Pinduoduo (PDD US)
A rising star

- Emerging ecommerce platform with rapid growth in recent years, driven by innovative social ecommerce features; 585mn users in 4Q19 vs. 362mn for JD and 711m for Alibaba; estimated market share of ~9% in 2019
- Long-term investment on user loyalty via sizable marketing spending would reduce near-term profitability
- Initiate **BUY** with TP of USD 57 on emerging potential in lower-tier cities

Company Report
Initiation
April 21, 2020
Rating: BUY
TP: USD 57

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A rising star in lower tier cities. Pinduoduo is an emerging player with rapid growth in the ecommerce sector despite its relatively short operating history (since 2015). In our view, its rising popularity is driven by its innovative business model which provides buyers with value-for-money products and interactive shopping experiences. Strong user growth was seen, with its active users reaching 585mn in 4Q19 vs. 362mn for JD and 711mn for Alibaba. Its no. of users has exceeded that of JD since 2Q18 and was 18% less than Alibaba's in 4Q19. In 2019, the Group generated RMB 1.0tr of Gross Merchandize Value (GMV), up 113% YoY. We estimate its online market share in 2019 was ~9%, vs. 63% for Alibaba and 20% for JD.

Long-term investment on user loyalty. Pinduoduo has been suffering from core net losses in recent years, mainly dragged by sales and marketing expenses that accounted for 2.7% of GMV in 2019 vs. 0.7% for Alibaba and 1.0% for JD. We view it as a long-term investment on user loyalty and stickiness and see potential of rationalization of sales and marketing spending in the medium term when its business scale grows further. We overall expect the company to achieve break-even by 2021E driven by ongoing sales growth and margin improvements amid better economy of scale and better cost control.

Strategic partnerships with Tencent and Gome Retail. Tencent is the second-largest shareholder with ~17% stake and 3.4% voting right. In addition, it has formed a strategic partnership with Gome Retail, which could strengthen its position in the household appliances and electronics, especially big-ticket consumer goods.

Initiate with BUY. We initiate **BUY** with a DCF-based TP of USD 57. We believe the Group is well positioned to ride on the growth of in China's lower-tier cities.

Results and Valuation

	2018A	2019A	2020E	2021E
Revenue (RMB mn)	13,120	30,142	46,403	75,368
Chg (%,YoY)	*652.5*	*129.7*	*53.9*	*62.4*
Net profit (RMB mn)	-10,297	-6,968	-6,902	2,481
Chg (%,YoY)	*NA*	*NA*	*NA*	*NA*
Core net profit (RMB mn)	-3,456	-4,266	-3,654	5,872
Chg (%,YoY)	*NA*	*NA*	*NA*	*NA*
Earnings per ADS (RMB)	-13.9	-6.0	-5.9	2.1
Chg (%,YoY)	*NA*	*NA*	*NA*	*NA*
Core earnings per ADS (RMB)	-4.7	-3.7	-3.1	5.1
Chg (%,YoY)	*NA*	*NA*	*NA*	*NA*
Core P/E (x)	-75.4	-95.2	-111.7	69.5
P/S (x)	19.9	13.5	8.8	5.4
ROAE (%)	-115.5	-32.1	-30.2	10.4
ROAA (%)	-36.5	-11.7	-8.9	2.9

1 ADS = 4 common shares
Source(s): Bloomberg, ABCI Securities estimates

ADS price (USD)	50.1
Est. share price return	13.7%
Est. dividend yield	0%
Est. total return	13.7%
Previous Rating &TP	NA
Previous Report Date	NA

Source(s): Bloomberg, ABCI Securities estimates

Key Data

52Wk H/L(USD)	46.4/18.4
Issued Class A shares (mn)	2,580
Class A market cap (USD mn)	32,321
Avg daily turnover (USD mn)	313
Major shareholder(s)	Voting right
Zheng Huang	88.9%
Tencent	3.4%
Banyan Partners	1.7%

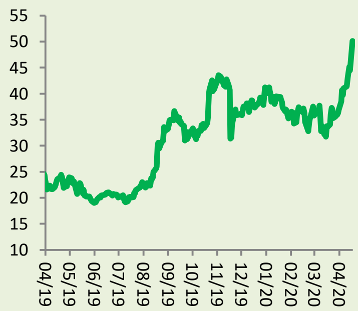
Source(s): Bloomberg, HKEx, ABCI Securities

Share Performance (%)

	Absolute	Relative*
1-mth	49.3	37.6
3-mth	27.4	34.6
6-mth	47.4	43.5

*Relative to MXCN
Source(s): Bloomberg, ABCI Securities

Share performance(USD)



Source(s): Bloomberg, ABCI Securities

Content

A rising star in lower-tier cities

A rapidly rising challenger to major ecommerce platforms

Pinduoduo is an emerging player in the ecommerce sector with rapid growth in recent years despite its short operating history (operating since 2015) compared with other major peers, such as Alibaba and JD.

In our view, its rising popularity is driven by its innovative business model that provides buyers with value-for-money products as well as fun and interactive shopping experiences. Pinduoduo is particularly appealing to customers in lower-tier cities given their stronger desire for value-for-money products since the population generally has lower purchasing power than that in higher-tier cities.

Interactive and dynamic shopping experiences

Overall, its platform combines comprehensive selection of value-for-money products and "social ecommerce" experiences that leverages social networks as an effective tool for buyer acquisition and engagement. E.g., its "team purchase" model allows users to explore products while interacting with friends via social networks, resembling the real-life experiences of shopping with friends. Customers can either initiate a new team purchase or invite friends on social networks to join, or join an existing team purchase initiated by others. Overall, customers can enjoy lower prices if there are enough buyers in the team. This contrasts with the traditional search-based ecommerce model, which only resembles the real-life experiences of shopping alone.

Exhibit 1: Pinduoduo's team purchase business model

Source(s): The Company

In addition, its platform offers various fun elements such as games and promotions to simulate user interactions and engagement. E.g., it launched an in-app casual game, Duo Duo Orchard (多多果园), in which users plant a virtual fruit tree by earning "virtual water" by accomplishing tasks including marking purchases, logging in, inviting friends, etc. Users will receive a basket of real fresh fruits once the virtual fruit tree grows up.

Synergies with the agriculture initiative

The feature also helps the Group's agriculture initiative as the fruits delivered as prizes are sourced primarily from less-developed areas, such as Southern Xinjiang; this can help support local economies in these regions.

In 2019, GMV for agricultural products reached RMB 136bn, up 109% YoY and accounted for 13.5% of total GMV. Overall, it connected 586,000 merchants selling agricultural products with 240mn active users who purchased such goods, with a repurchase rate exceeding 70%. In 2019, about 1,500 agriculture SKUs received over 100,000 orders via team purchase.

Exhibit 2: Duo Duo Orchard feature

Source(s): Pinduoduo app

In addition to providing a dynamic shopping experience, its team purchase model also helps the Group understand user need to improve product offerings (Consumer-to-Manufacturer, C2M model). E.g., the Group can share users' preferences to merchants so the latter can fine-tune its production and marketing plans accordingly. In this way, merchants can potentially reduce its product development cycles and enhance operating efficiency.

The Group has partnered with over 900 companies in C2M initiatives and created 2,200 custom SKUs in 20 product categories (e.g. household electric appliances) with over 150mn orders placed cumulatively.

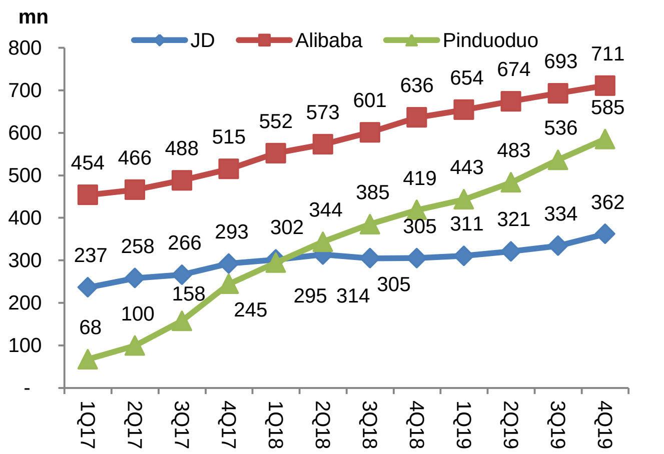
Rapid user growth

Pinduoduo has been experiencing rapid growth in recent years, with its active users reaching 585mn in 4Q19 vs. 68mn in 1Q17. Its no. of active users has exceeded that of JD since 2Q18.

