409,475	522,573	668,561	856,273	1,096,887	1,194,423	1,504,881	1,857,671	2,257,171	2,708,854
Bank borrowings	3,599	6,175	36,907	40,181	42,783	53,939	62,591	72,418	82,885	93,299	75,810	85,758	96,979	109,711	124,244
-Short-term other borrowings	1,990	4,304	5,948	6,028	7,356	15,195	19,961	25,376	31,143	36,880	41,768	47,250	53,432	60,447	68,454
-US\$4.0 billion syndicated loan denominated in US\$	0	0	27,346	24,957	26,780	26,361	2								

Cash Flow Map																							
(Currency: RMB in millions)	2015	2016	2017	2018	2019	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E								
Core Businesses																							
Total Revenues	76,204	101,143	158,273	250,266	376,844	506,977	666,025	846,678	1,039,096	1,230,541	1,393,629	1,576,520	1,782,801	2,016,848	2,284,014								
Cost of revenue and other expenses	-50,805	-68,655	-105,096	-173,338	-309,033	-413,115	-545,416	-696,416	-856,717	-1,013,685	-1,163,246	-1,314,015	-1,485,435	-1,681,517	-1,907,170								
EBITDA	25,399	32,488	53,177	76,928	67,811	93,863	120,609	150,263	182,380	216,856	230,383	262,505	297,366	335,331	376,844								
Amortization of intangible assets	-2,089	-2,931	-5,122	-7,120	-10,727	-17,306	-22,735	-28,902	-35,470	-42,006	-47,573	-53,816	-60,857	-68,847	-77,967								
Impairment of goodwill	(175)	(455)	0	(694)	0	0	0	0	0	0	0	0	0	0	0								
EBIT	23,135	29,102	48,055	69,314	57,084	76,557	97,873	121,361	146,909	174,850	182,810	208,690	236,508	266,484	298,877								
Tax	(750)	(352)	(4,693)	(8,647)	1,399	(1,133)	(1,961)	(3,163)	(4,898)	(7,462)	929	(317)	(1,722)	(3,291)	(5,027)								
NOPLAT	22,385	28,751	43,362	60,668	58,483	75,424	95,913	118,198	142,011	167,388	183,740	208,373	234,786	263,193	293,850								
Depreciation	2,326	3,770	5,284	8,789	14,962	16,744	21,996	27,963	34,317	40,640	46,026	52,067	58,879	66,609	75,432								
Operational Cash Flow	24,711	32,521	48,646	69,457	73,445	92,167	117,909	146,161	176,328	208,028	229,766	260,439	293,666	329,802	369,283								
Invested Capital - fixed assets	12,244	16,505	24,897	66,489	92,030	90,468	118,849	151,086	185,422	219,585	248,687	281,323	318,133	359,898	407,573								
Gross Capex	4,261	8,392	41,592	25,541	-	1,562	28,381	32,237	34,336	34,162	29,102	32,636	36,810	41,765	47,675								
Net Capex	8,031	13,676	50,381	40,503	15,182	50,378	60,199	68,654	74,803	75,129	84,703	95,689	108,374	123,107	137,107								
ΔNWC+ΔOther Assets	35,910	44,249	44,391	126,977	37,604	112,409	120,421	116,084	95,915	217,788	76,444	88,400	82,095	88,046	93,971								
ΔOther Liabilities	-	1,967	-	3,030	-	10,265	-	7,821	-	13,008	-	15,386	-	16,388	-	16,388							
Investment Cash Flow	41,974	54,895	84,507	159,659	39,778	149,240	165,235	168,349	154,412	279,026	145,570	160,216	176,486	194,324									
Free Cash Flow Core Activities	-	9,453	-	6,248	-	15,051	-	86,214	52,389	-	31,332	-	19,074	7,979	53,615	-	49,261	114,869	133,450	153,315	174,959		
Non core business																							
Interest and investment income, net	9,455	52,254	8,559	30,495	44,106	32,085	34,514	37,126	39,935	42,958	46,209	49,706	53,467	57,514	61,866								
Other income, net	2,486	2,058	6,086	4,160	221	3,002	3,002	3,002	3,002	3,002	3,002	3,002	3,002	3,002	3,002								
