

2019年5月20日

买入
首次覆盖

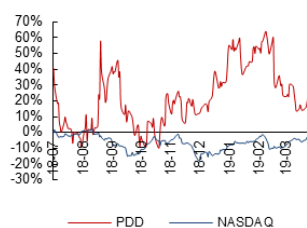
基因独特，空间可人

拼多多(PDD:US)

Market Data: 17 May 2019

Closing Price (US\$)	23
Price Target (US\$)	32
SPX	2912
IXIC	7740
52-week High/Low (HK\$)	33/22
Market Cap (US\$bn)	25.3
Market Cap (Rmbbn)	174.6
Shares Outstanding (Mn)	4460
Exchange Rate (Rmb-US\$)	6.9

Price Performance Chart:



Source: Bloomberg

Analyst

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Financial summary and valuation

	2017	2018	2019E	2020E	2021E
Revenue (Rmbm)	1,744	13,120	27,138	39,643	51,315
YoY (%)	245.5	652.3	106.8	46.1	29.4
Adj. Net income (Rmbm)	-382	-3,456	-4,649	107	5,068
YoY (%)	54.7	1,964.9	(28.7)	(54.5)	(135.8)
Adj. EPS (Rmb)	(0.84)	(4.64)	(3.96)	0.09	4.31
Adj. Diluted EPS (Rmb)	(0.84)	(4.64)	(3.96)	0.09	4.31
ROE (%)	(49.0)	(34.5)	(23.7)	0.6	28.8
Debt/asset (%)	0	0	0	0	0
Dividend Yield (%)	0.0	0.0	0.0	0.0	0.0
P/E (x)	n.a.	n.a.	n.a.	1,703.2	35.8
P/B (x)	226.1	24.3	35.6	42.6	39.8
EV/EBITDA (x)	n.a.	n.a.	n.a.	n.a.	31.7

Note: Diluted EPS is calculated as if all outstanding convertible securities, such as convertible preferred shares, convertible debentures, stock options and warrants, were exercised.

我们首次覆盖拼多多，拼多多已在电商行业 GMV 排名第三，年度活跃用户排名第二。通过社交拼团，单位 SKU 高销量高折扣的模式，PDD 在剩余流量市场中(如低线城市和银发群体)中拥有进一步渗透的优势。我们认为用户数量和购买次数会是公司短期驱动因素，而单价的提升更为长期。我们预测 adj.EP ADS 在 19E 为人民币-4.64 元，20E 为人民币 0.16 元(转为正值)，21E 为人民币 4.35 元(同比 2694%)，并基于 DCF 模型给出目标价格 32 美元。股价仍有 41% 的上涨空间，我们首次覆盖给予买入评级。

基因独特。在淘宝农村和京东前几年的下沉战略收效甚微的情况下，PDD 的崛起教育了低线城市用户如何网上购物和销售商品。农产品已形成独特壁垒，截止 2018 年，PDD 平台上农产品订单金额已经达到 653 亿元人民币(同比增长 233%)，成为中国最大的在线农产品销售渠道，占其 2018 年总 GMV 的 14%。同时，高频高折扣的拼团商业形式促成了 PDD 的独特基因。随着公司品类的扩张，PDD 的市场份额很快从 2016 年的 0% 上升到 2018 年的 5.2%，2018 年底活跃买家数量已超过京东 1.14 亿。

留存率关键。鉴于公司可以充分利用自身优势开发低线市场新用户，并努力将新用户留在平台上，熟悉平台，期待新用户像老用户一样可以更高频地购买性价比比较高的产品，用户数量的提升和购买频率的提升促成了公司短期增长的两个短期驱动因素。在 PDD 平台上留存 12 个月以上的用户年消费额已经较成熟，因此在 2018 年年消费额仅为 1127 元人民币的情况下，用户留存成为关键。我们预计年均消费在 2021 年达到 2958 元人民币，活跃用户从 2018 年的 4.19 亿增至 2021 年的 5.43 亿，21 年 GMV 将达到 1.6 万亿元人民币，年复合年增长率 51%。

升级之路漫长。PDD 可以通过 C2M 和品牌馆入驻两个方式升级业务。C2M 方面，PDD 目标到 2019 年底完成与 100-200 家 C2M 制造商合作，到 2020 年实现 1000 家 C2M 制造商合作。PDD 单产品高销量的模式通过 C2M 制造商推出爆款产品具有较高的成功概率。此外，随着用户基础的扩大，平台将吸引更多的品牌入驻。目前，PDD 平台入驻品牌合作伙伴超过 800 家，天猫入驻品牌合作伙伴超过 10 万家。我们当前的模型预测并没有考虑单价的大幅上涨，因为单价的提升在财务上的进展需要时间，如果 PDD 能够在不丧失其独特基因的情况下成功升级，公司将有更多估值上涨空间。

首次覆盖给予买入评级。我们预测 adj.EP ADS 在 19E 为人民币-3.96 元，20E 为人民币 0.09 元(转为正值)，21E 为人民币 4.31 元(同比 4657%)，并基于 DCF 模型给出目标价格 32 美元，相当于 1.4X 19E PS、0.28X 19E P/GMV、0.9X 20E PS、0.20X 20E P/GMV。股价仍有 41% 的上涨空间，我们首次覆盖给予买入评级。

One for all, all for one

Pinduoduo is China's third largest e-commerce platform by gross merchandise value (GMV) and the second largest by active users. The platform has expanded rapidly thanks to its group buying model and low client acquisition costs, while enjoying a competitive advantage in unsaturated markets, such as lower-tier cities and elder users. We expect the firm's GMV to continue to grow rapidly in the short term, amid an expanding user base and increasing transactions per user. Longer-term, we expect average product prices to rise as the platform upgrades its offerings. We forecast adjusted EPS of –Rmb3.82 in 19E, Rmb0.16 in 20E, and Rmb4.35 in 21E (x27.2 YoY). We derive a target price of US\$32.00 (1.4x 19E PS). With 41% upside, we initiate coverage of the stock with a BUY rating.

Unique positioning. We note Pinduoduo has been more successful than Alibaba's (BABA:US – BUY) Taobao and JD.com (JD:US – Outperform) in reaching users based in lower-tier cities. For instance, agricultural products ordered on Pinduoduo totalled Rmb65.3bn in 2018 (+233% YoY; 14% of total GMV), the platform becoming the largest online agricultural product sales channel in China. Moreover, Pinduoduo differentiates itself from its main competitors by using a group buying model. Founded in September 2015, Pinduoduo has expanded rapidly, its market share in terms of total GMV increasing from 1.4% in 2017 to 5.2% in 2018. Its number of annual active buyers already exceeded JD's by 114m in 2018.

Focus on user retention. Thanks to its expanding user base, particularly in lower-tier cities, and increasing transactions per user, we expect the firm's GMV to continue to grow rapidly in the short term. We note users registered on the Pinduoduo platform for more than 12 months spend significantly more on average than newly registered users. As such, we see user retention as a key growth driver for the firm. Assuming users' average annual spending increases to Rmb2,958 in 21E and the number of active users grows from 419m in 18A to 543m in 21E, we expect GMV to reach Rmb1.6tn in 21E, representing a three-year Cagr of 51%.

Long-term business adjustments. Pinduoduo is exploring a customer-to-manufacturer (C2M) business model, in which the platform connects customers directly with manufacturers, in particular smaller ones. The firm targets 100-200 C2M manufacturing partners by 2019, and c.1,000 by 2020. We believe the C2M model will increase the success rate of product launches on the platform. Moreover, we expect its expanding user base to attract an increasing number of brands. To date, only c.800 brands are present on Pinduoduo, vs c. 100,000 for Tmall. Our model does not factor in any significant average price uptick in 2019-21E, as we believe it will take time for the company to increase average selling prices, given its focus on high-volume sales.

Initiate with a BUY. We forecast adjusted EPS of –Rmb3.96 in 19E, Rmb0.09 in 20E, and Rmb4.31 in 21E (x46.6 YoY). Based on a discounted cash flow (DCF) model, we derive a target price of US\$32.00, representing 1.4x 19E PS, 0.28x 19E P/GMV, 0.9x 20E PS, and 0.20x 20E P/GMV. With 41% upside, we initiate coverage of the stock with a BUY rating.

Pinduoduo at a glance

Founded in September 2015, Pinduoduo has become China's third largest e-commerce platform by gross merchandise value (GMV) and the second largest by active users. The platform has expanded rapidly thanks to its group buying model and low client acquisition costs, while enjoying a competitive advantage in unsaturated markets, such as lower-tier cities and elder users.

According to data from QuestMobile, 82% of Chinese mobile users were using e-commerce platforms in 2018, with 64% of the 202m of mobile users who didn't use e-commerce platforms located in tier-3 and lower-tier cities as well as rural areas. Meanwhile, with the internet penetration rate among the elderly rising from 10.3% in 2017 to 12.5% in 2018, elder users have become an important market segment for internet companies.

Pinduoduo has expanded rapidly, its market share in terms of total GMV increasing from 1.4% in 2017 to 5.2% in 2018. Its number of annual active buyers already exceeded JD's by 114m in 2018. The firm's group buying model, allowing customers to purchase larger volumes of specific items at a discounted price, is particularly suitable for users in lower-tier cities as well as elder users, giving the company a competitive advantage in unsaturated markets over platforms like Taobao and JD.com.

An increasing number of Chinese farmers are selling their products online. Given the relatively low price of agricultural products and the platform's offer to directly connect producers with consumers, Pinduoduo has become the largest online agricultural product sales channel in China. We note agricultural products ordered on Pinduoduo totalled Rmb65.3bn in 2018 (+233% YoY), accounting for 14% of its total GMV. Moreover, c.18,400 farmers used the platform to sell their products online in 2018 (c.62,000 farmers over the past three years).

Pinduoduo is exploring a customer-to-manufacturer (C2M) business model, in which the platform connects customers directly with manufacturers, in particular smaller ones. The firm targets 100-200 C2M manufacturing partners by 2019, and c.1,000 by 2020. We believe the C2M model will increase the success rate of product launches on the platform. Moreover, we expect its expanding user base to attract an increasing number of brands. To date, only c.800 brands are present on Pinduoduo, vs c.100,000 for Tmall.