We attributed Pinduoduo's rapid user growth to its innovative social ecommerce business model, which achieved good reception especially in lower-tier cities in China. JD, on the other hand, seems to be lagging behind in terms of user acquisition especially in lower-tier cities. Nonetheless, we believe JD's recent new business initiative targeting the lower-tier regions, Jingxi, which focuses on social ecommerce features, would stiffen competition with Pinduoduo.

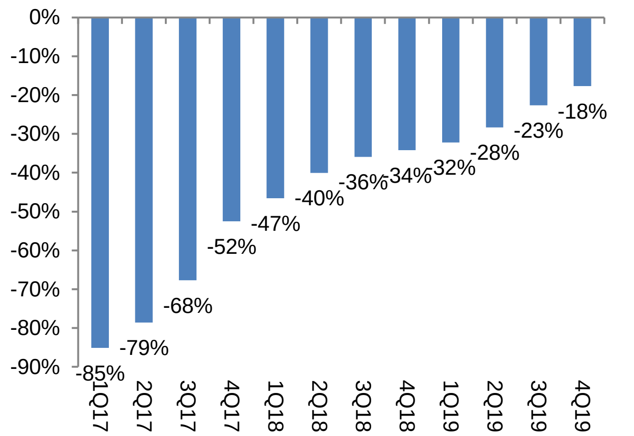
In terms of user number, Pinduoduo has been narrowing its gap with Alibaba. Its no. of users was 18% less than Alibaba's in 4Q19, down from 85% in 1Q17.

Exhibit 3: User comparison



Source(s): Companies, ABCI Securities

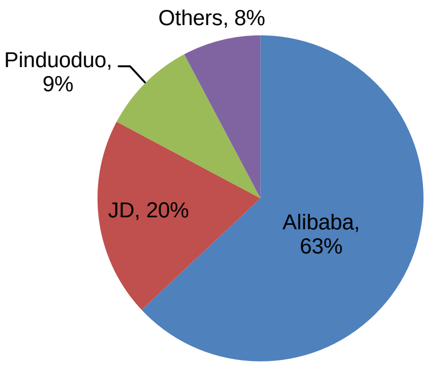
Exhibit 4: Pinduoduo's users/Alibaba's users



Source(s): Companies, ABCI Securities

In 2019, the Group generated RMB 1.0tr of Gross Merchandize Value (GMV), up 113% YoY. We estimate its online market share to be ~9% in 2019 vs. 63% for Alibaba and 20% for JD.

Exhibit 5: Online sales market share (2019)



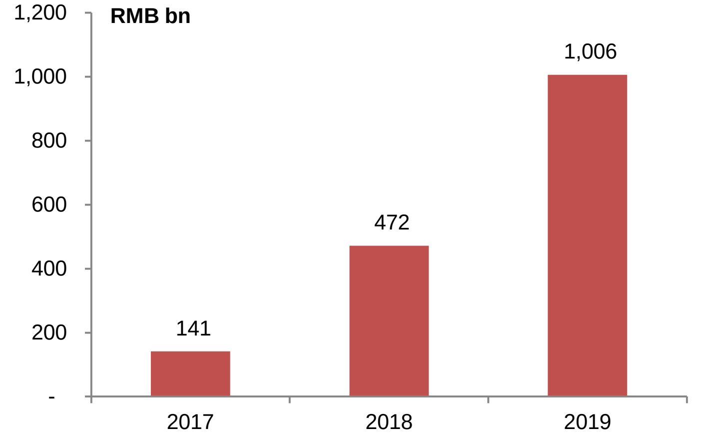
Source(s): Companies, ABCI Securities

Robust GMV growth

Pinduoduo's strong user base has led to robust GMV growth in recent years. The Group's GMV increased by about 7.1x from RMB141bn in 2017 to RMB1.0tr in 2019, significantly higher than the overall industry growth during the period.

In terms of product mix, apparels and fast moving consumer goods (FMCG) accounted for ~ 50% of GMV, while agriculture products accounted for ~13%.

Exhibit 6: GMV trend

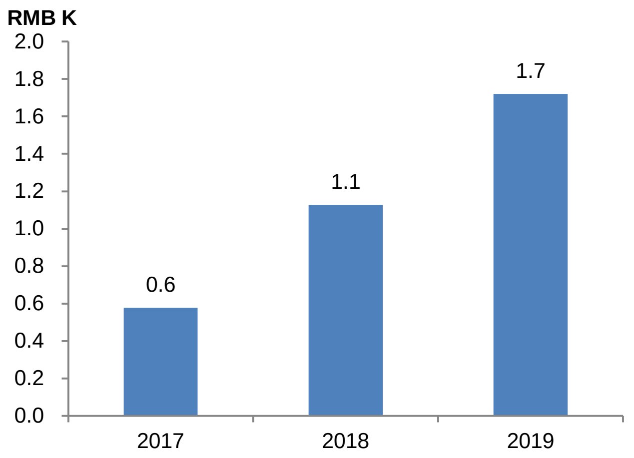


Source(s): The Company, ABCI Securities

User spending – the lowest among peers

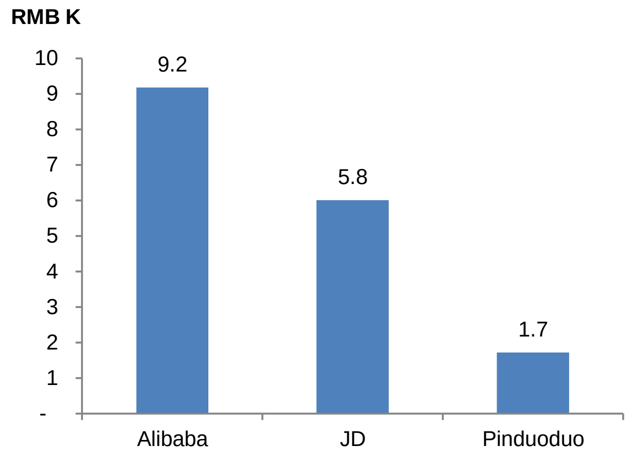
Pinduoduo is lagging behind its peers in terms of user spending. Based on our estimates, its annual spending per customer increased significantly from RMB 0.6K in 2017 to RMB 1.7K in 2019; nonetheless, the figure was still much lower than Alibaba's RMB 9.2K and JD's RMB 5.8K in 2019.

Exhibit 7: Pinduoduo's user spending per year



Source(s): The Company, ABCI Securities

Exhibit 8: User spending per year comparison (2019)



Source(s): Companies, ABCI Securities

In our view, Pinduoduo's lower annual spending per customer is caused by its higher exposure in lower-tier cities where consumers have lower spending power. Nonetheless, its customer mix is improving, as illustrated by the fact that GMV share from tier-1/2 cities increased from 37% in Jan 2019 to 48% in June 2019.

In addition, the lower user spending could imply that Pinduoduo's customers might have lower loyalty since they are generally more price sensitive given Pinduoduo's "value-for-money" market positioning. However, we believe the situation has been improving, as illustrated by the fact that the Group's average annual spending per user grew from RMB 0.6K in 2007 to RMB 1.7K in 2019.

Overall, given Pinduoduo's short operating history of five years, we believe it would take time for its customers to develop stickiness and loyalty with the Group.

In the ecommerce industry, per user spending would normally increase with the tenure of the users' shopping experience with the platform. E.g., users who have been with Pinduoduo for over a year are generally capable of spending a few thousand RMB per year, and its top-tier users are spending well over RMB 5,000 per year currently.