Adjusted taxes	-6,353	-8,584	-9,751	-10,444	-19,250	-11,654	-12,261	-12,914	-13,617	-14,372	-15,185	-16,059	-17,000	-18,011	-19,100								
Share of results of equity investees	-1,590	-1,730	-5,027	-20,792	566	-5,715	-5,715	-5,715	-5,715	-5,715	-5,715	-5,715	-5,715	-5,715	-5,715								
Non Core results	5,588	45,728	4,894	24,211	25,077	23,433	25,254	27,213	29,321	31,587	34,026	36,648	39,470	42,505	45,769								
Non Core Capital	66,294	129,731	158,885	188,793	254,733	171,772	184,772	198,756	213,797	229,978	247,382	266,104	286,243	307,906	331,208								
ΔNon Core Invested Capital		63,437	29,154	29,908	65,940	-82,961	13,000	13,984	15,042	16,180	17,405	18,722	20,139	21,663	23,302								
Free Cash Flow Non Core Activities	-17,709	-24,260	-5,697	-40,863	106,394	12,255	13,230	14,279	15,407	16,621	17,927	19,331	20,842	22,467									
Free Cash Flow Company	-27,162	-30,509	-20,748	-127,077	158,783	-19,077	-5,844	22,258	69,022	-32,640	132,796	152,781	174,157	197,425									
Financing																							
Financial results less OCI	(2,063)	(1,459)	(2,003)	(2,674)	(3,892)	(9,930)	(11,336)	(14,618)	(18,347)	(22,319)	(26,270)	(28,764)	(32,539)	(36,796)	(41,627)								
Net Financial Assets	(32,978)	(2,885)	14,068	32,671	116,873	(66,746)	(80,594)	(113,849)	(181,486)	(302,634)	(324,760)	(521,088)	(745,153)	(998,602)	(1,283,565)								
Investment in financial assets	30,093	16,953	18,603	84,202	(183,619)	(13,848)	(33,255)	(67,637)	(121,148)	(22,126)	(196,329)	(224,065)	(253,449)	(284,963)	(324,963)								
Equity	145,439	216,987	278,799	365,822	492,257	615,951	770,042	954,553	1,171,264	1,422,364	1,694,894	2,003,448	2,348,988	2,733,977	3,161,134								
ΔEquity		71,548	61,812	87,023	126,435	123,694	154,092	184,511	216,711	251,100	272,530	308,554	345,540	384,989	427,157								
Comprehensive Income	27,439	72,887	42,566	60,946	81,589	83,771	104,358	124,960	146,768	170,058	184,571	208,968	234,017	260,734	289,292								
Less: OCI	-	3,118	-	1,598	-	1,340	466	-	1,355	-	559	-	242	119	502	884	1,210	1,574	1,986	2,453	2,985		
Less: Share of results of equity investees	-	1,590	-	1,730	-	5,027	-	20,792	566	-	5,715	-	5,715	-	5,715	-	5,715	-	5,715	-	5,715	-	5,715
Financing Cash Flows	27,162	30,509	20,748	127,077	(158,783)	19,077	5,844	(22,258)	(69,022)	32,640	(132,796)	(152,781)	(174,157)	(197,425)									
<i>check with free cash flows</i>		TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE								

Financial Results	
WACC	10.1%
Terminal Value 2025	8,483,044
Discounted Terminal Value	3,936,906
NPV	4,483,870
Debt	116,873
Equity Value	4,366,996
# shares outstanding	2,623
Price	1,664.89
RMB-USD conversion Factor (22/11/2019)	0.14
Price per share (in USD)	233.08

Disclosures and Disclaimers

Report Recommendations

Buy	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
Hold	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
Sell	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

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A Work Project presented as part of the requirements for the Award of a Master's degree in Finance from the Nova School of Business and Economics.

