SHOW ME THE FUNDAMENTALS

Wong Kok Hoi

1 June 2017

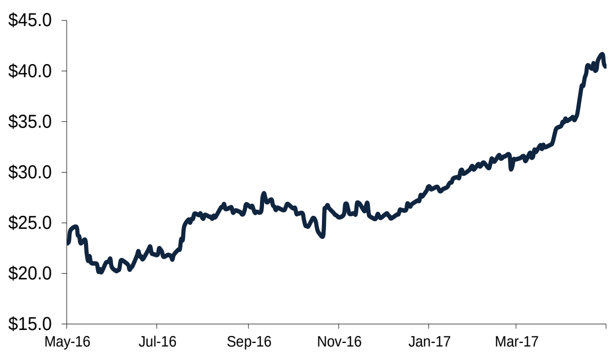
JD.com – $60 bn Market Cap – Tulips Anyone?

Executive summary:

Our investigative research shows that JD cannot become the Amazon of China. The evidence thus far shows stark differences between the two; notably JD has not made investments to turn itself into the serial technology disruptor that Amazon is. Jeff Bezos' company is creating significant shareholder value with AWS, Kindle, Prime, Alexa, Amazon Go, etc., while JD has no equivalents. JD is essentially akin to an old school retailer selling low-margin 3C/appliance goods. Here are our main findings from analyzing the financial statements, regulatory filings as well as talking to JD's competitors, industry experts and former employees:

- Hillhouse has sold 44 mm shares (close to $1.8 bn), according to the latest 3 quarterly filings. Founder of Hillhouse, Zhang Lei is said to enjoy a close relationship with Richard Liu, founder of JD. What we found notable is that Hillhouse sold the most number of shares after the CEO of JD Mall joined Hillhouse last year, as reported by Bloomberg. It also does not add up for Hillhouse to sell a large number of shares when JD plans to set up 1 mm convenience stores in 5 years and invest another $2-3 bn into modern logistics and, as stated by the founder, make profits from day one from both ventures.
- The bulls' expectation that 1P gross margins will expand to the mid-teens is unrealistic because the low-margin 3C product mix, which is greater than 50% of revenue, is a significant impediment towards profitability.
- JD's reclassification of operating and investing cash flows is designed to present inflated operating cash flow. By reclassifying accounts receivables and loans receivables of JD Finance in 2016, JD's operating cash flow (OCF) improved by $1.5 bn to post a $1.3 bn figure. Without the reclassification, OCF would still be negative in 2016.
- JD's logistics business faces ferocious competition from well-capitalized, pure logistic companies and Alibaba's family of logistics companies. 95% of JD's warehouses are leased and small – suited for low-margin, commodity goods like 3C and electrical appliances.
- The 3P marketplace business is much smaller than reported because the "services and other" line item in JD's financials includes non-core items like internet finance, logistics, investments, etc., which should be stripped out by investors.
- JD overpaid for loss-making Yihaodian in exchange for Walmart's purchase of JD shares in the open market.

Key Statistics (as of May 31, 2017) – in US$ mm unless specified (December FY end)



Ticker:	NASDAQ: JD
Share price per ADS:	$40.0
Current market cap:	Approx. $60 bn
Core GMV (2016):	$96 bn
Electronics/appliances revenue contribution to direct sales (2016):	75.6%
1P/3P Revenue contribution (2016):	91.4% / 8.6%
Est. 1P Gross margins (2016):	7.2%
Accumulated Deficit:	$3.2 bn
Full-time employees (Q1 2017):	122,405
52 week low / high:	$19.51 - $41.97

Source: Capi tal IQ. Company filings, sell -side research, analyst estimates. Each ADS = 2 class A ordinary shares. Note: $1 = RMB 6.75.

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Key Analyses

JD.com, a $60 bn Chinese e-commerce company is a market darling despite losing money for 13 straight years. In Q1 2017, the company did report its first quarterly profit of $35 mm, although the CFO did temper investors' optimism by **cautioning that remaining quarters in 2017** may not be as good as Q1 2017. Even at this run-rate, JD would be trading at an eye-popping 410x earnings multiple, yet Mr. Market has pushed the stock in the last 12 months to all-time highs for reasons unrelated to fundamentals. **This year**, JD's share price seemed to have benefited from the 'rising tide lifting all boats' phenomenon. China internet ADRs such as Alibaba, Tencent, Baidu, Netease, SINA, Weibo, New Oriental, etc have risen to all-time highs. The stark difference is that JD is still loss-making while these companies make sign ificant profits in their core business.

Since 2011, shareholders, debt holders, banks and PE investors have given $9.3 bn of capital to the company[1]. Are these stakeholders' optimism justified?

At APS, we argue that it is not and we set out our reasons in this paper.