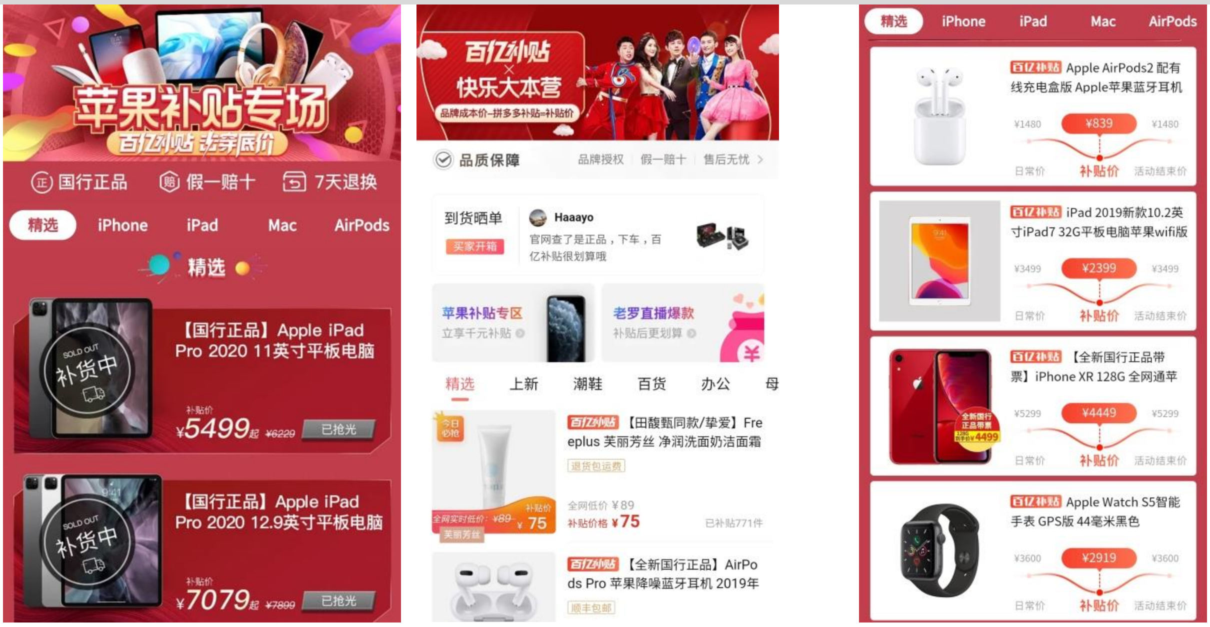
Effective marketing programs

In addition, effective marketing campaign also helps enhance user engagement and loyalty. The Group has launched a RMB 10bn subsidy marketing program since 2019 to offer discounted prices of various branded products including iPhone, Huawei phone, and others.

During the first 11 days of Nov 2019, it sold over 400,000 latest iPhone models. Similarly, on 2019 Singles Day, it sold over 1,000 cars for emerging domestic brands, such as Wuling Hongguang, in the first 16 minutes, with most of the buyers mainly from tier-3 cities and below. Our latest sample check reveals that its subsidized iPad products are currently out of stock, indicating good reception from consumers.

In our view, this helps shift the consumers' perception on Pinduoduo from price to quality. If customers are satisfied with their purchase of premium items, such as iPhone, in terms of quality and authenticity, the experience would encourage them to explore other products in Pinduoduo's platform, hence increasing their loyalty.

Exhibit 9: RMB10bn marketing program



Source(s): Pinduoduo app

Strategic partnership with Tencent (700 HK)

Tencent has been one of Pinduoduo's major shareholders since 2017, and is now the second-largest shareholder with ~17% stake and 3.4% voting right.

The two companies formed a strategic partnership in Feb 2018, in which Tencent offered Pinduoduo access points in Weixin Pay so that the Group could leverage the former's sizable user traffic. The two companies also cooperate in a number of areas including payment solutions, cloud services and user engagement, and to explore and pursue additional opportunities for potential cooperation.

The majority of Pinduoduo's users are currently on its own apps, implying that the Group manages to convert its users acquired from the WeChat channels to its own app.

Intensified competition

Pinduoduo's social ecommerce business model is facing intensified competition from other players.

JD: JD.com has launched a social ecommerce platform, Jingxi, in Sep 2019 targeting at lower-tier cities. Overall, Jingxi's business model is similar to Pinduoduo's by connecting consumers and manufactures via social media platforms and Jingxi app to enable consumers to communicate directly with manufacturers to explore value-for-money products.

In addition, it has partnered with Tencent to secure WeChat's first-level entry point to leverage the latter's traffic.

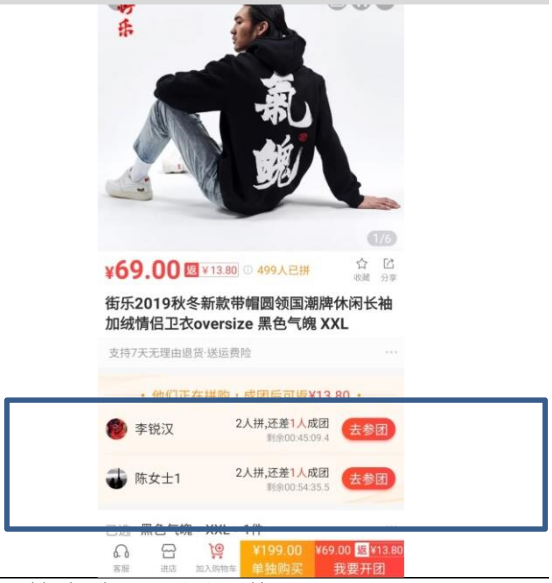
Comparing with JD's access point in Weixin, Pinduoduo's access point is located inside the "Weixin Pay" sub-menu (level-two access). Jingxi enjoys the level-one access in Weixin, meaning that the access point is closer to Weixin's main menu. In this regard, JD has a better chance of directing Tencent's traffic to its own app.

Overall, JD's Jingxi platform received good reception since its launch in Nov 2019, with daily orders exceeding RMB 1mn currently.

Exhibit 10: Jingxi-C2M model

Source(s): Jingxi app, ABCI Securities

Exhibit 11: Jingxi – Group-buy feature



Source(s): Jingxi app, ABCI Securities

Douyin (抖音): Douyin has recently launched a group-buying feature that allows merchants to sell products through short videos. Shoppers can pay within the app and choose to collect their orders in stores or through delivery by third parties. Despite its limited experience in ecommerce, Douyin could become a major competitor in the ecommerce area given its rising popularity in recent years.

Exhibit 12: Douyin's group buy features

Source(s): Ebrun.com

Peer comparison

Overall, there are two major business models for online e-commerce platforms – in-house and co-ops. In our view, each business model has its pros and cons. The decision to adopt which model is dependent on one's business strategies.

Co-ops business model: Alibaba and Pinduoduo operate online marketplaces and charge commission on merchants' sales. They rely mostly on third-party logistics companies for product delivery.

In theory, this model requires less fixed-asset investments and working capital. In addition, product and geographical expansion are also easier as platforms can leverage merchants' product sourcing capabilities and logistic partners' storage and transportation network. However, quality control is more difficult due to multiple parties involved in the supply chain, which can potentially affect services and customer loyalty.

In-house business model: JD, with its own product inventories and logistic network, is the only major online ecommerce platform adopting an in-house business model.

In theory, this business model, with more control on product quality and supply chain, could lead to better assurance and customer loyalty. The drawback is that this model usually requires hefty early-stage investments, which could impact a company's profitability in early years.

Exhibit 13**: In-house vs. Co-ops –theoretical pros and cons**

	In-house	**Co-op**
Examples	JD	Alibaba, Pinduoduo
Business model	Direct sales	Marketplace
Inventories	Self-owned inventories	Inventories owned by merchants
Logistics network	Self-built logistics network	Third party logistics partners
Product expansion	Harder as platforms need to source new product by itself	Easier as platforms can leverage on merchants' product sourcing capabilities
Geographical expansion	Harder due to the need to establish logistic infrastructure	Generally easier, as platform can leverage on logistic partners' network
Quality assurance	Easier	More difficult due to more parties involved and less control on external parties
Margins	Potentially lower due to higher fixed cost and product cost	Potentially higher as platforms mainly charge sales commission with no inventory cost.
Working capital requirement	Higher	Lower

Source(s): ABCI Securities

The following table compares Pinduoduo's business model with Alibaba's and JD's. As discussed above, Pinduoduo, similar to Alibaba, adopts a marketplace model with no self-owned inventories. It also partners with third-party logistics service providers for order fulfillment.