Equity Research on Alibaba Group: Global Leading commerce Retail Company with high Growth

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25508

Work project carried out under the supervision of:
Prof. Rosário André

03-01-2020

Abstract

Looking back to Alibaba's past history, the company has always shown its interest in being listed in Hong Kong, even in 2019, when the city's economy was negatively affected by social unrest events. In this report I analyze motivations for Alibaba Group's dual listing on Hong Kong stock exchange. By analyzing the historical data of another Chinese dual-listing company, China Unicom, and Alibaba's current situation, I discuss the difference in value that might occur to Alibaba's stock prices in Nasdaq and in Hong Kong, the risks that Alibaba might face and the benefits expected in the long-term.

Keywords

Alibaba, dual-listing, IT, Hong Kong

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Individual Report

Recently, Alibaba announced on November 15th, 2019 to launch its Hong Kong Public Offering. The offering comprises 500,000,000 new ordinary shares, including 12,500,000 new shares under the Public Retail Offering and 487,500,000 new shares under International Offering. Alibaba was listed on the Main Board of The Stock Exchange of Hong Kong Limited (the “SEHK”) under the stock code “9988” on 26th November 2019.

According to the Alibaba disclosure, Alibaba’s American depository shares (ADSs) will continue to be traded on the New York Stock Exchange. Upon listing, the Hong-Kong listed shares will be fully fungible with the ADSs and each share of ADS will represent 8 ordinary shares of Alibaba listed in Hong Kong. Upon listed in Hong Kong, Alibaba has become the first Chinese Internet company to be dual listed in both United States and China. On 20th November, Alibaba announced that the final offer price for all 500,000,000 shares was set at HK\$176 per share.

Given that Hong Kong has been in a series of anti-government protests and demonstrations since June 2019, the ongoing unstable political and social environment, as well as the significant economic recession in Hong Kong should have caused many companies afraid of entering into its stock market. Actually, Hong Kong stock change has indeed witnessed a substantial decline since the protests. In October, total turnover value was 1,589,877 million HK\$ and was 19.86% less than October 2018. Aside from that, also in October, number of deals met a 18.56% YoY decrease.ⁱ

Figure 1: Hong Kong Exchange Monthly Bulletin (Main Board)

	Oct-19	Oct-18	YoY change (%)
No. of listed companies	2,030.0	2,898.0	
No of listed securities	12,715.0	13,032.0	
No. of newly listed companies	20.0	14.0	
Turnover value (HK\$mil)	1,589,877	1,983,893	-19.86%
-Daily average	75,708	94,471	
Turnover volume (mil shares)	4,317,318	5,524,694	-21.85%
-Daily average	205,587	263,081	
No. of deals	26,505,047	32,543,850	-18.56%
-Daily average	1,262,145	1,549,707	
Market capitalisation (HK\$mil)	31,681,256	28,597,958	10.78%
Average P/E ratio (times)	11.06	10.08	
Average yield (%)	3.18	3.47	

Source: www.hkex.com.hk

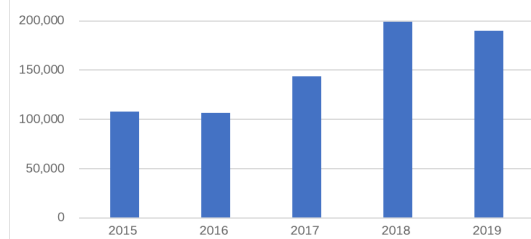
Figure 2: 6M return, HK exchange (red) vs Nasdaq (blue) vs S&P 500 (grey)