Thanks to its expanding user base and increasing transactions per user, we expect the firm's GMV to continue to grow rapidly in the short term. Assuming users' average annual spending increases from Rmb1,127 in 18A to Rmb2,958 in 21E and the number of active users grows from 419m in 18A to 548m in 21E, we expect GMV to reach Rmb1.6tn in 21E, representing a three-year Cagr of 51%. In the long term, we expect average product prices to rise as the platform upgrades its offerings, thus providing further growth potential.

As Pinduoduo doesn't charge commission fees, like Taobao, online marketing services represent its main source of revenue. We do not see any monetisation upside (with Alibaba's monetisation rate as a cap); however, we believe the company can still increase its operating leverage, as third-party (3P) e-commerce models usually enjoy higher margins (adjusted Ebitda margin of 63-66% for Alibaba's core marketplace and c.50% for JD's 3P business). We believe Pinduoduo's sales and marketing (S&M) expenses will remain high in the short term to retain new users on the platform and eventually increase its average annual spending per user. We expect S&M expenses to decrease as the platform becomes more mature. Overall, we forecast the company's non-GAAP net profit to turn positive in 20E.

Fig 1: Pinduoduo's revenue breakdown

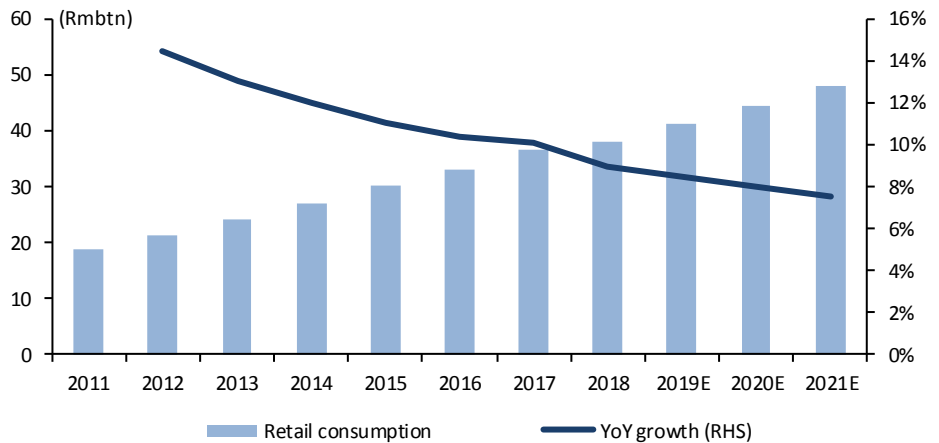
(Rmbm)	2017	2018	2019E	2020E	2021E
GMV	141,200	471,600	902,655	1,274,499	1,602,394
Monetisation rate of online marketing services	0.9%	2.4%	2.7%	2.8%	2.9%
Total revenue	1,744	13,120	27,138	39,643	51,315
Total revenue YoY growth	245.5%	652.3%	106.8%	46.1%	29.4%
S&M expenses YoY growth	-77.1%	-102.5%	-94.0%	-76.4%	-66.3%
Non-GAAP operating profit	(469)	(3,958)	(5,583)	(827)	4,488
Non-GAAP operating profit margin	-26.9%	-30.2%	-20.6%	-2.1%	8.7%
Non-GAAP net profit	(382)	(3,456)	(4,649)	107	5,068
Non-GAAP net margin	-21.9%	-26.3%	-17.1%	0.3%	9.9%

Source: Annual report, SWS Research

E-commerce industry

China has witnessed significant growth in retail sales of consumer goods over the past seven years. According to the National Bureau of Statistics (NBS), the retail consumption market increased from Rmb18.7tn in 2011 to Rmb38.1tn in 2018 (10.7% Cagr). We expect the sector to continue to grow at a Cagr of 7.9% over the next three years and reach Rmb47.9tn by 2021E.

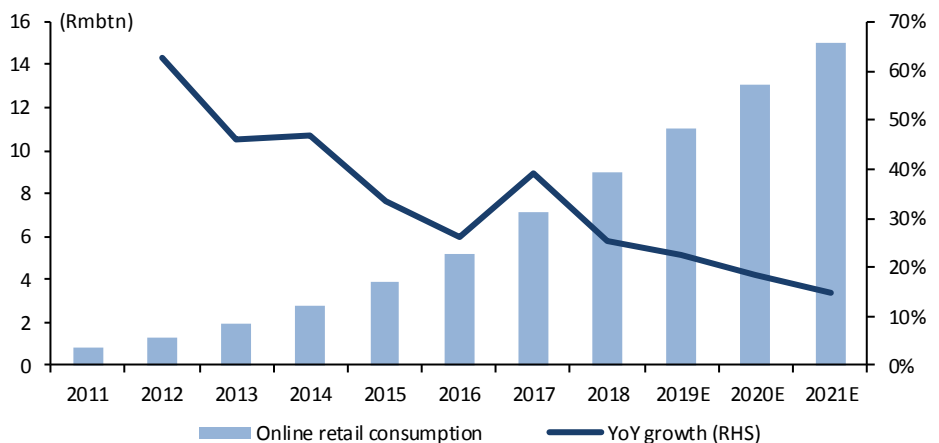
Fig 2: China's total retail consumption (based on gross transaction volume)



Source: NBS, SWS Research

Online retail consumption grew to Rmb9.0tn in 2018 (41.3% Cagr). We believe the pace of expansion will slow down as the market matures. We expect the size of the online retail market to reach Rmb15.0tn by 2021E, growing at a Cagr of 18.6%.

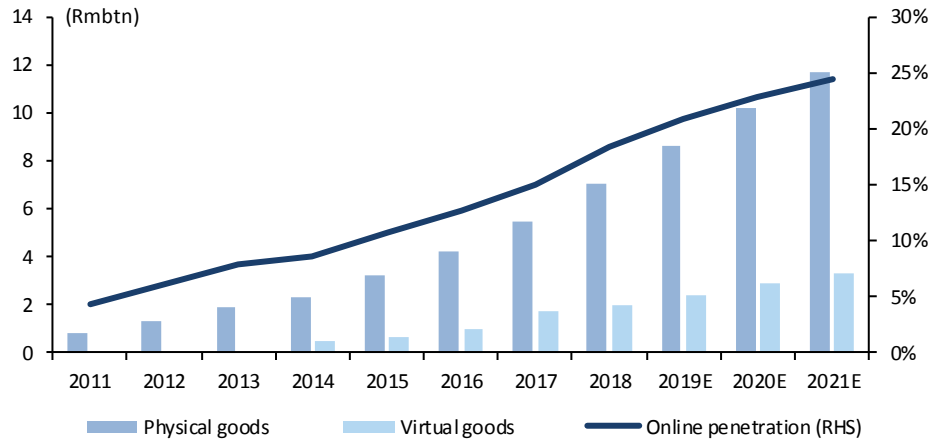
Fig 3: China's online retail consumption (based on gross transaction volume)



Source: NBS, SWS Research

Online retail sales include physical goods and virtual goods. The online penetration rate of physical goods reached c.18% in 2018. We note sales of physical goods grew at a Cagr of 31.5% from Rmb2.3tn in 2014 to Rmb7.0tn in 2018 (which we expect to reach Rmb11.7tn by 2021E). We have excluded virtual goods from our online penetration estimation given their unstable growth. Overall, we forecast online penetration to increase to 24% by 2021E.

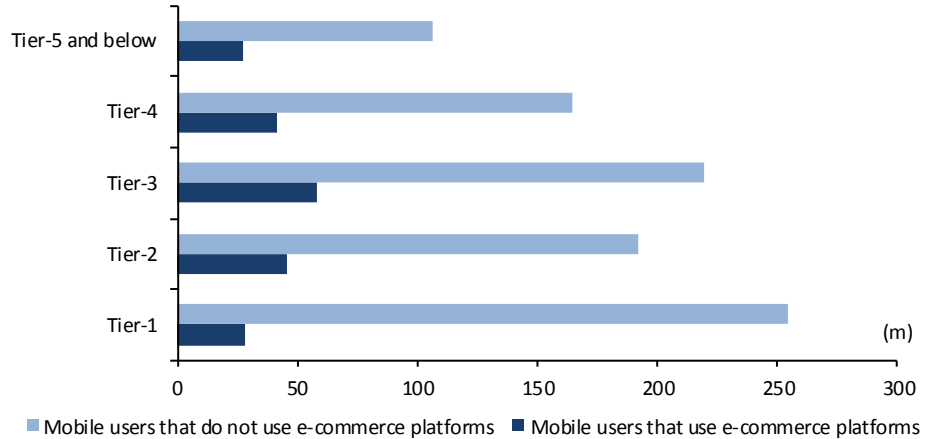
Fig 4: Online retail consumption breakdown (based on gross transaction volume)



Source: NBS, SWS Research

China's online retail market has become increasingly saturated, with Alibaba's active users already totalling 636m (vs a total of 830m mobile users in China). We note the online retail market is more saturated in tier-1 and tier-2 cities than in lower-tier cities. According to QuestMobile, the size of the unpenetrated market in lower-tier cities amounted to 128m users in March 2019.