Exhibit 14: Business comparison

	JD	Alibaba	Pinduoduo
Direct sales	Direct sales business sourced products from over 19K supplies at end-2018	NA	NA
Online marketplace	Over 270,000 merchants at end-2019,	Taobao and Tmall had over 2bn product and service listings at Mar, 2019. As of Mar 31, 2019, there were over 190,000 brands and merchants on Tmall, including 77% of the consumer brands ranked in the Forbes Top 100 World's Most Valuable Brands for 2019.	3.6mn active merchants in 2018 "team purchase" model to allow customers to purchase products at low prices
Omni-channel initiatives	JD Daojia –Online-to-offline supermarket platform 7FRESH- 24/7 fresh food supermarket SEVEN FUN- lifestyle space in Beijing to provide meal and leisure options JD E-SPACE – a 50K sqm experience store in Chongqing with innovative electronics and smart products Partnership with Walmart	Freshippo –grocery retail chain Partnership with various offline retailers including SunArt, Starbuck, Suning, Intime, Lianhua Supermarket, Red Staf Macalline, etc on omni-channel initiatives	Strategic partnership with Gome Retail
Logistic network	Self-owned logistics network –JD Logistics At end-2019, JD Logistics operated over 700 warehouses, covering GFA of ~16.9m sqm	In FY3/19, Cainiao Network's 15 strategic logistic partners employed over 1.6 mn delivery personnel in more than 700 cities and 31 provinces in China. Collectively, these partners operate more than 190,000 hubs and sorting stations and delivered 25.1 bn packages in FY3/19.	External logistic partners
Fintech	JD Digit (formerly JD Finance). Potential conversion into 40% of JD Digit's equity interest in the future, subject to regulatory approval	Ant Financial (33% stake)	NA

Source(s): Companies, ABCI Securities

A less comprehensive ecosystem than peers'

In contrast to various omni-channel initiatives launched by Alibaba's Freshippo and JD's JD Daojia, Pinduoduo is lagging behind in this area. Similar situation occurs in the FinTech area where there are relatively few innovations by Pinduoduo.

In our view, Pinduoduo's overall operating scale and financial resources are still smaller than Alibaba and JD; also, profitability of these omni-channel initiatives are generally weak at the moment, and that significant technological/operational know-hows are generally required for online-offline integration.

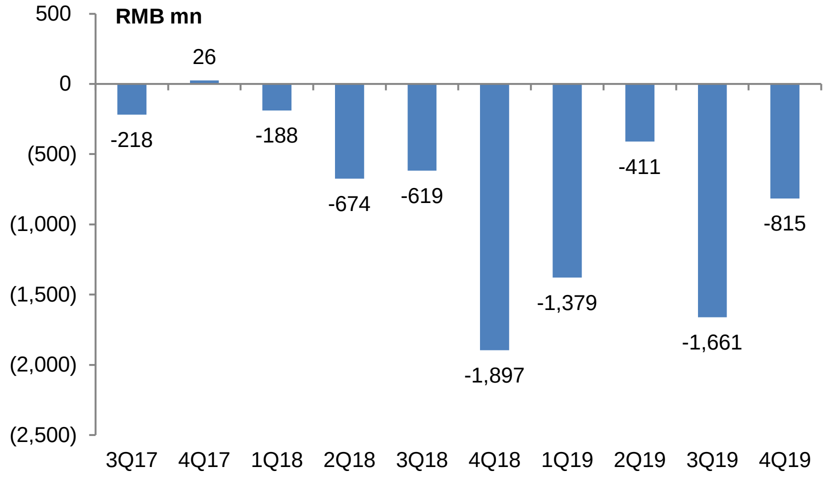
On a positive note, its strategic partnership with Tencent could allow it to leverage the latter's ecosystem, such as WeChat and WeChat Pay, compensating for the inadequacies in its self-built ecosystem.

In addition, it has formed a strategic partnership with Gome Retail in April 2020 via investing in its USD200m convertible bonds. In our view, it could strengthen Pinduoduo's position in the household appliances and electronics, despite the fact that household appliances and electronics generally have lower margins than apparel.

Long-term investment vs. short-term profitability

Overall, Pinduoduo has been suffering from core net losses in the past quarters except for a small profit in 4Q17. In addition, earnings have been volatile in recent quarters. E.g., quarterly net losses narrowed in 1Q19 and 2Q19 but widened again in 3Q19, followed by some narrowing in 4Q19.

Exhibit 15: Quarterly core net profit



Source(s): The Company, ABCI Securities

A comparison of cost structure with its peers reveals that Pinduoduo's sales and marketing/revenue ratio was exceptionally high at 90.2% in 2019 vs. ~10% for Alibaba and 3.7% for JD. In addition, its sales and marketing/GMV ratio is 2.7% vs. 0.7% for Alibaba and 1.0% for JD.

In our view, Pinduoduo has been actively investing in various promotions. For example, in 2019, it launched a RMB10bn subsidy program to stimulate user engagement.

We reckon that the management has not been focusing on achieving specific financial targets since the platform is still in its early stage of growth; instead, its strategy is to invest in areas that would establish a strong foundation for future growth. Decisions on sales and marketing expenses are based on the internal ROI metrics, which measure both financial parameters and user engagement levels.

Nonetheless, the Group does have internal operational metrics to adjust sales and marketing spending when the business reaches a certain level. In our view, this implies the potential of rationalizing its sales and marketing spending in the medium term when its business scale grows and matures.

Exhibit 16: Sales and marketing expenses comparison (2019)

	Alibaba	JD	Pinduoduo
Sales and marketing expenses/revenue	10.6%	3.7%	90.2%
Sales and marketing expenses/GMV	0.7%	1.0%	2.7%

Source(s): Companies, ABCI Securities
*FY3/19 for Alibaba

Overall, Pinduoduo's profitability is significantly weaker than Alibaba's and JD's given the significant losses in recent years. It recorded a core net loss of RMB 4.3bn in 2019, compared with JD's RMB10.8bn and Alibaba's RMB 139bn in core net profit. Pinduoduo's core net margin was -14.2% in 2019 vs. JD's 1.9% and Alibaba's 28.4% in 2019.

In terms of revenue size, it generated RMB 30.1bn revenue in 2019, significantly lower than RMB 488.8bn for Alibaba and RMB 576.8bn for JD, despite its sizable customer base. In our view, this can be attributed to its lower spending per customer compared with Alibaba and JD.

Exhibit 17: Financial comparison (2019)

	Alibaba			JD			Pinduoduo		
	2018	2019	YoY	2018	2019	YoY	2018	2019	YoY
Annual active user (mn) (period end)	636	711	11.8%	305	362	18.6%	419	585	39.7%
Revenue (RMB mn)	345,278	488,895	41.6%	462,019	576,888	24.9%	13,120	30,142	129.7%
Gross profit (RMB mn)	161,455	223,420	38.4%	65,953	84,421	28.0%	10,215	23,803	133.0%
Operating profit (RMB mn)	57,540	93,064	61.7%	-2,619	8,994	NA	-10,799	-8,538	-20.9%
Core net profit (RMB mn)	93,243	138,740	48.8%	3,460	10,750	211.0%	-3,456	-4,266	23.4%
Gross margin	46.8%	45.7%		14.3%	14.6%		77.9%	79.0%	
Operating margin	16.7%	19.0%		-0.6%	1.6%		-82.3%	-28.3%	
Core net margin	27.0%	28.4%		0.7%	1.9%		-26.3%	-14.2%	

Source(s): Companies, ABCI Securities

Exhibit 18: Financial comparison (2018)

	Alibaba			JD			Pinduoduo		
	FY3/18	FY3/19	YoY	2017	2018	YoY	2017	2018	YoY
Annual active user (mn)	552	654	18.5%	293	305	4.4%	245	419	71.0%
GMV (RMB bn)	4820	5727	18.6%	1,295	1,677	29.5%	141	472	234.0%
Annual spending per user (RMB)	8,732	8,742	0.1%	4,426	5,492	24.1%	576	1,126	95.3%
Revenue (RMB mn)	250,266	376,844	50.6%	362332	462,019	27.5%	1744	13,120	652.3%
Gross profit (RMB mn)	143,222	169,915	18.6%	50,815	65,953	29.8%	1021	10,215	900.5%
Operating profit (RMB mn)	69,314	57,084	-17.6%	-835	-2,619	213.8%	-596	-10,799	1711.9%
Core net profit (RMB mn)	85,766	100,731	17.4%	4,968	3,460	-30.4%	-373	-3,456	826.5%
Gross margin	57.2%	45.1%		14.0%	14.3%		58.5%	77.9%	
Operating margin	27.7%	15.1%		-0.2%	-0.6%		-34.2%	-82.3%	
Core net margin	34.3%	26.7%		1.4%	0.7%		-21.4%	-26.3%	

Source(s): Companies, ABCI Securities

DuPont analysis

We conduct a DuPont analysis to study the ROA composition of the three major online ecommerce platforms, Alibaba, JD, and Pinduoduo.