Source: Yahoo finance

As Alibaba disclosed, the company plans to use the proceeds from the offering for the implementation of its strategies of driving user growth and engagement, empowering business to facilitate digital transformation, and continuing to innovate and invest for the long more funding to enhance its growth, especially in local consumer services, logistics and cloud

Figure 3: Cash and cash equivalents 2015-2019



Source: Company data

computing segments. On the other hand, however, the company has been holding large amount of cash for years, indicating that Alibaba's funding needs should not be urgent. Taking into consideration Hong Kong city's current situation,

it seems not yet to be the best time for Alibaba to

be listed in Hong Kong now. However, looking back at the group's history, we can find some clues that it is not the first time Alibaba shows its strong preference to Hong Kong stock market.

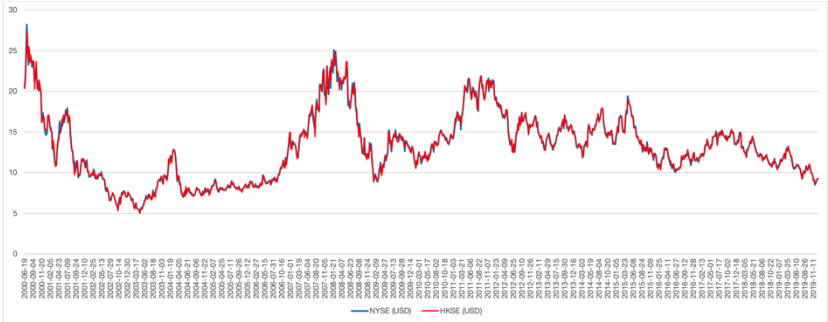
In 2007, Alibaba listed its B2B business in Hong Kong and raised 11.6 billion HK\$, making it a record financing among Chinese Internet enterprises at that time. The company later delisted from Hong Kong stock change in 2012. In 2013, Alibaba had several negotiations with Hong Kong Stock Exchange, with aim to go public entirely in Hong Kong. However, Alibaba's

executives, who together held around 10% of shares, intended to reserve their rights to control a majority of board members, which violated prudent regulations of Hong Kong exchange. In Hong Kong at that time, shareholders' rights should completely match with number of shares they hold, in order to protect minority shareholders. After that Alibaba chose New York, where the rules are more flexible and dual listing is allowed. In April 2018, Hong Kong exchange amended listing rules, permitting listings of companies with weighted voting right (WVR) structuresⁱⁱ, in order to attract more young modern companies who adopt WVR. This finally made it possible for Alibaba and other technology companies to come back. In May 2019, the group once pursued \$20 billion listing in Hong Kongⁱⁱⁱ, which was later delayed because of Hong Kong's unrests. After lowering its target amount, Alibaba finally returned to Hong Kong in end of November, 6 years after they missed each other by the first time.

Though there was no Chinese Internet company go dual listing before Alibaba, several Chinese companies in other industries have been listed both in China and the US, most part of which are state owned giant companies. Historical stock price shows that stocks of a same company in two exchange markets tend to evolve in very similar trends. For example, the historical price trends of China Unicom, a China state-owned dual listed company, in Hong Kong and in the

US, are presented as below, since its dual listing in 2000.

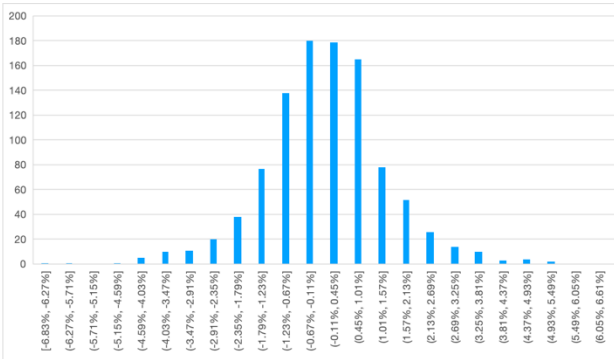
Figure 4: China Unicom stock price change NYSE vs HKSE, 2000-2019