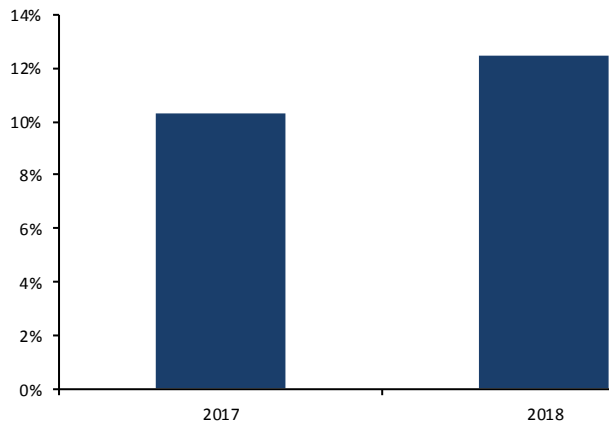
Fig 5: Mobile users and e-commerce platforms, as of March 2019



Source: QuestMobile, SWS Research

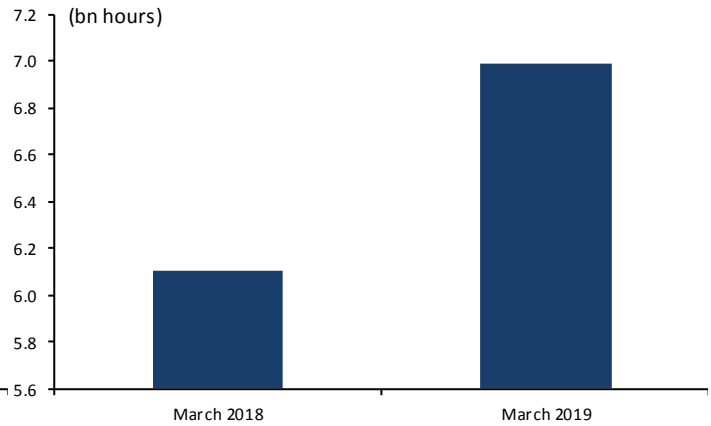
Elder mobile users represent another unsaturated market. We note the number of people aged 50 or above increased to 431m in 2018, accounting for 31% of China's total population. They also represented 12.5% of all internet users in 2018, up from 10.3% in 2017. As a group, they are characterised by an increasing use of the internet as well as stronger price sensitivity compared to younger working users.

Fig 6: Proportion of elder internet users (aged 50 or above)



Source: Company data, SWS Research

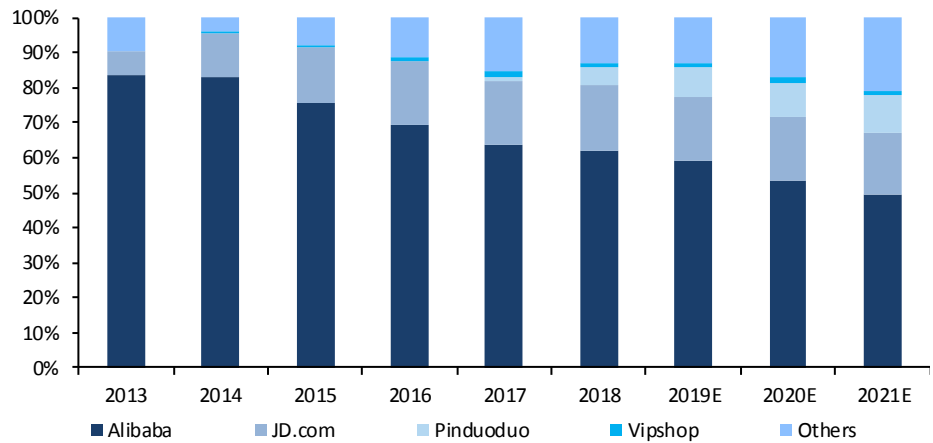
Fig 7: Total time spent by elder mobile users (aged 50 or above)



Source: Taobao, SWS Research

Until 2016, China’s e-commerce sector was dominated by Alibaba and JD. We expect Alibaba’s GMV, which increased from Rmb1.7tn in FY14 to Rmb4.8tn in FY18 (64% market share), to reach Rmb7.8tn by FY22E, with a market share of 49%. Meanwhile, we believe JD’s market share will remain stable at c.18% (same level as in 2016-18). By contrast, Pinduoduo’s GMV surged from Rmb0.1tn in 2017 (1% market share) to Rmb0.5tn in 2018 (5% market share). We expect Pinduoduo’s GMV to further grow to Rmb1.6tn in 2021E, representing a market share of 11%, while the firm may surpass JD in terms of GMV in the foreseeable future.

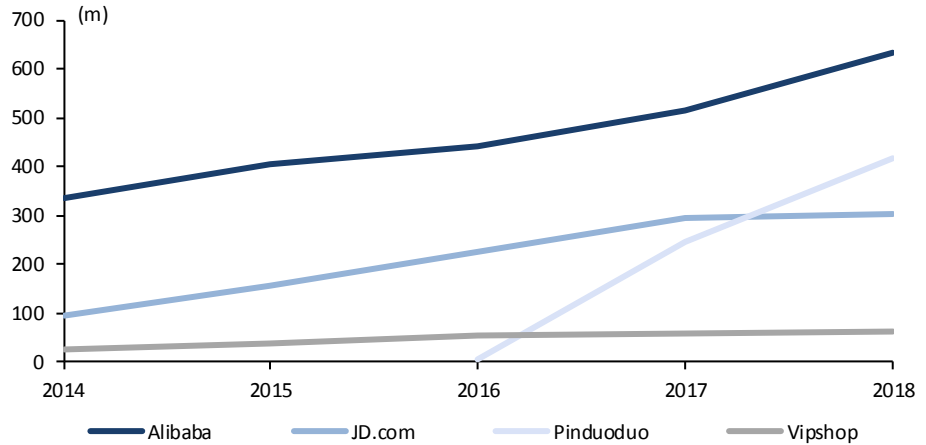
Fig 8: China’s e-commerce sector (GMV breakdown)



Source: Annual reports, Prospectus, SWS Research

GMV is driven by both annual active buyers and GMV per active buyer. Alibaba has successfully maintained its leading position in both areas (active buyers increased 5.8% QoQ in 4Q18), and we believe it will continue to do so in the coming years. However, we note JD’s annual active buyers declined 3% QoQ in 3Q18, while remaining flat QoQ in 4Q18. As a result, Pinduoduo’s active users exceeded JD’s with a total of 419m users in 2018. Thanks to its customer-to-customer (C2C) platform Taobao, Alibaba is able to expand in lower-tier cities, in contrast with JD, which focuses on business-to-customer (B2C) higher-quality branded products and, as such, grows more slowly in price-sensitive markets.

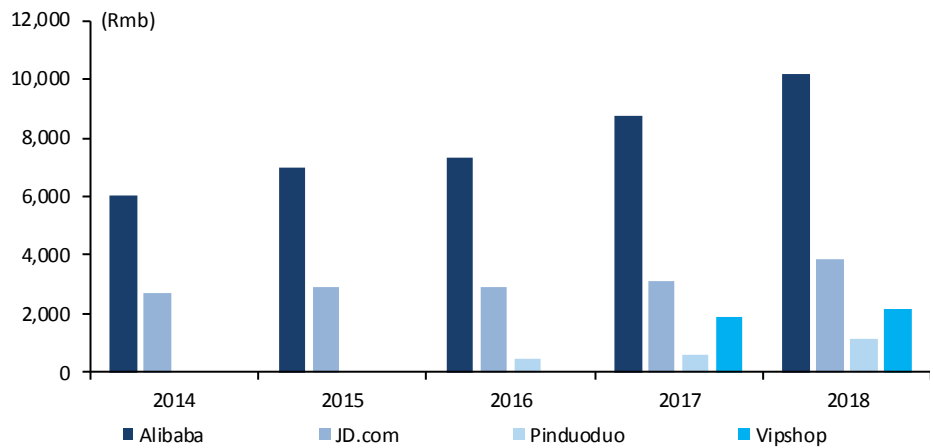
Fig 9: Leading e-commerce players' annual active buyers



Source: Annual reports, Prospectus, SWS Research

Alibaba remains the leading player in terms of GMV per active buyer, followed by JD and Vipshop. Pinduoduo saw its annual GMV per user double YoY in 2018. We note buyers who have used the platform for more than 12 months spend significantly more on average than newly registered users. We believe Pinduoduo will quickly catch up with JD's level as the proportion of active users registered on the platform for over 12 months increases.

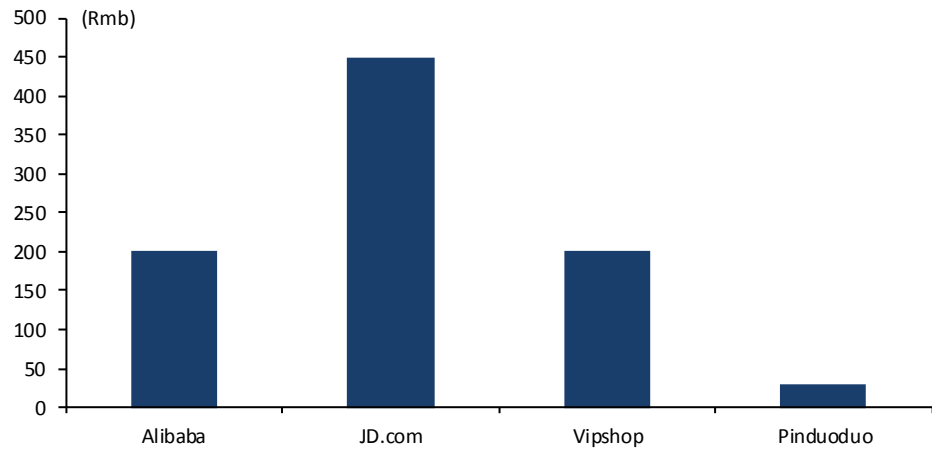
Fig 10: Leading e-commerce players' annual GMV per active buyer



Source: Annual reports, Prospectus, SWS Research

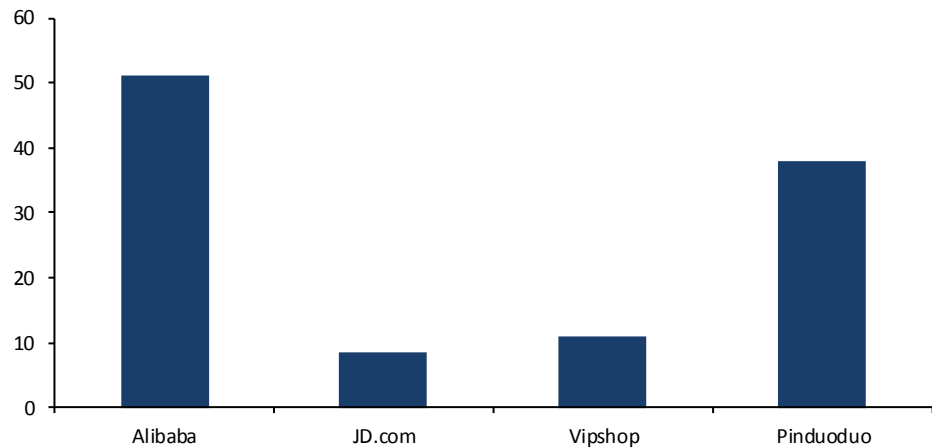
We can further split annual GMV per active buyer into average price per item sold and annual purchase frequency. We do not have the official data for e-commerce platforms' average price per item, but assume an industry average of Rmb200 in 2018, based on our experience. We assume JD's average price per item was Rmb450 in 2018 as its CEO revealed that the platform's average price was three times the industry average. We assume Alibaba and Vipshop's average prices were the same as the industry average, vs Rmb30 for Pinduoduo, according to our channel checks. We note Pinduoduo's competitive advantage in terms of price and purchase frequency, with upside potential for both indicators. Its average product price is substantial lower than the industry average, while its purchase frequency averages c.38 per year, second only to Alibaba (c.58 per year). In contrast with Pinduoduo, JD exhibits high average prices and lower purchase frequency, which is typical of B2C markets as well as electronics and appliances sales.