Three years after IPO in May 2014, JD is still a direct-sales (1P) model (2016: 91.4% of revenues). In its 1P business, JD still derives ~76% of 1P revenue from low-margin 3C/home appliance products. According to Goldman Sachs, this segment has reached a high online penetration of 40%[2] and therefore predicts growth will slow from here. If this prediction turns out to be correct then it would become more challenging for JD to make a profit to justify its $60 bn market cap.

The bulls argue that JD can expand 1P gross margins from 7% to over 15%. However, APS' primary checks speaking to offline retailers, suppliers, e-commerce competitors point to a disturbing fact: There is no money to be made selling 3C goods, a product mix from which JD still derives over half[3] of 1P revenue. Although JD does not explicitly disclose this, JD claims that it can "comfortably" in the "long run" achieve 2-4% net margins in its 1P business, which hinges on expanding gross margins to mid-teens. Our analysis shows that this is closer to a myth than a reality because of its JD's product mix and intense competition.

The bulls forecast that margins must expand by selling higher margin products in its 1P business. But there is no persuasive evidence that JD can shrug off its 3C roots. Even in 3C/appliances, Alibaba's Tmall has a 40% share with Suning[4]. Next, JD's 3P marketplace model remains sub-scale relative to Alibaba's Tmall. Tmall's GMV is 5-6x larger than JD's 3P GMV and Tmall dominates share in high margin categories like apparel, FMCG and other general merchandise goods.

Many US investors and analysts forecast JD will become China's Amazon. We believe this is a **misplaced comparison** for a plethora of reasons. Amazon is a **serial technology disruptor** with inventions like Alexa, Amazon Go, Kindle, Prime, AWS, media/video, etc. Amazon's AWS (cloud segment) is annualizing $15 bn revenues, growing over 50% with a significant $3.6 bn in operating income. In Q1 2017, AWS accounted for 89% of Amazon's total annualized operating income. We would argue that without AWS, Amazon's market cap would not be where it is now; **JD is benefitting from an 'AWS halo effect' it does not rightfully command.**

Source: Company filings, website, press releases, news articles, channel checks, sell-side analysts. *Note: $1 = RMB 6.75.*

[1] Includes equity capital; short-term debt, asset backed securitized debt and unsecured debt; net of repayment. JD Finance to be spunoff from Q2 2017.

[2] Euromonitor, iResearch, Kantar, eMarketer, Company data, Goldman Sachs Global Investment Research

[3] JD.com does not disclose 3C revenue separately. 3C and home appliance account for approx. 70% of JD's revenue

[4] Goldman Sachs Global Investment Research

Amazon dominates US ecommerce with **no relevant competitor** and is present in over 12 countries. JD is nowhere near dominant even in China and has no overseas presence[5]. At home, JD has to fight Alibaba who has over 75% market share[6]. **Valuation wise**, when Amazon's market cap was $50 bn in 2009, the company had already achieved a GAAP profit of $900 mm followed by another profit of $1.2 bn in 2010, trading at 50x PER.

JD's **network of 256 warehouses** (95% leased) and last mile delivery is seen by bulls as a source of long-term advantage. This is exaggerated as it can be replaced by competitors, including Alibaba. Importantly, JD's warehouses are on average only 22,000 sqm; apt for standardized 3C/appliance goods and less so for FMCG and other high margin goods. Alibaba's Tmall has grown at ~85% over the last two years, while being profitable, so there is no concrete evidence that JD's logistics has been an advantage. Delivery is also becoming a **crowded** and increasingly competitive space, with recent capital raisings from the likes of **Best Logistics, ZTO, YTO, STO and SF Express**. Contrary to what consensus believes, we think JD's fulfilment costs will remain challenged and relevant GAAP profitability elusive.

京东金融 JD Finance

JD bulls are also cheering the spinoff of JD Finance. While JD will receive RMB 14.3 bn ($2.1 bn) in cash proceeds there is limited disclosure on the capital injected, balance sheet support, and the losses JD has suffered from JD Finance. Additionally, the spinoff potentially includes a redemption rights for investors that would require the company to return the capital with interest if JD Finance is not able to IPO at a valuation of RMB 93bn within 5 years for round one investors. In China, lending is a risky business. Even if the spinoff produces a profit for JD at the point of sale, isn't granting a put option to JD Finance's new shareholders placing the company at risk in the future?

In conclusion, if JD is not China's Amazon and neither its product mix nor its cost structure show promises of decent profits, isn't $60 bn a hefty price to pay for a pure online retailer of low-margin products?

Source: Company filings, website, press releases, news articles, channel checks, sell-side analysts. *Note: $1 = RMB 6.75.*

[5] JD entered Indonesia in 2015 with JV with Provident Capital Partners. We discount JD's Indonesia operations given it is currently a very smaller player in the country.

[6] iResearch and UBS estimate for 2016.