To recap, under the DuPont model:

Return on average asset (ROA) = Core net margin (i.e. core net profit/revenue) x Asset turnover (i.e. revenue/Average total asset).

Having said that, under JD's direct sales business model, it recognizes the direct-sale GMV as revenue, while Alibaba and Pinduoduo only recognizes sales commission as revenue (which is only a small % of GMV) under their marketplace model. As a result, the conventional DuPont formula might not be entirely applicable in this case, in our view.

To account for their accounting treatment difference, we adjust the DuPont formula by replacing revenue with GMV in the equation. So, the revised formula becomes:

Return on average asset (ROA) = (Core net profit/GMV) x (GMV/average total asset)

Alibaba: Alibaba's ROA was the highest among its major peers. In our view, this is mainly driven by its high core net profit/GMV ratio, which could be party attributed to its co-op business model that does not bear inventory and logistic cost. This is despite the fact that its GMV-to-average total asset ratio is the lowest among the three.

JD: JD's ROA was ranked second (4.6% in 2019). In our view, the main drag is its low core net profit/GMV ratio of 0.5%, which is related to its inventory and logistic cost. Its GMV-to-average total asset ratio was higher than that of Alibaba, implying more effective use of asset to generate GMV.

Pinduoduo: Pinduoduo was loss-making with a negative ROA. Its negative core net margin/GMV ratio was mainly caused by its high marketing and selling expenses equivalent to 90% of revenue and 114% of gross profit in 2019. Such high expenses were caused by active investments in marketing. In our view, this strategy has led to superior GMV-to-average total asset ratio (16.9x in 2019) at the expense of overall profitability.

Exhibit 19**: ROA analysis (2019)***

	Core net profit/GMV (A)	GMV/average total asset (B)	ROA% (AxB)
Alibaba	2.3%	5.0	11.6%
JD	0.5%	8.9	4.6%
Pinduoduo	-0.4%	16.9	-7.2%

*FY3/20E for Alibaba

Source(s): Companies, ABCI Securities

Industry trends

China's retail sales dropped by 19.0% YoY in 1Q20, according to National Bureau of Statistics (NBS). Among the product categories, jewelry, automobiles, furniture, apparel, construction materials, and consumer electronics were the hardest hits.

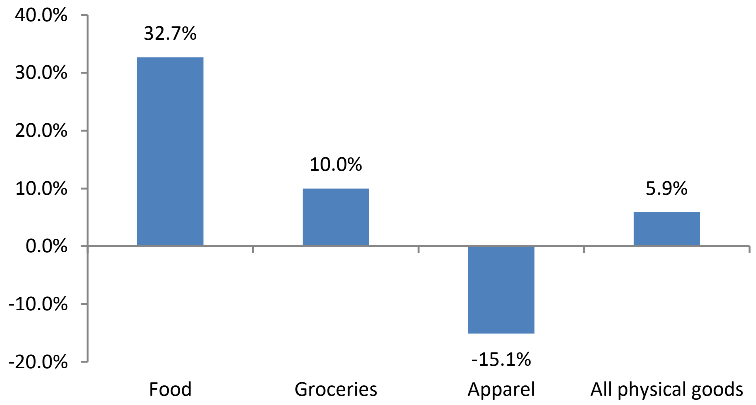
Under this weakening macro backdrop, online sales of physical goods grew by 5.9% in 1Q20, down from 19.5% YoY in 2019. In our view, this would inevitably impact the performance of major online sales platforms. On a positive note, the 5.9% YoY growth in 1Q20 implies some sequential improvement in March 2020 versus the 3.0% growth in 2M20.

The recent virus outbreak has prompted more consumers to utilize online shopping, especially for groceries and good products, due to the closure of physical shops and cut-off in local transportation. In our view, such changes in consumer behavior could benefit the ecommerce industry as a whole in the long run.

In recent years, we have seen emerging trends in the ecommerce sector that are benefiting players with strengths in specific areas.

Food products: Overall, food products achieved an online sales growth of 30.9% YoY in 2019, higher than 15.4% and 19.8% YoY for apparel and grocery products, according to NBS. In 1Q20, online sales of food grew by 32.7% YoY, outperforming other major categories. In our view, this is partly driven by ongoing improvement in logistic supply chain, especially the same-day delivery and cold-chain service.

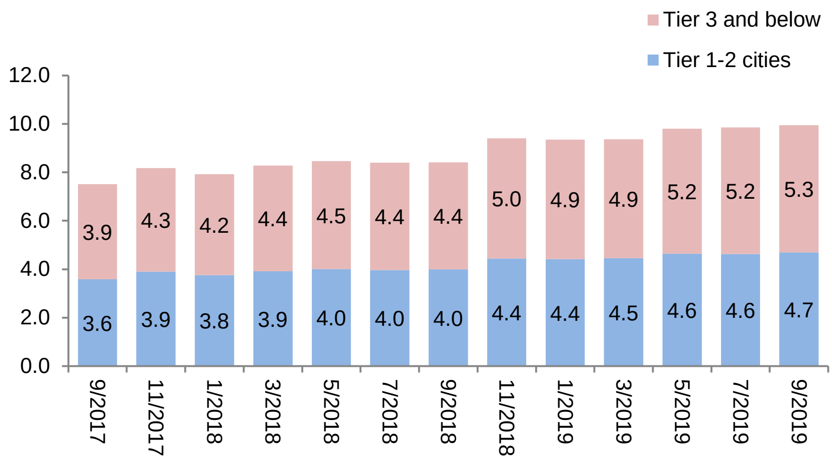
Exhibit 20: China's online sales growth by category (1Q20)



Source(s): NBS, ABCI Securities

Lower-tier cities: Overall, major ecommerce platform have been focusing on lower-tier cities in recent years. About 70% of new customers of Alibaba and JD are from lower tier cities. There were about 1bn mobile shopping users in Sep 2019, according to Questmoible, in which about 53% of users were from lower tier cities (tier-3 and below).

Exhibit 21: No. of mobile shoppers by city tier (100m)



Source(s): Questmobile, ABCI Securities

Social ecommerce: Social ecommerce, which leverages social network such as WeChat to allow users to share product information with friends, has become increasingly popular. Consumers could enjoy steep discounts when they share an item to their friends, or by joining an ongoing group-buying deals on the app.

Also, more online brands/online platforms partners with celebrities or internet KOLs (Key Opinion Leader) to offer live videos or short videos to introduce products. E.g., Austin Li (李佳琦), a male KOL famous for selling lipsticks and other cosmetic products in his live program, has over 50mn fans. Another ecommerce KOL, Viya (薇娅), had over 30mn customer views for her live programs in the recent Nov 11 festival. She has also once achieved a record over RMB 300mn daily sales during the Nov 11 festival in 2018.

Financial analysis

For 2019-2021E, we expect GMV to grow by 46% CAGR to RMB 2.2tr by 2021E, driven by the growing number of active users and spending.

Annual active customer: the Group had 585mn of annual active customers at end-2019, up 40% YoY in 2019. Given the company's high popularity in lower tier cities, we expect it to penetrate into lower tier further in coming years, with the no. of active customers reaching 772mn by 2021E.

Annual spending per active customer: Annual spending per active customer has seen a growing trend in recent years, reaching RMB1.7K in 2019. Having said that, it is still significantly lower than RMB 9.2K for Alibaba and RMB5.8K for JD. We expect the figure to increase further to RMB 2.8K in 2021E driven by ongoing improvement in user experience and loyalty.