Fig 11: Leading e-commerce players' average price per order (2018 estimates)



Source: Annual reports, Prospectus, SWS Research

Fig 12: Leading e-commerce players' annual purchase frequency per active buyer in 2018



Source: Annual reports, Prospectus, SWS Research

Pinduoduo is a young company that successfully gained market share in recent years. Looking at GMV drivers, Pinduoduo already surpasses JD in terms of annual active buyers, with its average annual spending per user growing rapidly, mainly through increased purchase frequency. If the platform becomes large enough with a stable user base, we believe an increasing number of brands will join, which will drive up its average price per product and thus provide another strong growth driver.

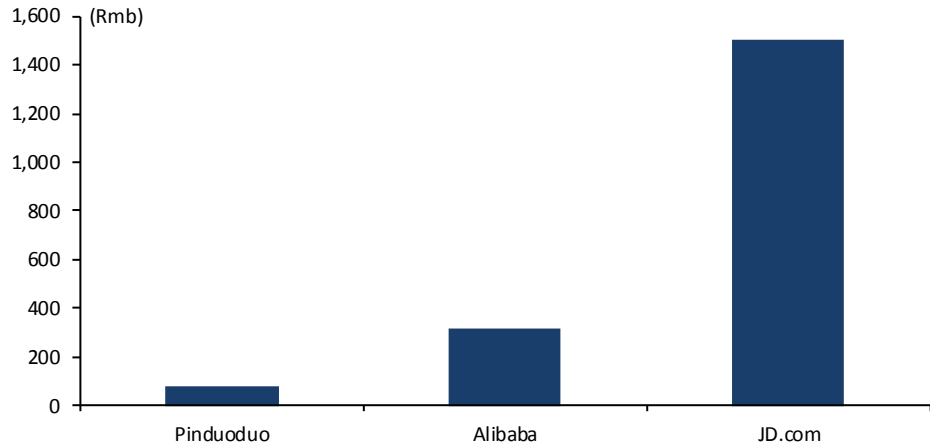
Unique positioning

The firm's group buying model enables users to enjoy attractive prices. Moreover, as users actively share the platform's products with their family, friends, and contacts on popular social networks, like WeChat and QQ, Pinduoduo benefits from increased product exposure, while rapidly expanding its user base. As new users share the products with their own contacts, the user base grows even more, creating a virtuous circle for the platform.

Pinduoduo's "mini-program" has become one of the most popular mini-programs on WeChat, generating additional traffic to the Pinduoduo app. We note 40.9% of its mini-program users are also Pinduoduo app users.

Orders placed on the platform totalled 4.3bn in 2017 and 7.5bn over the 12-month period ending 30 June 2018, while the number of annual active buyers reached 245m in 2017 and 419m in 2018. Taking into account sales and marketing (S&M) expenses, we note Pinduoduo enjoys the lowest customer acquisition cost among major Chinese e-commerce players. However, its acquisition cost has been on the rise in recent quarters. Therefore, we see client retention as a key factor for the firm to consolidate its active user base.

Fig 13: Customer acquisition cost in 2018



Source: Annual reports, Prospectus, SWS Research

Note: Customer acquisition cost is calculated as follows: S&M expenses / new active buyers

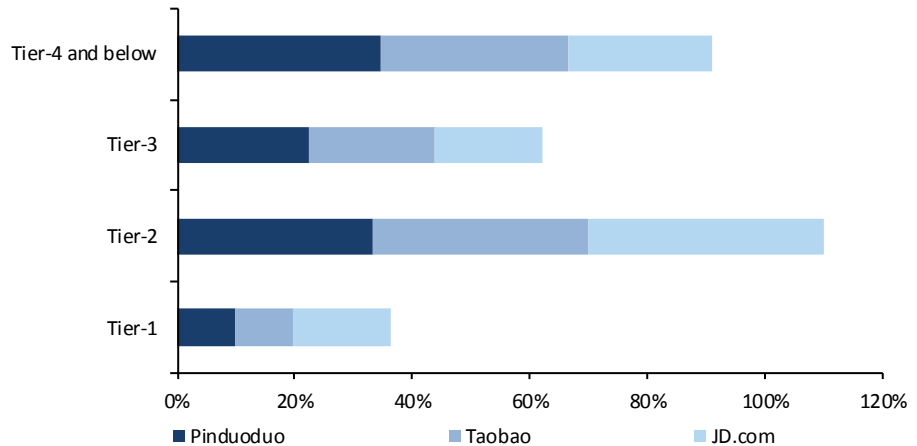
In addition, Pinduoduo’s dynamic social shopping experience creates a sense of excitement, compared to the more conventional search-based model and, as such, users are more willing to engage. As a result, average monthly active users of the mobile app increased rapidly, from 15m in 1Q17 to 195m in 2Q18. By leveraging social networks, the platform has been able to quickly increase its brand recognition and strengthen its market position.

The group buying model is also beneficial to merchants, who sell larger volumes. Moreover, merchants can benefit from economies of scale as their sales volume increases. We note the number of active merchants on the platform totalled 1.7m in the 12-month period ending 30 June 2018.

Given a business model based on large purchase volumes, Pinduoduo features a limited number of stock keeping units (SKUs), in contrast with Alibaba, which offers a much more comprehensive range of products. However, through group buying, merchants can realise a much higher sales volume per SKU. For instance, we see that many items sold on Pinduoduo have a cumulative sales volume of over 10k units. Thanks to volume-based discounts, Pinduoduo was able to attract price-sensitive buyers, especially in lower-tier cities and among elder internet users.

We note Pinduoduo users live primarily in lower-tier cities. According to Analysys, 57% of Pinduoduo users came from tier-3 and lower-tier cities as of February 2018, vs 53% for Taobao. By contrast, most JD users were concentrated in tier-1 and tier-2 cities.

Fig 14: Proportion of active users per type of city in February 2018

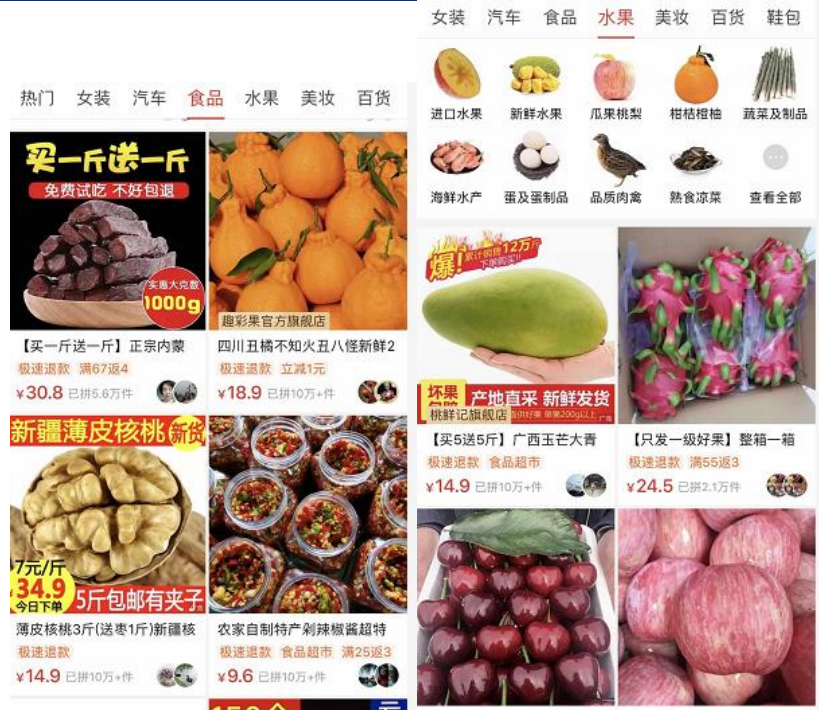


Source: Analysys, SWS Research

Like Taobao, apparel and fast moving consumer goods (FMCG) account for over 50% of Pinduoduo’s GMV. Although Pinduoduo’s offerings in the computer, communication, and

consumer electronics (3C) and appliances categories are much smaller due to more price-sensitive users, lower-priced agricultural products represent a significant portion of sales (14% of GMV in 2018). We note agricultural product orders totalled Rmb65.3bn in 2018 (+233% YoY), making Pinduoduo the largest online agricultural product sales channel in China. In total, c.18,400 farmers used the platform to sell their products online in 2018 (c.62,000 farmers over the past three years).

Fig 15: Agricultural products sold on the Pinduoduo platform



Source: Pinduoduo app, SWS Research

In a letter to shareholders, Pinduoduo announced its intention to become a “value-for-money platform” like Costco (COST:US). Costco is the second largest supermarket and the largest membership-only warehouse supermarket in the US. The firm offers products at low prices, often sold in bulk or very large packages, and marketed primarily towards large families and businesses. As a result, the company has the lowest gross margin among competitors (12-14%, vs 24.5-26% for Walmart (WMT:US)). Its inventory turnover days reached 31.2 in 2017, c.10 days shorter than Walmart’s due to an effective supply chain. In addition, Costco avoids selling similar products under different brands. It has also developed its own brand, *Kirkland Signature*, allowing further price reductions.