1 Stuck With Low Margin Products

1P gross margins cannot expand from 7% to mid-teens because 1) the product mix is primarily low-margin consumer electronics (3C) and home appliances; 2) the product mix will not meaningfully improve; and 3) fulfilment is intensely competitive

Introduction

1P (online direct sales) is JD's core business, accounting for 91.4% of total net revenues in 2016. If we exclude revenues from non-core activities like logistics, internet finance, etc, 1P accounts for 93-94%.

Despite JD growing its 1P GMV 4-fold from RMB 93.7 bn in 2013 to RMB 372.4 bn in 2016, its gross margins barely improved. That is because ~76% of 1P revenues **come from 3C and electrical appliances which have razor-thin margins. Almost all major retailers lose money selli**ng cell phones and computers, the two largest product categories at JD.

Our conclusions are as follows: 1) JD's 1P product mix has not changed much in the last few years and will be **difficult to shift meaningfully**, 2) which could explain why 1P gross margin has remained stubbornly low at 6.0-7.5%; and therefore gross margin expansion to the mid-teens is unlikely to become a reality due to poor product mix, intense competition and limited economies of scale and 3) offline retailers enjoy higher gross margins as they derive 60-75% revenue contribution from higher margin goods, unlike JD.

1P: Low-margin 3C/appliances remain JD's core

From Exhibit 1 we can see that JD's 1P GMV and sales have increased in the last 4 years at a phenomenal rate. However, it is the product mix that matters as anyone can sell more goods at a loss.

Exhibit 1: JD's 1P GMV and revenue since 2013

(in RMB million)	2013	2014	2015	2016
1P (Online Direct) - GMV	**93,700**	**159,300**	**255,600**	**372,400**
% YoY Growth	*65.3%*	*70.0%*	*60.5%*	*45.7%*
1P (Online Direct) - Sales	**67,018**	**108,549**	**167,721**	**237,702**
% YoY Growth	*66.2%*	*62.0%*	*54.5%*	*41.7%*

Source: Company filings

As Exhibit 2 illustrates, the 3C and home appliance segment's contribution to 1P sales was ~85% in 2013 and 3 years later in 2016 remains at ~76%. As of Dec 2015, this was as high as 80%, and since then JD has acquired Yihaodian (a loss-making company) to expand into FMCG.

Exhibit 2: 1P revenue contribution by product categories

(in RMB '000)	2013	2014	2015	2016
Online direct sales	**67,017,977**	**108,549,258**	**167,720,984**	**237,701,986**
% YoY Growth	*66.2%*	*62.0%*	*54.5%*	*41.7%*
Electronics and home appliance	**56,814,078**	**90,890,026**	**134,346,243**	**179,636,669**
% YoY Growth	*67.0%*	*60.0%*	*47.8%*	*33.7%*
% of Online Direct Sales	*84.8%*	*83.7%*	*80.1%*	*75.6%*
General merchandise	**10,203,899**	**17,659,232**	**33,374,741**	**58,065,317**
% YoY Growth	*61.4%*	*73.1%*	*89.0%*	*74.0%*
% of Online Direct Sales	*15.2%*	*16.3%*	*19.9%*	*24.4%*