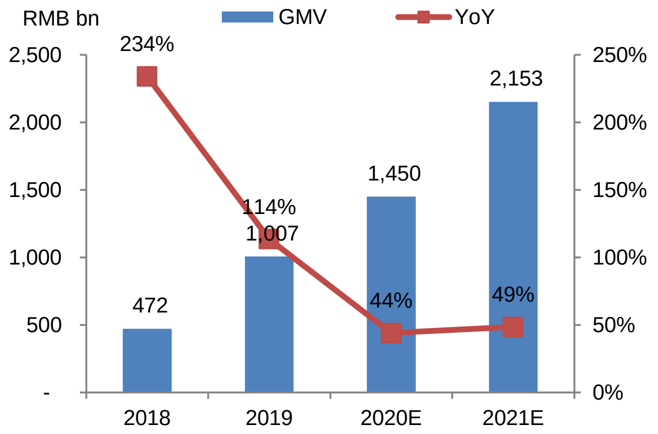
Exhibit 22: Major assumptions

	2018	2019	2020E	2021E
Annual active customer account (mn)	419	585	702	772
GMV (RMB bn)	472	1,007	1,450	2,153
Annual spending per active customer (RMB)	1,127	1,721	2,065	2,788
Monetization rate	2.8%	3.0%	3.2%	3.5%

Source(s): the Group , ABCI Securities estimates

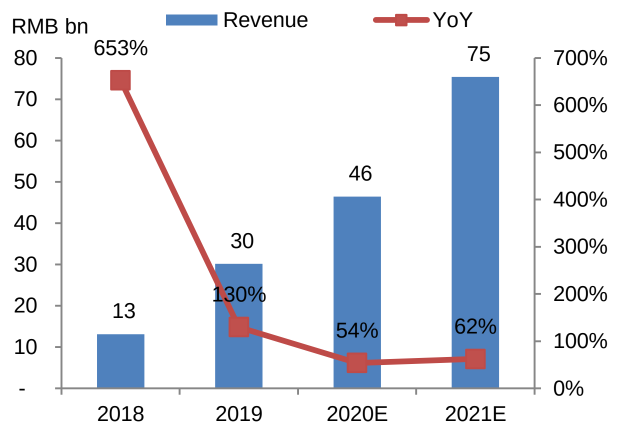
Overall, we expect revenue to increase at 58% CAGR in 2019-2021E to RMB 75.4bn by 2021E, propelled by growing GMV and improving monetization rate from 3.0% in 2019 to 3.5% in 2021E, thanks to improving value-added services provided to merchants.

Exhibit 23: GMV outlook



Source(s): the Group , ABCI Securities estimates

Exhibit 24: Revenue outlook



Source(s): the Group , ABCI Securities estimates

In terms of revenue mix, online marketing services accounted for 89% of revenue in 2019, followed by transaction services (11%). Looking forward, we expect the share of online marketing services to rise gradually to 91% by 2021E.

Online marketing services: Pinduoduo provides various marketing services to merchants, such as allowing merchants to bid for keywords that match product listings appearing in search results and advertising placements such as banners, links and logos. The placement and the price for such placement are determined through an online bidding system. We overall expect its revenue contribution to increase from 89% in 2019 to 91% in 2021E as Pinduoduo continues to innovate various value-added services to merchants.

Transaction services: Pinduoduo charges merchants fees for transaction-related services. Overall, its revenue shares have been on a declining trend given the ongoing business mix shifting to online marketing services. We expect its revenue contribution to drop to 9% by 2021E vs. 11% in 2019.

Exhibit 25**: Revenue forecasts (RMB mn)**

	2018	2019	2020E	2021E
Online marketplace services	11,516	26,814	41,762	68,585
Transaction services	1,604	3,328	4,640	6,783
Total revenue	**13,120**	**30,142**	**46,403**	**75,368**

Source(s): the Group , ABCI Securities estimates

Looking forward, we expect the margins to improve further.

Gross margin: Gross margin has been in an uptrend improving to 79.0% in 2019 vs. 58.5% in 2017 driven by economies of scale and improving efficiency of its online marketplace. Looking forward, we expect such improvement process to continue with gross margin reaching 83.0% by 2021E.

Sales and marketing expenses: Non-GAAP sales and marketing expenses have been the biggest cost item for Pinduoduo, accounting for 87.3% of revenue in 2019. Such ratio has been coming down from the peak of 99.4% in 2018 because less promotion and subsidies are required when customer loyalty increases; also, Pinduoduo's bargaining power over merchants improves as its operation scale grows. Looking forward, we expect non-GAAP sales and marketing expenses/revenue ratio to improve to 68.0% by 2021E.

General & admin expenses: We expect non-GAAP G&A expense/sales ratio to improve to 1.0% in 2021E vs. 1.7% in 2019 driven by improving economies of scale.

R&D expenses: Non-GAAP R&D expenses /sales ratio was 9.9% in 2019. We expect this ratio to improve in 2020-2021E on economies of scale, reaching 8.0% in 2021E.

Exhibit 26: Non-GAAP cost trend (RMB mn)

	2018	2019	2020E	2021E
Cost of revenue	-2,902	-6,315	-8,584	-12,813
Sales and marketing	-13,036	-26,313	-38,050	-51,250
General and admin	-160	-510	-696	-754
R&D	-980	-2,984	-4,176	-6,029
Total	**-17,078**	**-36,123**	**-51,507**	**-70,846**
% of revenue				
Cost of revenue	*-22.1%*	*-21.0%*	*-18.5%*	*-17.0%*
Sales and marketing	*-99.4%*	*-87.3%*	*-82.0%*	*-68.0%*
General and admin	*-1.2%*	*-1.7%*	*-1.5%*	*-1.0%*
R&D	*-7.5%*	*-9.9%*	*-9.0%*	*-8.0%*
Total	***-130.2%***	***-119.8%***	***-111.0%***	***-94.0%***

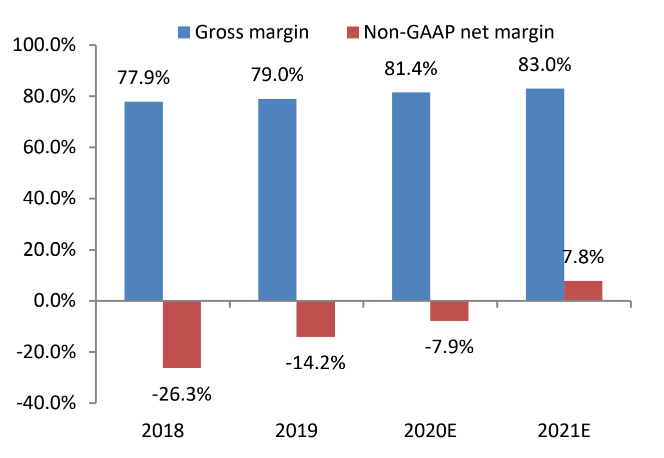
Note: Excl. impacts of share-based compensation and other non-operating items

Source(s): the Group , ABCI Securities estimates

Based on improving gross margins and cost trends, we expect the Group would reach the breakeven point by 2021E with a core net profit of RMB 5.9bn, implying a core net margin of 7.8% in 2021E vs. -14.2% in 2019.

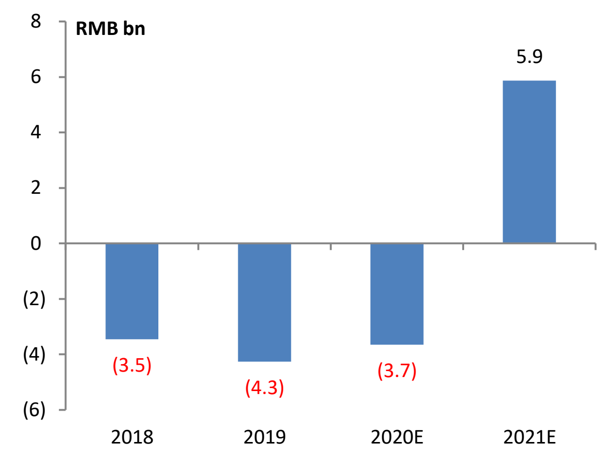
Nonetheless, earnings visibility is still low at the moment and our forecasts are subject to revision with reference to future quarterly earnings.

Exhibit 27: Margin outlook



Source(s): the Group, ABCI Securities estimates

Exhibit 28: Core net profit outlook



Source(s): the Group, ABCI Securities estimates

Earnings sensitivity

In terms of earning sensitivity, we estimate that each 50bp increase in core net margin, net profit will increase by 7% for 2021E.