Pinduoduo is exploring a customer-to-manufacturer (C2M) business model, in which the platform connects customers directly with manufacturers, in particular smaller ones. This allows the company to shorten the supply chain and thus offer lower prices, while manufacturers are able to produce goods more efficiently, based on end-customers’ actual demand. We believe this business model will help Pinduoduo transform from a simple “low-price” platform into a “value-for-money” platform. The firm targets 100-200 C2M manufacturing partners by 2019, and c.1,000 by 2020. We believe the C2M model will contribute to gradually increasing the average price per product sold on the platform.

The company has started to cooperate with famous brands, such as *Guomei* and *Yanxuan*. For the same branded products, Pinduoduo’s unit price is usually lower than Tmall’s and JD’s. More specifically, for cheaper products, Pinduoduo’s unit price tends to be a few yuan lower, while for more expensive products, the difference ranges from a few dozen to a few hundred yuan. As such, we see room for unit prices on Pinduoduo to increase. To date, only c.800 brands are present on Pinduoduo, vs c.100,000 for Tmall.

Fig 16: Product price comparison of major e-commerce platforms (Rmb)

Brand	Product	Department	Tmall	JD.com	Pinduoduo
Casio	Men's Sports Watch, Black Gold GA-110GB	Apparel	1,490	1,490	859
Adidas	Women's Sports Sweater White CZ2369	Apparel	399	239	229
Huawei	8 Plus 64G Mobile Phone, Golden	Electronics	1,499	1,499	1,125
FLYCO	Electric Shaver FS871	Electronics	65	59	55
Maybelline	Eraser Eye Concealer	Beauty	89	85	76
Elizabeth Arden	Visible Difference Refining Moisture Cream Complex 75ml	Beauty	159	159	143
Nestle	Instant Coffee 1+2 Original taste 100 count, 1500g	Food	102	112	87
Daliyuan	Egg Yolk Pie, 1.5kg	Food	33	34	27
Dettol	Dettol First Aid Antiseptic Disinfectant Liquid, 1.5L (pack of 2)	Health care	99	100	89
Tempo	3M Particulate Respirator Anti PM2.5 KN95 for kids (pack of 3)	Health care	49	59	46

Source: Tmall, JD, and Pinduoduo apps, SWS Research

Note: Prices collected on 16 October 2018

Given a business model based on low prices and the platform's low registration requirements (most sellers are micro- and small-sized merchants), the company is facing a severe counterfeit problem. During the weeks before the IPO, Chinese authorities required the firm to strengthen supervision over products sold on the platform to address copyright infringement issues. We note the company took a number of measures to eliminate counterfeit products, including the implementation of a merchant tracking and review system. However, based on Taobao's experience, we believe it will take time before Pinduoduo's counterfeit problem is fully addressed, while the company may suffer financial penalties and the retention rate of buyers and merchants may be affected.

Fig 17: China's anti-counterfeiting regulations

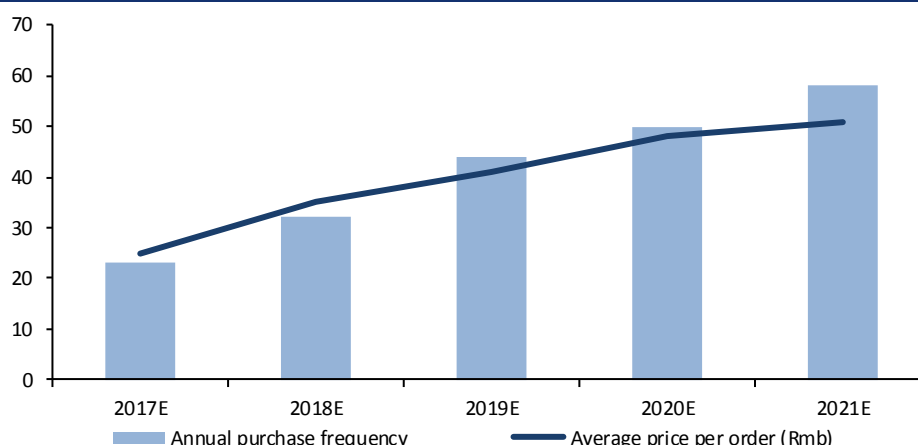
Name of regulation	Issuing authority	Important date
Trademark Law	Standing Committee of the NPC	Revised for the third time in August 2013
Tort Liability Law	Standing Committee of the NPC	Enacted in December 2009, took effect in July 2010
Administrative Measures for Online Trading	SAIC	Issued on 26 January 2014
Consumer Rights and Interests Protection Law	Standing Committee of the NPC	Effective since March 2014
Online Trading measures	SAIC	Enacted in January 2014, took effect in March 2014
Electronic Commerce Law	Standing Committee of the NPC	Enacted in August 2018, took effect in January 2019

Source: National policy, SWS Research

Growth drivers

Given the use of social networks and relatively low prices, we believe annual GMV per active buyer is mostly driven by users' purchase frequency. Moreover, it will take time for the C2M and brand cooperation strategy to have a material impact on the firm's average price per order, which we see more as a long-term driver of GMV per active buyer. As such, we expect purchase frequency to grow faster than average price per order in the next three years.

Fig 18: Pinduoduo's annual purchase frequency and average price per order

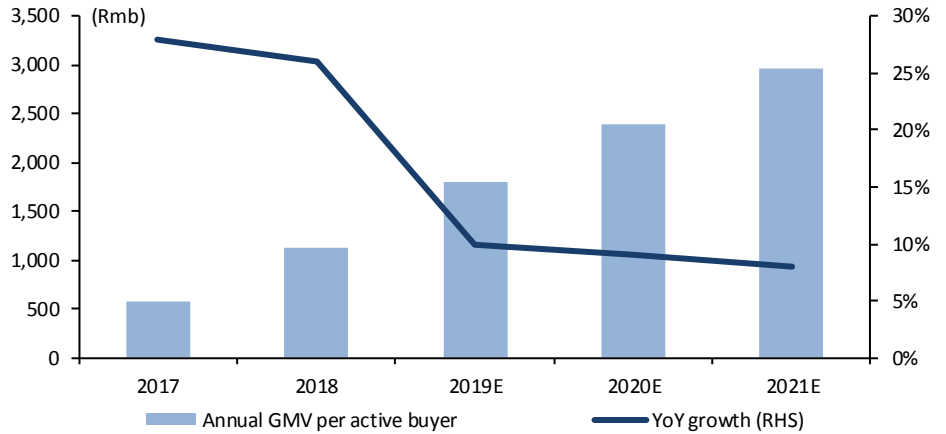


Source: Prospectus, SWS Research

Note: All annual purchase frequency and average price figures are estimates

Users registered on Pinduoduo for more than 12 months spend similar amounts on average to other platforms. We thus see significant upside potential for the firm’s annual GMV per active buyer, which we expect to reach Rmb1,804 in 19E, Rmb2,400 in 20E, and Rmb2,958 in 21E.

Fig 19: Pinduoduo’s annual GMV per active buyer



Source: Prospectus, SWS Research

We estimate that Pinduoduo has the potential to attract up to 629m active users in total, mostly located in lower-tier cities (vs 419m active users in 2018).

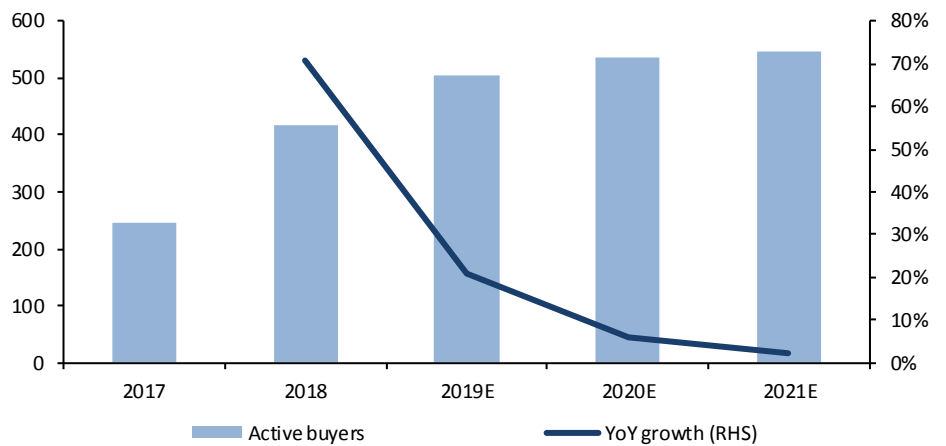
Fig 20: Estimation of Pinduoduo’s active buyers potential

City	Population (m)	Penetration assumed	Potential buyers (m)
Tier-1	73.6	20%	15
Tier-2	222.9	60%	134
Tier-3 and below	533.5	90%	480
Total			629

Source: SWS Research

We conservatively forecast 500m active buyers in 19E, 531m in 20E, and 542m in 21E. However, we see further upside potential in the long run as the company attracts additional brands and expands in tier-1 and tier-2 cities.

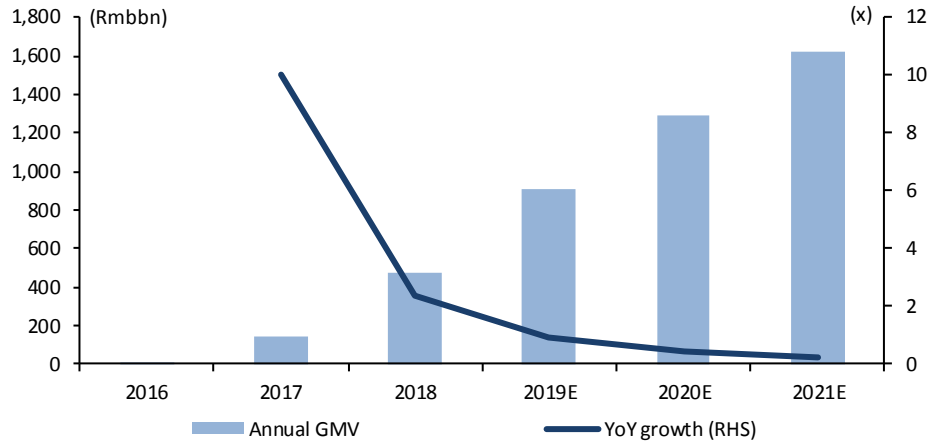
Fig 21: Pinduoduo’s annual active buyers



Source: Prospectus, SWS Research

Given upside potential on both annual active buyers and annual GMV per buyer, we expect the firm’s annual GMV to grow at a Cagr of 51% in the next three years.