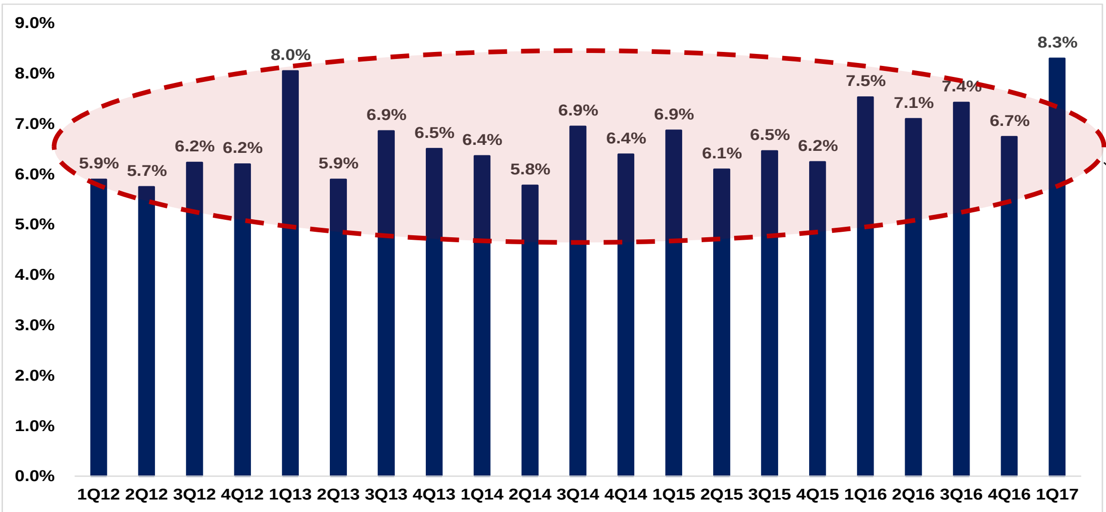
Source: Company filings

3C revenue contribution to JD's 1P business in 2016 is estimated at over 50%[7] although JD does not explicitly disclose this breakdown. These are low-margin commoditized goods offered at ferociously competitive prices. As a result, most retailers sell them at a loss. The President of a key competitor to JD confided to us that they would still spend lavishly to refurbish an Apple product corner where its cell phones sell at a loss for years because they use it to attract traffic. **In other words, more sales mean more losses**.

1P gross margin has stayed largely flat in the last 3 years. Product mix is the key reason

Exhibit 3 illustrates that JD's 1P gross margins over the **last 21 quarters** have remained stubbornly low between 6.0 – 7.5%[8], except for two quarters in Q1 2013 and Q1 2017. **In fact, Q1 has historically been where margins peaked in 2013, 2015 and 2016 and we expect 2017 to have been the same**. The 1P gross margins have been 6.8%, 6.4%, 6.4% and 7.2% in 2013, 2014, 2015, and 2016, respectively[9]. 1P GMV has grown by 4x and yet gross margins have not improved.

Exhibit 3: JD's 1P quarterly gross margins



- JD's 1P quarterly gross margins have not changed meaningfully in the last 3 years, while GMV has grown 4x. Product mix is the key reason

Source: Company filings and APS estimates.

Mind the gap: JD's 1P gross margin expansion to mid-teens is very unlikely to become a reality

The bull thesis for justifying JD's $60 bn price tag rests on a key assertion that JD will be able to meaningfully expand 1P gross margins by generating significant revenue from higher margin non-3C goods such as apparel, household products, cosmetics, etc. Indeed, JD argues that 1P margins could comfortably in the "long run" double to mid-teens i.e. circa 15% or above.

Source: Company filings, website, press releases, news articles, channel checks, sell-side analysts. *Note: $1 = RMB 6.75.*

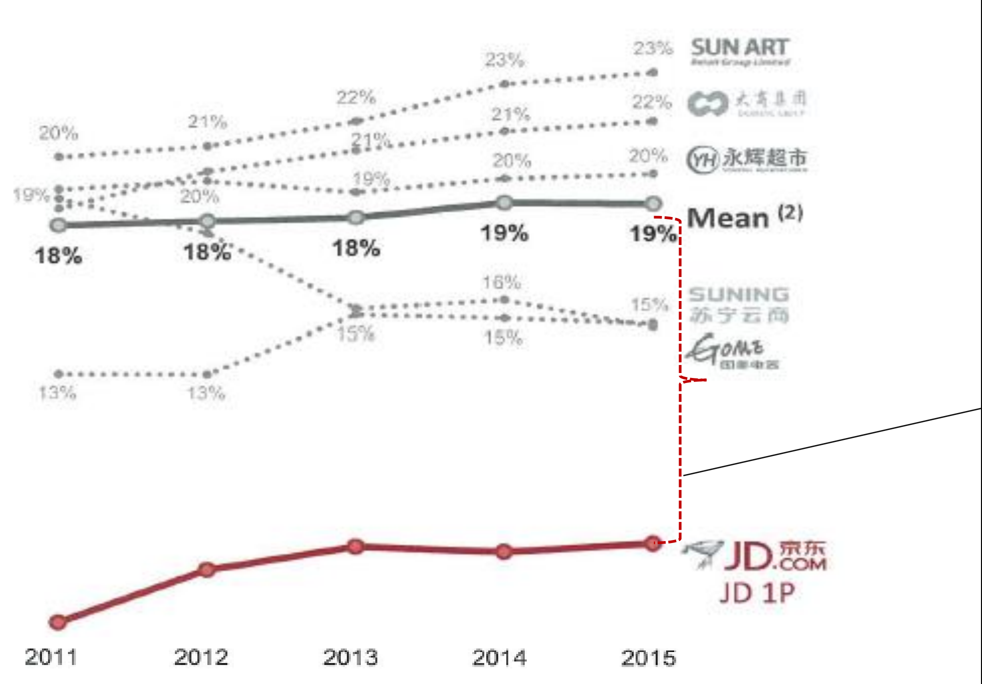
[7] JD does not disclose revenue from 3C category. 3C revenue is estimated based on Yipit data for JD's 3C GMV.

[8] 1P direct sales revenues less cost of revenues, as 3P has no associated cost of revenues.

[9] Source: JD filings and APS estimate.

Please see Exhibit 4, which is extracted from JD's March 2017 investor presentation.