Exhibit 29: Earnings sensitivity analysis

Changes in core net margin (bps)	Changes in 2021E core net profit
50	7%
40	5%
30	3%
20	2%
10	0%
-10	-3%
-20	-5%
-30	-7%
-40	-8%
-50	-10%

Source(s): ABCI Securities estimates

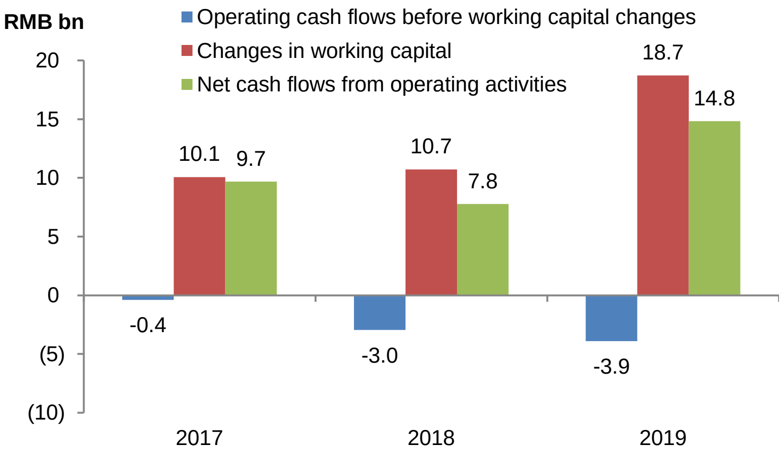
Cash flow analysis

Despite ongoing net losses, the Group has been achieving positive operating cash flows in recent years, primarily driven by positive working capital cash flows. This is enabled by the rising amount of merchant deposits and payables to merchants as the business scale continues to grow.

The Group reported a negative operating cash flow of RMB 3.9bn in 2019 prior to changes in working capital. This is offset by the RMB18.7bn cash inflow from working capital movement, including the RMB 12.6bn cash inflow from merchant payables and RMB3.7bn cash inflow from merchant deposit. As a result, the Group's net cash flow from operating activities was reported at RMB14.8bn.

The Group maintained a net cash of RMB32.5bn at end-2019.

Exhibit 30: Operating cash flows analysis



Source(s): The Company, ABCI Securities

Exhibit 31: Quarterly financials (RMB mn)

	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19	4Q19
Online marketplace	*1,108*	*2,371*	*2,974*	*5,062*	*3,948*	*6,467*	*6,711*	*9,687*
Transaction service	*277*	*338*	*398*	*592*	*597*	*823*	*803*	*1,106*
Net revenues	**1,385**	**2,709**	**3,372**	**5,654**	**4,545**	**7,290**	**7,514**	**10,793**
Cost of revenue	-319	-388	-775	-1,424	-873	-1,595	-1,833	-2,037
Gross profit	**1,066**	**2,321**	**2,598**	**4,230**	**3,672**	**5,695**	**5,681**	**8,755**
Sales and marketing	-1,218	-2,971	-3,229	-6,024	-4,889	-6,104	-6,909	-9,273
General and admin	-29	-5,801	-306	-322	-236	-278	-437	-346
R&D	-73	-186	-332	-525	-667	-804	-1,127	-1,272
Profit from operations	**-253**	**-6,636**	**-1,269**	**-2,641**	**-2,120**	**-1,490**	**-2,792**	**-2,135**
Interest income	50	137	165	233	252	403	415	473
Interest expenses							-6	-140
Fx gain	-2	4	6	3	-2	45	34	-13
Others, net	4	2	1	-20	-7	40	23	27
Share of results of investee							-8	37
PBT	**-201**	**-6,494**	**-1,098**	**-2,424**	**-1,878**	**-1,003**	**-2,335**	**-1,752**
Income tax expenses								
Deemed distribution to preferred shares holders	-81							
Net income	**-282**	**-6,494**	**-1,098**	**-2,424**	**-1,878**	**-1,003**	**-2,335**	**-1,752**
Non-GAAP net profit	**-268**	**-673**	**-619**	**-1,896**	**-1,379**	**-411**	**-1,660**	**-815**
YoY								
Group revenue growth (%)	NA	NA	697%	379%	228%	169%	123%	91%
EBIT growth (%)	NA	NA	441%	NA	737%	-78%	120%	-19%
Net profit growth (%)	NA	NA	395%	NA	566%	-85%	113%	-28%
Core profit growth (%)	NA	NA	183%	NA	414%	-39%	168%	-57%
Margin								
Gross profit margin (%)	77.0%	85.7%	77.0%	74.8%	80.8%	78.1%	75.6%	81.1%
EBIT margin (%)	-18.3%	-245.0%	-37.6%	-46.7%	-46.6%	-20.4%	-37.2%	-19.8%
Net margin (%)	-20.4%	-239.7%	-32.6%	-42.9%	-41.3%	-13.8%	-31.1%	-16.2%
Core net margin (%)	-19.4%	-24.9%	-18.3%	-33.5%	-30.3%	-5.6%	-22.1%	-7.6%

Source(s): the Group, ABCI Securities

Initiate with BUY

We initiate **BUY** on the counter with a DCF-based TP of USD57.

Our DCF approach is based on the following assumptions:

- 11% WACC based on 2.6% risk free rate (reference to China 10-year government bond yield), 1.1x beta, 8.0% equity risk premium, 8% cost of debt and 10% debt to capital ratio
- 4% terminal growth rate
- EBIT margin normalized to 10% by 2029E

The following table shows the sensitivity analysis.

Exhibit 32: DCF sensitivity

		WACC				
Terminal growth		**10.0%**	**10.5%**	**11.0%**	**11.5%**	**12.0%**
	2.0%	55.7	51.9	48.6	45.7	43.0
	3.0%	60.6	56.1	52.1	48.7	45.6
	4.0%	67.2	61.5	56.7	52.5	48.9
	5.0%	76.3	68.9	62.7	57.5	53.1
	6.0%	90.1	79.6	71.2	64.3	58.6

Source: ABCI Securities estimates

Our DCF-based valuation range is USD48.6- USD71.2 per share, based on 2.0-6.0% terminal growth rate. We set our TP to USD57, around the mid-point of this range.

Overall, the key downside risk to our DCF valuation is that the company could not turnaround its loss-making situation over the next few years. Please refer to the risk factors section below for more details.

Peer valuation analysis

Pinduoduo's comparable peers are China major online e-commerce platforms including Alibaba and JD, as well as overseas major ecommerce platforms including Amazon, Ebay, Rakuten, and Zalando.

Pinduoduo is currently trading at a higher P/E than Alibaba and JD; however, P/E is not be the best valuation metric for Pinduoduo given that it is still in the early stage of profitability. As a result, we refrain from using P/E as our primary valuation metric. On a P/S basis, Pinduoduo is trading at 6.1x 2021E P/S, higher than 4.8x for Alibaba, reflecting Pinduoduo's higher GMV growth trend.

Exhibit 33: Peer valuation

		Market cap (Lcy)	Price (Lcy)	P/sales			P/E		
				2019	2020E	2021E	2019	2020E	2021E
China major ecommerce platforms									
BABA US Equity	ALIBABA	569,086	**212.1**	7.8	6.0	4.8	30.4	25.5	20.4
JD US Equity	JD.COM	66,382	**45.2**	0.8	0.7	0.6	37.9	36.8	23.4
PDD US Equity	PINDUODUO	58,246	**50.1**	13.4	9.1	6.1	NA	NA	61.1
	Average			**7.4**	**5.3**	**3.8**	**34.2**	**31.1**	**35.0**
Oversea major ecommerce platforms									
AMZN US Equity	AMAZON.COM INC	1,193,274	**2,393.6**	4.3	3.6	3.0	103.0	58.2	42.7
EBAY US Equity	EBAY INC	29,964	**37.6**	2.8	3.1	2.9	16.8	13.5	12.6
4755 JP Equity	RAKUTEN INC	1,316,939	**918.0**	1.0	0.9	0.8	NA	NA	120.5
ZAL GR Equity	ZALANDO SE	10,624	**42.0**	1.6	1.5	1.3	NA	246.6	77.0
	Average			**2.4**	**2.3**	**2.0**	**59.9**	**106.1**	**63.2**

Source(s): Bloomberg, ABCI Securities estimates

Risk factors

Loss-making business

The Group reported net losses in recent years. Unless the Group turnaround its loss-making situation, the current business model may not be sustainable in the long run. In such case, our forecast and DCF-valuation method cannot be justified. As a result, the stock may not be suitable to prudent investors who prefer to invest in companies operating with profitable business model.

Market competition

The Group competes with other online ecommerce platforms including Alibaba and JD. The competition will be on commission rate, promotion discount, brand advertising, technological investment, and more.

Slowing ecommerce consumption

As the Group is exposed to consumer spending on services, any significant slowdown of consumption in China would impact financial performance. In the long term, we believe domestic market growth would converge with income growth, which is usually in line with GDP growth.