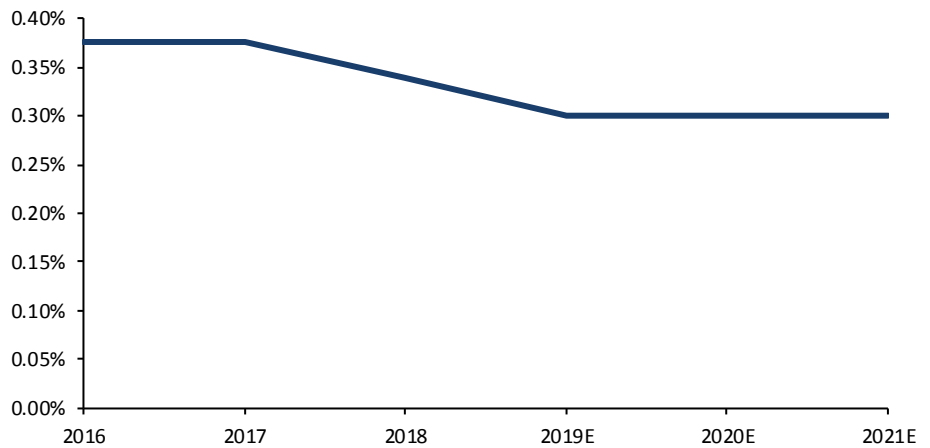
Fig 22: Pinduoduo's annual GMV



Source: Prospectus, SWS Research

Pinduoduo offers no first-party (1P) e-commerce business. The company generates most of its revenue through marketing services on its 3P platform. We note the firm does not charge any commission fee, like Taobao, while merchants registering on the platform enjoy a payment processing fee of only 0.6%, charged by third-party online payment service providers. By contrast, Tmall requires a 0.4-5% commission fee for registration, while JD requires a 5-8% fee. As a result, the platform has been very successful in attracting new merchants. Thanks to large transaction volumes, Pinduoduo enjoys preferential processing fees from payment service providers, like WeChat Pay and Alipay (lower than 0.6%).

Fig 23: Pinduoduo's transaction service fee



Source: Prospectus, SWS Research

With Rmb11bn generated in 2018, the online marketing services segment accounted for 88% of the firm's total revenue.

Pinduoduo offers two ways for merchants to increase their exposure to potential buyers: bidding for keywords in search results on the platform and advertising through banners, links, and logos (of which prices are determined through an online bidding system). The monetisation rate of online marketing services rose from 0.86% in 2017 to 2.44% in 2018.

Fig 24: Comparison of major monetisation methods

	Pinduoduo	Taobao	Tmall	JD.com
Commissions	None	None	0.4-5%	Wide range (around 5-8%)
P4P marketing services - search	CPC	CPC	CPC	CPC
Feeds	Testing	Testing	Testing	Testing
Ads placement (banners, links, logos, etc.)	Yes	Yes	Yes	Yes
Membership fees	None	None	88VIP	JD Plus

Source: Annual reports, SWS Research

We see one advertisement per six products listed when using the keyword search function on Pinduoduo (similar to Taobao).

Fig 25: Pinduoduo's search ads



Source: Pinduoduo, SWS Research

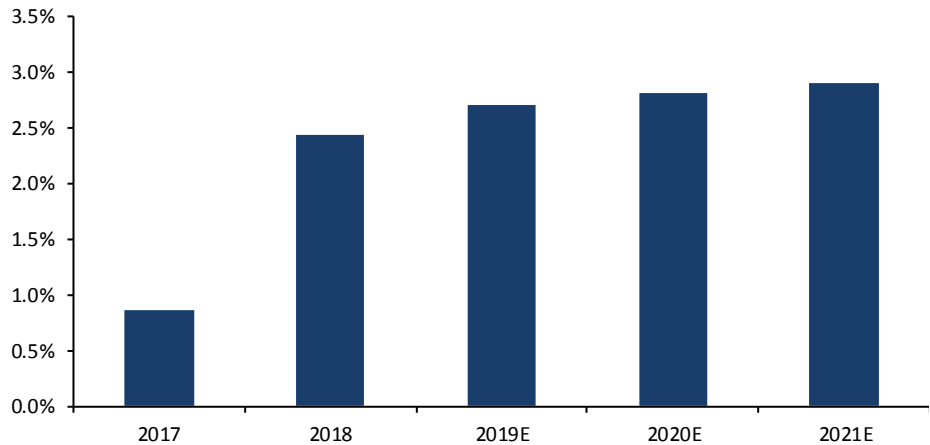
Fig 26: Taobao's search ads



Source: Taobao, SWS Research

We do not see much upside potential for Pinduoduo's online marketing monetisation rate. Its ad density is already similar to that of Taobao, while it cannot exceed Alibaba's overall monetisation rate of 3.3% in FY18 without taking the risk of losing merchants to other platforms. As such, we anticipate a very moderate increase in Pinduoduo's monetisation rate in the coming years.

Fig 27: Pinduoduo's online marketing services monetisation rate

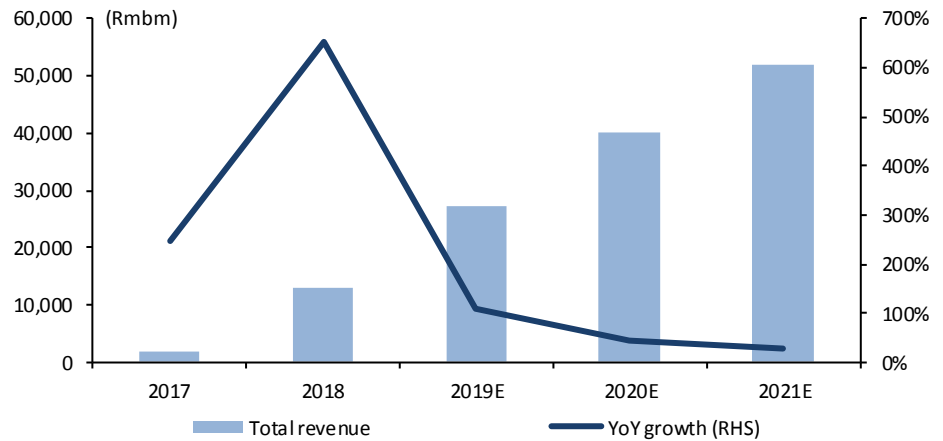


Source: Prospectus, SWS Research

Company financials

Based on our GMV and monetisation estimates, we expect Pinduoduo’s revenue to grow 109% YoY to Rmb27bn in 19E, 46% YoY to Rmb40bn in 20E, and 29% YoY to Rmb51bn in 21E.

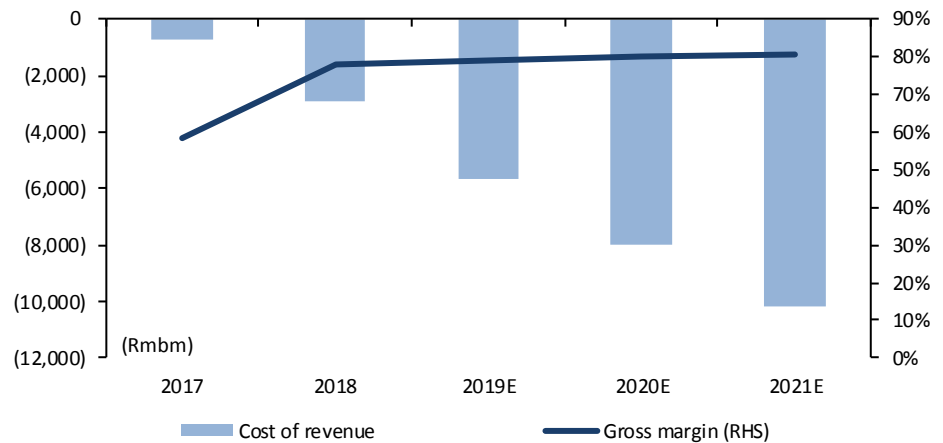
Fig 28: Revenue forecast



Source: Annual reports, SWS Research

Costs associated with the platform’s operations (bandwidth and server costs, depreciation and maintenance costs, and staff-related costs) are relatively low. We thus expect the firm’s gross margin to remain stable at c.80% over the next three years.

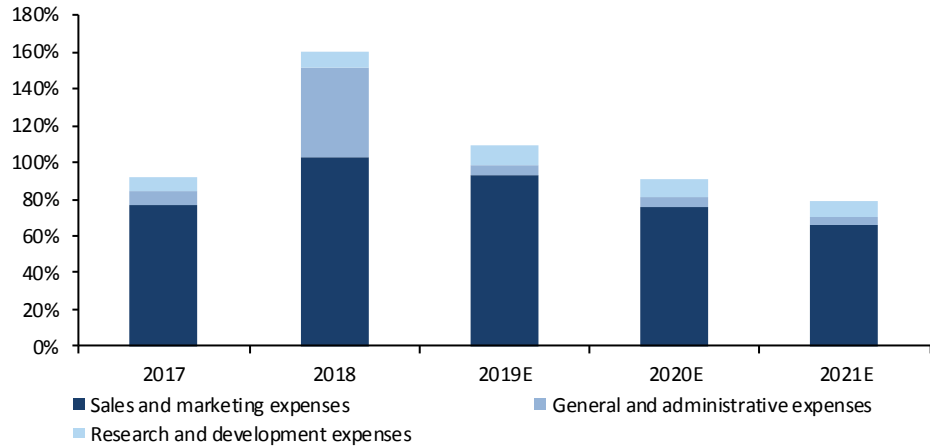
Fig 29: Cost of revenue and gross margin



Source: Annual reports, SWS Research

Among operating costs, sales and marketing (S&M) expenses accounted for 102% of revenue in 2018, removing all gains from the revenue side. Given an Ebitda margin of 60%-plus for Alibaba’s marketplace, we expect Pinduoduo’s Ebitda margin to increase and approach Alibaba’s in the long term. However, we note Pinduoduo’s active users are still growing rapidly and, therefore, S&M expenses are essential for the firm to retain new users. We expect S&M expenses as a percentage of revenue to gradually decrease to 94% in 19E, 76% in 20E, and 66% in 21E.