Exhibit 4: JD's Gross Margin vs Major Chinese Offline Retailers



Source: JD's investor presentation; March 2017.

Holy Grail?

JD's investor presentation highlights that 1P margins could increase from 7% to well over the mid-teens.

APS view:

- JD's lion share of direct sales revenue comes from 3C goods which have razor-thin gross margins
- According to our primary sources, there is no money to be made selling 3C goods. **The more you sell, the more cash you burn**

At APS, our analysis shows that this is highly unlikely to happen for the following reasons.

We performed primary checks and spoke to offline and online retailers, industry experts and suppliers who all confirmed that there is **little to no money** to be made by selling 3C goods—the crux of the issue is, this still accounts for over 50% of JD's 1P revenues.

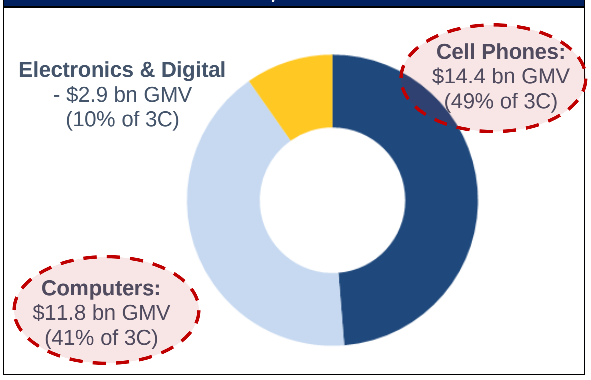
In its core 1P business (~91.4% of revenue), JD derived **24%** of direct sales GMV **from cell phones** and **20% from computers** in the last 12 months, according to Yipit[10]. Yipit estimates **$29 bn of 1P GMV** in the last 12 months came from **commoditized 3C products**: cell phones accounted for $14.4 bn, computers $11.8 bn and electronics $2.85 bn (refer Exhibit 6).

Exhibit 5: JD's estimated GMV mix (LTM)

Product Categories	% of 1P GMV
3C	**~49%**
Cell phones	*~24%*
Computers	*~20%*
Electronics & Digital	*~5%*
Home appliances	**~25%**
Total 3C and Home Appliances	**~75%**
General Merchandise	**~25%**

Source: Yipit data, sell-side research, and APS.

Exhibit 6: JD sold $29 bn of 3C Products



Source: Yipit data, sell-side research, and APS.

Since the market values JD on top-line growth, it must sell cell phones and computers which are easy to sell. As a result, we think JD is now trapped in this profitless black hole: **damned if you sell and damned if you don't**. This is the principal reason why, despite its size, JD still cannot eke out a relevant annual profit.

Source: Company filings, website, press releases, news articles, channel checks, sell-side analysts. *Note: $1 = RMB 6.75.*

[10] JD does not explicitly disclose its 1P 3C GMV/revenue figures.

Offline retailers' margins vs JD's 1P margins: JD's is lower due to product mix and not due to JD's "strategy" to keep margins low

Although JD maintains that its strategy is to keep its margins low, we do not buy this assertion. It is apparent when JD's revenue scale, product mix and margins are compared with its key competitors'.

At GOME and Suning, household appliances which enjoy higher margins contribute 74% and 59% to the respective companies' revenues. 3C products are kept low at just 26% and 40% to revenues, respectively. GOME and Suning earn gross margins of approx. 17-18%[11] on home appliances while earning **similarly thin gross margins as JD** on 3C goods of approx. 9% and 6%. Due to intense competition, 3C products' gross margins have consistently declined for both offline and online retailers. Our primary checks confirm this situation will likely continue.

GOME's and Suning's product mix and margins are in stark contrast to JD's. JD, unlike GOME and Suning, does not disclose its 3C and appliance split. Some analysts we spoke to think 3C accounts for as much as **60% of 1P revenue**.

Exhibit 7: Revenue: JD vs Suning vs Gome

Revenues (RMB in million)	2013	2014	2015	2016
JD 1P	67,018	108,549	167,721	237,702
JD 1P 3C/Appliances	**56,814**	**90,890**	**134,346**	**187,149**
% of JD 1P revenues	*84.8%*	*83.7%*	*80.1%*	*78.7%*
Gome	**56,401**	**60,360**	**64,595**	**76,695**
3C	16,356	16,901	18,087	19,941
% revenue contribution	*29.0%*	*28.0%*	*28.0%*	*26.0%*
Appliances	40,044	43,459	46,508	56,754
% revenue contribution	*71.0%*	*72.0%*	*72.0%*	*74.0%*
Suning	**103,921**	**107,260**	**133,894**	**144,669**
3C	35,470	35,470	49,126	58,353
% revenue contribution	*34.1%*	*33.1%*	*36.7%*	*40.3%*
Appliances	67,241	70,632	80,809	85,271
% revenue contribution	*64.7%*	*65.9%*	*60.4%*	*58.9%*

- 3C commoditized goods represent the lion share of 1P revenues

- Suning and GOME derive 59% and 74% of revenues respectively from appliances, unlike JD of only approx. 25-27%.
- Even in 3C, offline retailers sell more premium products than online channels.