High sales and marketing expenses

Pinduoduo's sales and marketing/revenue ratio was exceptionally high at 90.2% in 2019 due to active promotions. Although there is a potential of rationalizing its sales and marketing spending in the medium term when its business scale grows and matures, the management has not announced a long-term target on sales and marketing expenses at the moment.

No dividend record to ordinary shareholders

The Group has omitted dividend to ordinary shareholders since listing. In our view, this could due to its weak profitability over the past few years. In our view, the situation could only changes in the medium term should its profitability improve over the next few years.

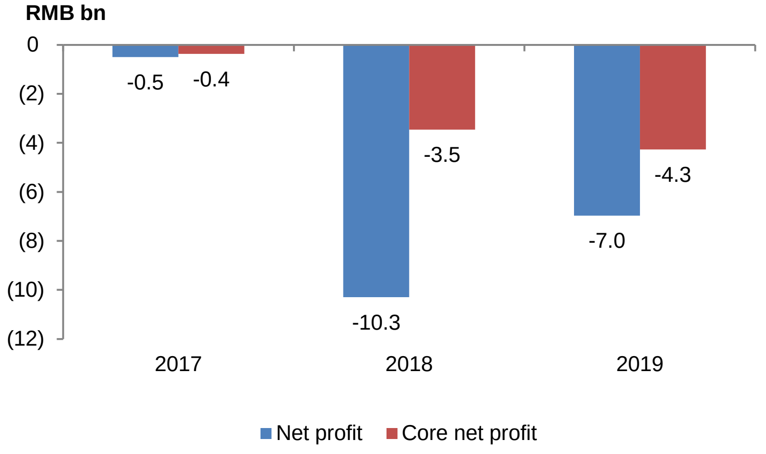
Non-GAAP financials

The Group has disclosed the non-GAAP financial metrics, such as the non-GAAP net profit, to supplement its GAAP financial measures. Historically, there were differences between its GAAP net profit and non-GAAP net profit due to inclusion of items such as share-based compensation and other non-core items in the former.

Among these items, share-based compensation expense is related to various factors including price movement of ordinary shares, expected volatility, risk-free interest rate, etc. Pinduoduo's share-based compensation expenses amounted to RMB 2.6bn in 2019.

While investors tend to exclude these items when performing analysis given their non-cash nature, we believe these non-GAAP financial measures should only serve as reference.

Exhibit 34: Net profit vs. Non-GAAP core net profit (RMB m)



Source(s): the Group, ABCI Securities

Consolidated income statement (2018A-2021E)

FY Ended Dec 31 (RMB mn)	2018A	2019A	2020E	2021E
Total revenue	**13,120**	**30,142**	**46,403**	**75,368**
Cost of sales	-2,905	-6,339	-8,615	-12,844
Gross profit	**10,215**	**23,803**	**37,788**	**62,524**
Sales and marketing	-13,442	-27,174	-39,143	-52,392
General and admin	-6,456	-1,297	-1,695	-1,797
R&D	-1,116	-3,870	-5,302	-7,205
Operating Profits	**-10,799**	**-8,538**	**-8,352**	**1,131**
Interest income	585	1,542	1,450	1,350
Interest expenses	0	-146	0	0
Fx gain	10	63	0	0
Others, net	-12	83	0	0
Share of results of investee	0	29	0	0
PBT	**-10,217**	**-6,968**	**-6,902**	**2,481**
Tax	0	0	0	0
PAT	**-10,217**	**-6,968**	**-6,902**	**2,481**
Minority interests/distribution to convertible preferred shareholders	-81	0	0	0
Profits attributable to shareholders	**-10,297**	**-6,968**	**-6,902**	**2,481**
Share-based compensation	6,841	2,558	3,248	3,392
Interest related to CB amortization	0	144	0	0
Other non-core items	0	0	0	0
Non-GAAP profits attributable to shareholders	**-3,456**	**-4,266**	**-3,654**	**5,872**
Growth				
Total revenue (%)	652.5	129.7	53.9	62.4
Gross Profits (%)	900.8	133.0	58.8	65.5
Operating Profits (%)	NA	NA	NA	NA
Net profit (%)	NA	NA	NA	NA
Non-GAAP net profit (%)	NA	NA	NA	NA
Operating performance				
Operating margin (%)	-82.3	-28.3	-18.0	1.5
Net margin (%)	-78.5	-23.1	-14.9	3.3
Core net margin (%)	-26.3	-14.2	-7.9	7.8
ROAE (%)	-115.5	-32.1	-30.2	10.4
ROAA (%)	-36.5	-11.7	-8.9	2.9

Note: Individual items may not sum to total due to rounding
Source(s): the Group, ABCI Securities estimates

Consolidated balance sheet (2018A-2021E)

As of Dec 31 (RMB mn)	2018A	2019A	2020E	2021E
Fixed assets	29	41	91	141
Intangible asset	2,579	1,994	1,994	1,994
Other non-current assets	183	1,020	1,045	1,072
Total non-current assets	**2,791**	**3,056**	**3,131**	**3,207**
Cash & equivalents	14,160	5,768	10,401	24,792
Restricted cash	16,379	27,578	30,335	33,369
Short-term investments and investment securities	7,631	35,289	29,996	26,996
Account receivables	248	1,051	1,104	1,159
Other current assets	1,973	3,315	3,363	3,413
Total current assets	**40,391**	**73,001**	**75,199**	**89,728**
Total assets	**43,182**	**76,057**	**78,329**	**92,935**
Account payables	670	2,109	2,184	2,263
Payable to merchants	17,276	29,927	33,639	37,157
Merchant deposit	4,188	7,841	9,481	14,118
Borrowings and notes	0	899	1,399	1,899
Other current liabilities	2,225	4,993	4,993	4,993
Total current liabilities	**24,359**	**45,768**	**51,695**	**60,429**
Convertible bonds	-	5,207	5,207	5,207
Other non-current liabilities	-	436	436	436
Total non-current liabilities	**-**	**5,642**	**5,642**	**5,642**
Total liabilities	**24,359**	**51,410**	**57,337**	**66,071**
Equity attributable to shareholders	18,823	24,647	20,993	26,865
Non-controlling interests	-	-	-	-
Total equity	**18,823**	**24,647**	**20,993**	**26,865**

Notes: Individual items may not sum to total due to rounding
Individual items may vary from reported figures due to rounding /definition differences
Source(s): the Group, ABCI Securities estimates

Consolidated cash flow statement (2018A-2021E)

As of Dec 31 (RMB mn)	2018A	2019A	2020E	2021E
Operating cash flow	**7,768**	**14,821**	**4,733**	**14,540**
Investing cash flow	**(7,549)**	**(28,320)**	**(600)**	**(650)**
Financing cash flow	**17,344**	**15,855**	**500**	**500**
Effective of FX	547	450	-	-
Net cash flows	**18,111**	**2,806**	**4,633**	**14,390**

Notes: Individual items may not sum to total due to rounding
Individual items may vary from reported figures due to rounding /definition differences
Source(s): the Group, ABCI Securities estimates

Disclosures

Analyst Certification

I, Chow Sau Shing, being the person primarily responsible for the content of this research report, in whole or in part, hereby certify that all of the views expressed in this report accurately reflect my personal view about the subject Group or companies and its or their securities. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this report. I and/or my associates have no financial interests (except "Disclosures of Interests" below) in relation to the listed Group (ies) covered in this report, and I and/or my associates do not serve as officer(s) of the listed Group (ies) covered in this report.

Disclosures of Interests

ABCI Securities Company Limited and/or its affiliates, within the past 12 months, have investment banking relationship with one or more of the companies mentioned in the report.

Definition of equity rating

Rating	Definition
Buy	Stock return rate≥ Market return rate (10%)
Hold	- Market return rate (-10%) ≤ Stock return rate < Market return rate (+10%)
Sell	Stock return < - Market return (-10%)

Notes: Stock return rate: expected percentage change of share price plus gross dividend yield over the next 12 months
Market return rate: average market return rate since 2008 (HSI total return index 2008-19 CAGR at 10%)

Time horizon of share price target: 12-month

Stock rating, however, may vary from the stated framework due to factors including but not limited to: corporate governance, market capitalization, historical price volatility relative to corresponding benchmark index, average daily turnover of the stock relative to market capitalization of the stock, competitive advantages in corresponding industry, etc.

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