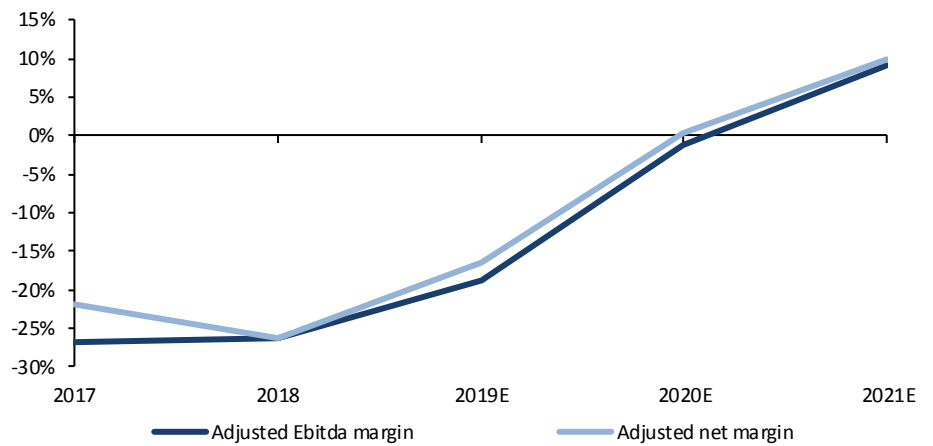
Fig 30: Major operating costs as a percentage of revenue



Source: Annual reports, SWS Research

We forecast an adjusted Ebitda margin of 9% in 21E, vs 60%-plus for Alibaba’s marketplace, indicating substantial upside potential for Pinduoduo. We expect the company to break even (in terms of adjusted net profit) in 20E.

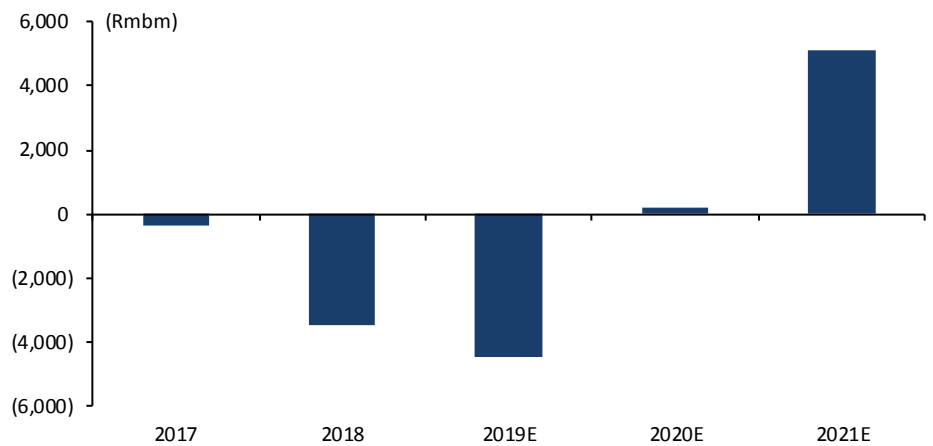
Fig 31: Pinduoduo’s adjusted profit margins



Source: Annual reports, SWS Research

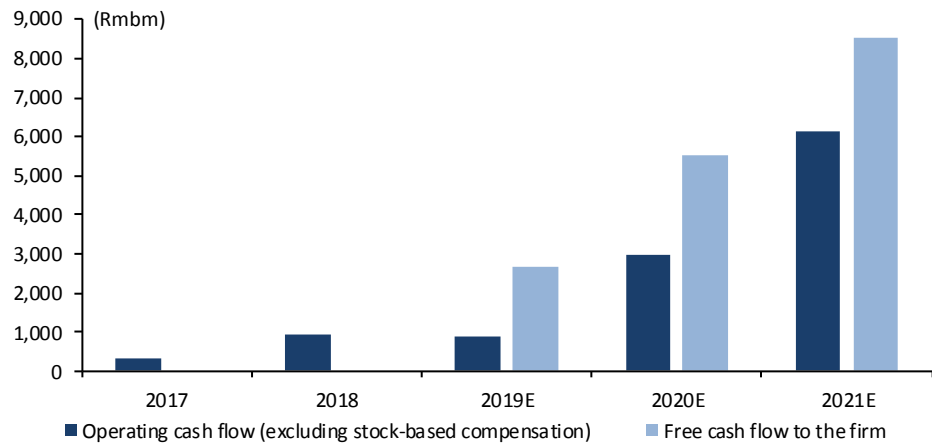
We forecast non-GAAP net profit of –Rmb4.6bn in 19E, Rmb107m in 20E, and Rmb5.1bn in 21E (x46.6YoY).

Fig 32: Net profit forecast



Source: Annual Reports, SWS Research

Like most 3P e-commerce platforms, the company enjoys strong cash flows. Moreover, it currently has no debt outstanding.

Fig 33: Cash flows


Source: Annual reports, SWS Research

We expect return on equity (ROE) to be mainly driven by the firm's net margin expansion.

Fig 34: Debt ratio and DuPont analysis

	2017	2018	2019E	2020E	2021E
Debt ratio					
Net debt / Equity	-253.8%	-75.2%	-116.7%	-156.5%	-179.7%
DuPont analysis					
ROE	-49%	-35%	-23%	1%	29%
Net profit margin	-22%	-26%	-16%	0%	10%
Asset turnover	0.13	0.3	0.52	0.72	0.83
Assets / Equity	11.05	2.29	2.59	3.26	3.38

Source: Annual reports, SWS Research

Valuation

We use a discounted cash flow (DCF) valuation method to assess the firm's value. We calculate an equity value of Rmb258bn and an enterprise value of Rmb234bn. We expect revenue growth to slow down in 2021-26E and stabilise at +3% YoY from 2026E onwards. We derive the firm's weighted cost of capital (WACC) using 3% as the risk-free rate (based on current government debt yields), a 10% market risk premium (based on the Bloomberg Hong Kong market risk premium), and a cost of debt of 4.0%. We use an adjusted beta of 1.2, based on our assumption that the company will make no material change to the nature of its business.

Under these assumptions, we find a present value of US\$32.00 per share, representing 1.4x 19E PS, 0.28x 19E P/GMV, 0.9x 20E PS, and 0.20x 20E P/GMV.

Fig 35: Free cash flow to the firm (FCFF)

	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	Terminal growth period
Revenue	27,434	40,081	51,885	62,262	70,356	76,688	80,522	82,938	85,426	87,989	90,628	93,347	96,147	99,032	102,003
Ebit	-5,426	-750	4,536	9,339	17,589	24,540	30,598	33,175	34,170	35,195	36,251	37,339	38,459	39,613	40,801
Tax paid	0	0	-907	-1,868	-3,518	-4,908	-6,120	-6,635	-6,834	-7,039	-7,250	-7,468	-7,692	-7,923	-8,160
Nopat	-5,426	-750	3,629	7,471	14,071	19,632	24,479	26,540	27,336	28,156	29,001	29,871	30,767	31,690	32,641
Change in WC	7,865	6,080	4,751	5,701	6,443	7,022	7,374	7,595	7,823	8,057	8,299	8,548	8,804	9,069	9,341
Cash Nopat	2,439	5,330	8,380	13,173	20,514	26,655	31,852	34,135	35,159	36,214	37,300	38,419	39,572	40,759	41,982
Plus: D&A	258	232	209	623	704	767	805	829	854	880	906	933	961	990	1,020
Less: Capex	-30	-35	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40	-40
FCFF	2,667	5,527	8,549	13,755	21,177	27,381	32,618	34,924	35,973	37,054	38,166	39,313	40,493	41,709	42,962
TV															441,034
Total	2,667	5,527	8,549	13,755	21,177	27,381	32,618	34,924	35,973	37,054	38,166	39,313	40,493	41,709	483,996
2019E value	233,922														
2020E value	261,483														
2021E value	289,316														

Source: SWS Research

Fig 36: Key assumptions and valuation

	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	Terminal growth period
Revenue growth	-	46%	29%	20%	13%	9%	5%	3%	3%	3%	3%	3%	3%	3%	3%
Ebit margin	-20%	-2%	9%	15%	25%	32%	38%	40%	40%	40%	40%	40%	40%	40%	40%
Tax over Ebit	0%	0%	-20%	-20%	-20%	-20%	-20%	-20%	-20%	-20%	-20%	-20%	-20%	-20%	-20%
Changes in WC/revenue	29%	15%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%
D&A/revenue	1%	1%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%

WACC			Valuation				
Risk-free rate	3.0%	SWS Research	At the beginning of		2019E	2020E	2021E
Equity risk premium	10.0%	SWS Research	EV (Rmbm)		233,922	261,483	289,316
Beta	1.2	Bloomberg	Net debt (Rmbm)		-23,914	-26,879	-32,988
Cost of equity	15.0%	CAPM	Minority interest (Rmbm)		0	0	0
Nominal cost of debt	4.0%	Historical average data	Equity value (Rmbm)		257,836	288,362	322,304
Debt-to-equity ratio:	20%	Estimated long-term capital structure	Equity value (HK\$m)		37,917	42,406	47,398
Effective tax rate	20.0%	Long-term value combined with current tax rate	Outstanding shares		4,700	4,702	4,702
WACC	13.03%	Weighted average data	Share price		32.27	36.08	40.32

Source: SWS Research

Fig 37: Sensitivity analysis (target price)

(US\$)	WACC	Perpetual growth rate						
		3.27	2.85%	2.90%	2.95%	3.00%	3.05%	3.10%
11.53%		38.14	38.24	38.34	38.45	38.55	38.66	38.77
12.03%		35.89	35.98	36.07	36.15	36.24	36.33	36.42
12.53%		33.88	33.96	34.03	34.11	34.18	34.26	34.34
13.03%		32.08	32.14	32.20	32.27	32.34	32.40	32.47
13.53%		30.45	30.50	30.56	30.61	30.67	30.73	30.78
14.03%		28.97	29.01	29.06	29.11	29.16	29.21	29.26
14.53%		27.62	27.66	27.70	27.75	27.79	27.83	27.88

Source: SWS Research

With 41% upside to our target price, we initiate coverage of the stock with a BUY rating.