Exhibit 8: Gross profit: JD vs Suning vs Gome

Gross profit (RMB in mm)	2013	2014	2015	2016
JD	6,844	13,371	23,758	38,559
JD 1P	**4,522**	**6,918**	**10,713**	**17,003**
% 1P margin	*6.7%*	*6.4%*	*6.4%*	*7.2%*
Gome	**8,502**	**8,994**	**9,513**	**10,377**
% margin	*15.1%*	*14.9%*	*14.7%*	*13.5%*
3C	1,802	1,801	1,896	1,806
% margin	*11.0%*	*10.7%*	*10.5%*	*9.1%*
% GP contribution	*21.2%*	*20.0%*	*19.9%*	*17.4%*
Appliances	6,701	7,195	7,634	8,613
% margin	*16.7%*	*16.6%*	*16.4%*	*15.2%*
% GP contribution	*78.8%*	*80.0%*	*80.2%*	*83.0%*
Suning	**14,949**	**15,352**	**18,346**	**18,310**
% margin	*14.4%*	*14.3%*	*13.7%*	*12.7%*
3C	3,023	2,582	3,177	3,367
% margin	*8.5%*	*7.3%*	*6.5%*	*5.8%*
% GP contribution	*20.2%*	*16.8%*	*17.3%*	*18.4%*
Appliances	11,672	12,549	14,371	14,789
% margin	*17.4%*	*17.8%*	*17.8%*	*17.3%*
% GP contribution	*78.1%*	*81.7%*	*78.3%*	*80.8%*

Source: Goldman Sachs, company filings

- JD's low gross margin results from a product mix dominated by commoditized, 3C goods. Therefore scale without the right product mix won't improve

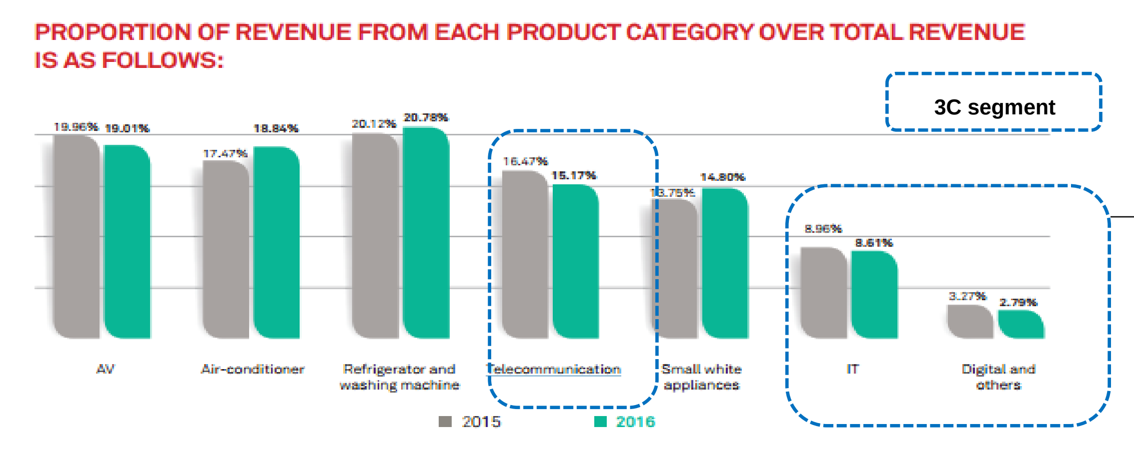
- Even in 3C, offline retailers sell more premium products than online channels.

- GOME and Suning derive over 80% of their gross profit from higher margin appliances segment. Both disclose this while JD does not.

Source: Company filings, website, press releases, news articles, channel checks, sell-side analysts. *Note: $1 = RMB 6.75.*

[11] Company filings.