Source: Yahoo finance

Each China Unicom’s ADR share equals 10 shares of Hong Kong stock. After applying currency exchange rate, we can conclude that prices in two stock change markets are very similar (also see figure 5). This is aligned to intuition, because if price values have large

Figure 5: Difference distribution between China Unicom NYSE and HKSE stock price, as % of HKSE price



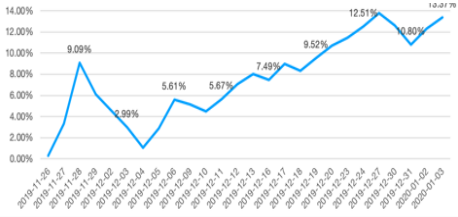
Source: Yahoo finance

difference, investors will flow from one market to another to grab arbitrage opportunity, finally leading to prices in two markets almost the same. Therefore, prices in two markets will move up and down almost simultaneously and will not differ a lot in value, which is also expected to happen to Alibaba.

From Alibaba’s perspective, the company is expected to gain several benefits from listing in Hong Kong. First, dual listing can help to widen the financing channels and reduce their risk of relying on a single market, especially under the unstable economic and political relationships between China and United States since last year. Besides, due to China’s exchange control^{iv} (for example, if a domestic enterprise makes investment in a foreign country, it should apply to its responsible department for examination and approval), Alibaba has limited exposure to China mainland investors if its shares are only traded in Nasdaq. By going public in Hong Kong, it can meet up with capital from mainland China and other parts of Asia more easily, such as Asian sovereign wealth funds and Chinese institutional investors. Also, the 13-hour jet lag between New York and Hong Kong will give opportunity to trade Alibaba’s shares in the other stock market when one is closed, increasing the stock’s liquidity in terms of trading.

As Daniel Zhang, Chairman and CEO of Alibaba stated in his letter to investors on November 15th, during this time of ongoing change, they continue to believe that the future of Hong Kong remains bright. Alibaba hopes to contribute, in their small way, and participate in the future of Hong Kong.^v Alibaba’s entering into Hong Kong at this specific moment may also be considered as an initiative under potential encouragement from Chinese government, in order to raise back outside confidence and trust in Hong Kong market. However, given all the factors discussed above, listing in Hong Kong has actually been planned by Alibaba for years and is expected to benefit the company itself in its long-term operating. The recent price has also proved that, on 28th November 2019, the third day of Alibaba’s listing on Hong Kong stock exchange, its price increased 6.5% from listing price. As for 3rd Jan 2020, the price increased up to 13.4%, raising Alibaba’s market

Figure 6: Alibaba HK listing accumulative return, 26th Nov 2019-3rd Jan 2020



Source: Yahoo finance

capitalization to surpass 4,500bn HKD, being the largest of Hong Kong stock exchange (higher than its competitor Tencent, which is listed in Hong Kong, too).

ⁱ www.hkex.com.hk

ⁱⁱ HKEX. April 2018. “Note to subscribers for the amendments to the rules governing the listing of securities (the "Listing Rules") Update No. 119.” https://www.hkex.com.hk/Listing/Rules-and-Guidance/Listing-Rules-Contingency/Amendments-to-Main-Board-Listing-Rules/2018/Update-No-119?sc_lang=en

ⁱⁱⁱ Williams Mugwagwa. 2019. “Alibaba May Pursue \$20B Hong Kong Listing amid Trade Tension: Report.” <https://www.ccn.com>

^{iv} Lawinfochina. “Regulations of the People’s Republic of China on the Management of Foreign Exchanges (Revised).” <http://www.lawinfochina.com/display.aspx?lib=law&id=512&CGid=>

^v Alibaba Group. November 15, 2019. “Chairman and CEO’s Letter to Investors.” <https://www.alibabagroup.com/en/news/article?news=p191115a>