Fig 38: Peer comparison

Ticker	Company name	Currency	Market cap (bn)	Gross margin	19E PE	20E PE	19E EV/EBITDA	20E EV/EBITDA
BABA US	Alibaba	USD	481.2	46.6	35	28	26	21
JD US	JD.com	USD	42.2	14.3	51	30	38	21
VIPS US	Vipshop	USD	5.31	20.2	13	11	7	6
BZUN US	Baozun	USD	2.6	64.1	31	20	24	15
RUHN US	Ruhnn	USD	0.59	33.4	-	-	-	-
SECO US	Secoo	USD	0.47	17.8	12	6	-	-
AMZN US	Amazon	USD	958.2	43.2	72	51	23	19
EBAY US	Ebay	USD	34.4	77.3	14	12	10	9
Average			191	40	33	23	21	15
PDD US Equity	PINDUODUO	HKD	73.9	41	N.A	30	N.A	48

Source: Bloomberg, SWS Research

Note: Based on Bloomberg consensus estimates for stocks that are not under our coverage

Risks

The major risk we see for the stock is whether Pinduoduo's buyer retention rate increases as expected. Its user base has expanded rapidly, with therefore a significant number of newly registered users. Among its 419m active buyers in 2018, we estimate that recurring users, who exhibit high purchase frequency and solid purchase amounts, only accounted for c.25% of the total. As such, the conversion of new buyers into recurring users has become key for Pinduoduo to maintain strong growth.

Appendix

Fig 39: Shareholding structure as of March 2019

Shareholders	Number of shares	Percentage
Huang Zheng	2,074,447,700*	45%
Tencent	786,466,688	17%
Banyan Partners Funds	391,766,996	8%
Sequoia Funds	334,191,580	7%
Other directors and executive team	222,388,312	5%
Others	840,167,412	18%
Total shares	4,649,428,688	100%

* Huang Zheng holds Class B shares, which have 10 times the voting power of Class A shares

Source: Annual report, SWS Research

Executive directors & senior management

Wu Wenhui, aged 38, is an executive director and co-chief executive officer of the group. Wu is responsible for the overall strategic planning and business direction of the group. Between January 2014 and March 2015, Wu was the chief executive officer of Tencent Literature. Between October 2004 and March 2013, Wu served as the chief executive officer of qidian.com and subsequently president of Shanda Literature Corporation. Prior to that, he worked as a programmer at Founder Technology Group between July 2000 and October 2001. Wu received his bachelor's degree in computer software engineering from Peking University in July 2000.

Liang Xiaodong, aged 40, is an executive director and co-chief executive officer of the group. Liang is responsible for the overall strategic planning and business direction of the group. Liang has been a partner at TBP Consultant (HK) Limited since January 2014. Between November 2014 and March 2015, Liang was the chief executive officer of Shanda Literature Corporation. Between March 2009 and December 2013, Liang was the chief financial officer of Shanda Literature Corporation. Prior to that, he was an investment director and investment manager at Shanghai Shengda Network Development from September 2002 to July 2007. Liang received his bachelor's degree in business management from East China University of Science and Technology in July 1998, his master's degree in economics from East China University of Science and Technology in March 2002, and his master's degree in business administration from Schulich School of Business, York University in February 2009.

Shang Xuesong, aged 43, is the president of Pinduoduo. He joined the group in September 2004. Shang is primarily responsible for the overall operations of the group. Between January 2014 and March 2015, Shang was president of Tencent Literature. Between September 2004 and March 2013, Shang was general manager of qidian.com, operated by Shanda Literature Corporation. Prior to that, he was a faculty member and teaching manager at the Shanghai University of International Business and Economics from July 1994 to September 2004. Shang graduated from the East China University of Political Science and Law after completing a diploma course in economic law in July 1999.

Lin Tingfeng, aged 40, is a senior vice president. He joined the group in September 2004. Lin is primarily responsible for overseeing original content and team management. Between January 2014 and March 2015, Lin was a senior vice president at Tencent Literature. Prior to that, he was a senior vice president at qidian.com, operated by Shanda Literature Corporation, from September 2004 to March 2013. Lin received his bachelor's degree in international economics and trade from Shanghai Dianji University in January 2017.

Zhang Rong, aged 39, is a senior vice president. He joined the group in January 2014. Zhang is primarily responsible for publishing, monthly subscriptions, and team management. Between January 2014 and March 2015, Zhang was a senior vice president at Tencent Literature. Prior to that, he was a product manager and assistant general manager at Tencent Science & Technology (Shenzhen) from June 2004 to January 2015. Zhang received his bachelor's degree in economic management from Shandong University of Finance and Economics in July 2000. Zhang has been an executive director and manager of Tianjin Ruino Technology and the manager of Wangwen Xinyue since August 2016, both of which are subsidiaries of the company.

Consolidated Income Statement

Rmbm	2017	2018	2019E	2020E	2021E
Revenue	1,744	13,120	27,138	39,643	51,315
Cost of Sales	-723	-2,905	-5,616	-7,882	-10,057
Gross Profit	1,021	10,215	21,522	31,762	41,258
Other Income	1	-12	0	0	0
General and administrative expenses	-133	-6,457	-1,580	-1,917	-1,977
S&M expenses	-1,345	-13,442	-25,503	-30,283	-34,048
adj. EBITDA	-467	-3,461	-5,325	-595	4,697
adj. EBIT	-469	-3,958	-5,583	-827	4,488
Finance Costs	0	1	2	3	4
Profit before tax	-525	-10,217	-7,342	-3,342	1,549
Income tax expense	0	0	0	0	-354
Minority interests	0	1	2	3	4
adj. Profit attributable	-382	-3,456	-4,649	107	5,068

Source: SWS Research

Consolidated Cash Flow Statement

Rmbm	2017	2018	2019E	2020E	2021E
Profit before taxation	-525	-10,217	-7,342	-3,342	1,549
Plus: Depr. and amortisation	2	497	258	232	209
Finance cost	0	-1	-2	-3	-4
Losses from investments	0	0	0	0	0
Change in working capital	10,188	10,725	7,519	6,031	4,698
Others	-8,786	-688	7,334	-2,483	-3,531
CF from operating activities	880	315	7,768	436	2,921
CAPEX	-9	-27	-30	-35	-40
Other CF from investing activities	81	-7,521	0	0	0
CF from investing activities	72	-7,549	-30	-35	-40
Equity financing	0	11,524	8,883	0	0
Net change in liabilities	1,447	5,825	0	0	0
Dividend and interest paid	0	1	2	3	4
Other CF from financing activities	-48	-5	-2	-3	-4
CF from financing activities	1,399	17,344	8,883	0	0
Net cash flow	2,350	10,111	16,620	401	2,881

Source: SWS Research

Consolidated Balance Sheet

Rmbm	2017	2018	2019E	2020E	2021E
Current Assets	13,138	40,391	49,944	53,066	59,349
Bank balances and cash	12,429	30,540	39,828	42,714	48,776
Trade and other receivables	88	248	512	748	968
Inventories	0	0	0	0	0
Other current assets	621	9,604	9,604	9,604	9,604
Long-term investment	5	183	183	183	183
PP&E	9	29	59	94	134
Intangible and other assets	162	2,579	2,321	2,089	1,880
Total Assets	13,314	43,182	52,507	55,432	61,546
Current Liabilities	12,110	24,359	32,143	38,410	43,329
Borrowings	0	0	0	0	0
Trade and other payables	10,331	20,171	25,359	30,482	33,066
Other current liabilities	1,778	4,188	6,784	7,929	10,263
Long-term liabilities	0	11,475	35,289	36,445	37,022
Total Liabilities	12,110	35,834	67,432	74,855	80,351
Minority Interests	0	0	0	0	0
Shareholder Equity	13,314	43,182	52,507	55,432	61,546
Share Capital	0	0	0	0	0
Reserves	-992	18,822	20,363	17,022	18,216
Equity attributable	-992	18,823	20,364	17,022	18,217
Total Liabilities and equity	13,314	43,182	52,507	55,432	61,546

Source: SWS Research

Key Financial Ratios

	2017	2018	2019E	2020E	2021E
Ratios per share (Rmb)					
Adj. Earnings per share	(0.8)	(4.6)	(4.0)	0.1	4.3
Adj. Diluted earnings per share	(0.8)	(4.6)	(4.0)	0.1	4.3
Operating CF per share	0.2	2.6	0.1	0.6	1.3
Dividend per share	0.0	0.0	0.0	0.0	0.0
Net assets per share	0.7	6.3	4.3	3.6	3.9
Key Operating Ratios (%)					
ROIC	(60.10)	(39.53)	(28.49)	(4.42)	23.46
ROE	(48.96)	(34.51)	(23.73)	0.57	28.76
Gross profit margin	58.56	77.86	79.31	80.12	80.40
Ebitda margin	(26.77)	(26.38)	(19.62)	(1.50)	9.15
Ebit margin	(26.90)	(30.17)	(20.57)	(2.09)	8.75
Growth rate of Revenue(YoY)	245.45	652.26	106.84	46.08	29.44
Growth rate of Profit(YoY)	54.68	1964.88	(28.71)	(54.48)	(135.75)
Debt-to-asset ratio	0.00	0.00	0.00	0.00	0.00
Turnover rate of net assets	1.45	0.70	1.33	2.33	2.82
Turnover rate of total assets	0.13	0.30	0.52	0.72	0.83
Effective tax rate (%)	0.00	0.00	0.00	0.00	(22.86)
Dividend yield (%)	0.00	0.00	0.00	0.00	0.00
Valuation Ratios (x)					
P/E	n.a.	n.a.	n.a.	1703.2	35.8
P/B	226.1	24.3	35.6	42.6	39.8
EV/Sale	63.9	12.7	5.8	3.9	2.9
EV/Ebitda	n.a.	n.a.	n.a.	n.a.	31.7

Source: SWS Research

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