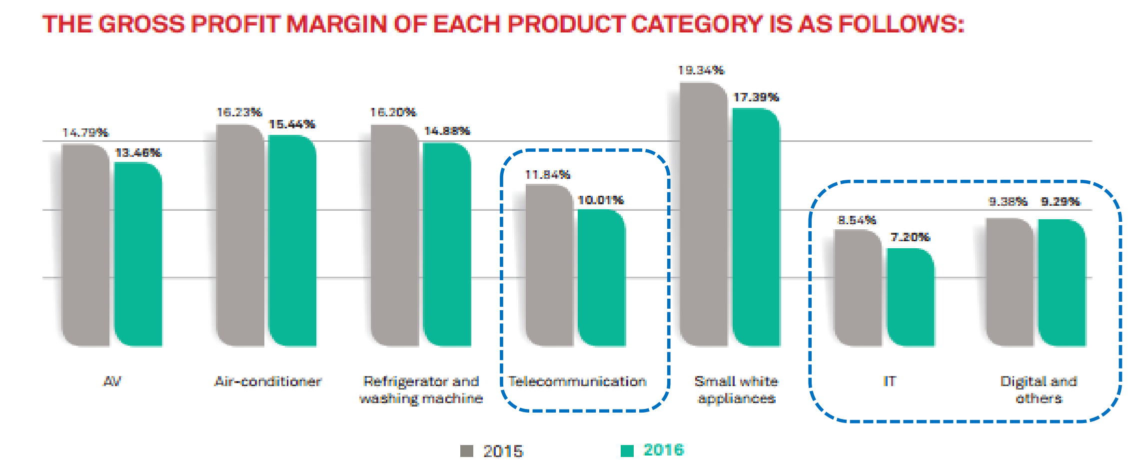
Exhibit 9: GOME – Revenue by product category



- 3C margins are low even for offline retailers despite selling more premium / higher ASP products than online channels due to consumer behavior

Source: GOME annual report, 2016.

Exhibit 10: GOME - Gross margin by category



Source: GOME annual report, 2016.

There is no money to be made selling 3C online due to Chinese consumers' buying habits

It is important to note that GOME and Suning also are losing money on their online sales of 3C products. By using a mobile app which compare prices at major retailers, consumers can in a matter of seconds find the retailer selling a product at the lowest price. Therefore, they have cleverly deemphasized 3C products in favor of differentiated **household electrical appliance products which are usually sold offline**. Our checks on the ground in China tell us that offline retailers sell more premium products compared to online channels like JD. TVs, for instance, can include more functions and better designs. Differentiated, higher-margin products are rarely sold online because Chinese consumers want to touch, feel and test them before committing. In our view, the dynamics of the industry and consumer psychology will not change in the foreseeable future to warrant a different assessment.

Economies of scale unlikely in 3C/appliances; JD does not have special purchasing terms relative to key competitors

In its investor presentation, JD argued that it has achieved **economies of scale in the 3C and appliances category** and therefore can increase margins. However, the issue with margins lies in **product mix** **and** **not bargaining power with suppliers**.

JD will not be getting more favorable prices than the larger offline retailers. JD's 1P 3C revenue size is already nearly 6x GOME's and 2x Suning's so it already enjoys the bulk discount advantage. Our channel checks with JD's core

3C/appliance competitors indicate they enjoy the same bulk discount on 3C products from their suppliers. **The ecosystem is very transparent.** It is also not in the interest of manufacturers to kill off their larger retailers.

In our analysis, JD can improve profitability **only if it changes its current 1P product mix markedly** by selling more differentiated and high-priced household electronics, which we know is challenging for a pure online retailer unless consumer habits change drastically.

Another alternative is to deemphasize significantly its profitless 3C business but that would be a **self-defeating move** because investors were promised that GMV scale will lead to profits.

The other strategy is to increase its new business categories of groceries, apparel and cosmetics but it will take at least 3-5 years before it gains traction. Alibaba has the lead share here. Even the best grocery retailer, **Yonghui** (SHSE: 601933), makes ~2% net margin. Can a new player like JD without experience and core competence in grocery retailing do better? **Yihaodian, Walmart, Carrefour and many Chinese grocery retailers** have been loss-making for many recent years because of intense competition. JD holds a 10% stake in Yonghui but there has been limited evidence of meaningful collaboration. One possible reason is that Yonghui sees JD more as a potential rival than a shareholder. Likewise, Walmart owns ~10% of JD but competes with JD in the grocery business.

3C/appliances' online penetration has peaked — JD's growth in these segments will decelerate

As highlighted in the Exhibit 11, 3C and home appliances' online penetration is already at 40%[12], the highest among major product categories in China. Compare this to overall online penetration of 14% in 2016 which Goldman predicts will reach 21.5% by 2020.

Exhibit 11: Online Penetration of Goods in China

	APPAREL, SHOES & ACCESSORIES	ELECTRONICS (3C) & APPLIANCES	FMCG GROCERIES (PERSONAL CARE, FOOD)	FURNITURE & FININSHINGS	AUTO & FUEL	OTHER GOODS
2016 online + offline market size	Rmb 2.5trn	Rmb 1.8trn	Rmb 10.9trn	Rmb 1.1trn	Rmb 7.3trn	Rmb 6.0trn
As % of China retail goods spending	8%	6%	37%	4%	25%	20%
As % of China online GMV	25%	18%	13%	1%	7%	36%
2013-2016 ave. growth						
Offline + online:	6%	8%	7%	8%	14%	39%
Online:	34%	31%	35%	62%	N/A	34%
2017E-2020E ave. growth						
Offline + online:	7%	4%	6%	5%	6%	20%
Online:	20%	13%	34%	24%	N/A	22%
Online penetration (adjusted*) – 2016E	31%	40%	5%	4%	N/A	16%
Online penetration (adjusted*) – 2020E	49%	55%	12%	8%	N/A	17%

- Online penetration has peaked in categories that JD operates in

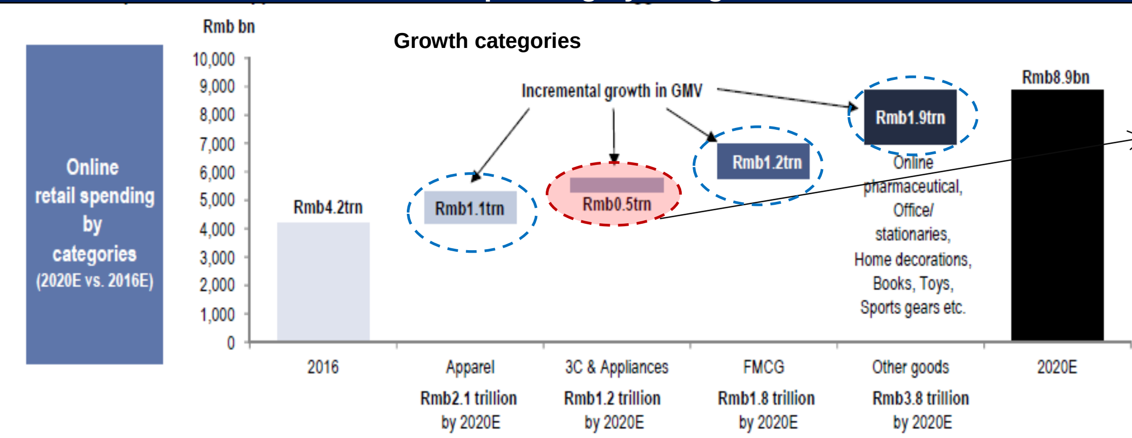
Source: Goldman Sachs: "China E+Commerce Shopping Re-imagined", Feb 2017.

If Goldman's prediction turns out to be correct, JD's **growth from the 3C/appliance category must soon meet limitations**. It is worrying that JD has yet to make a profit in its core category when online penetration is peaking. Growth will then have to come from elsewhere. They could come from apparel, accessories, FMCG, groceries, personal care, and other categories (see Exhibit 12). But here, JD does not have a track record and has to face a fiery competitor in Alibaba.

Source: Company filings, website, press releases, news articles, channel checks, sell-side analysts. *Note: $1 = RMB 6.75.*

[12] Goldman Sachs: "China E+Commerce Shopping Re-imagined", Feb 2017.

Exhibit 12: Online retail spending by categories 2020e vs 2016



- online retail growth will come from Apparel, FMCG, and other goods; not 3C/home appliance which is JD's core

Source: Goldman Sachs: "China E+Commerce Shopping Re-imagined", Feb 2017.

An e-commerce FMCG survey highlights that not only does **JD trail both T-mall (by more than 10% points!) and Taobao** in consumer awareness but online consumers buy more from **even Taobao** than JD for the 4 product categories (see Exhibit 13). **Investor perception differs starkly from consumers' actual actions**. As Alibaba had said publicly they would outspend JD on promotion of FMCG goods, we can expect JD to face intense competition in this category too.

Exhibit 13: Tmall leads by >10% in all 4 categories. Even Taobao is ahead of JD.

Top 5 Brand Awareness and Shoppers Penetration by FMCG Category
% of Respondents

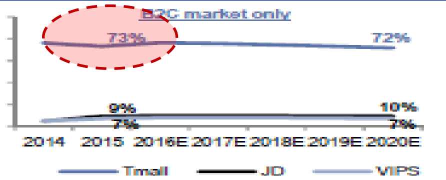
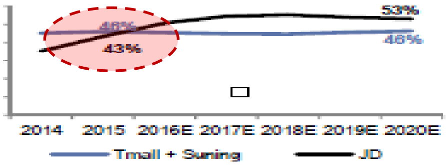
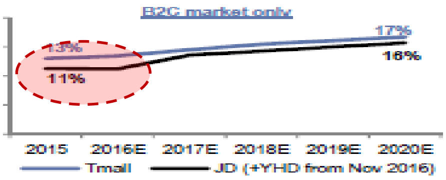
	Infant Milk Formula			Packaged Food & Soft Drinks			Alcoholic Drinks			Beauty and Personal Care		
	Platform	Aware%	Shopped%	Platform	Aware%	Shopped%	Platform	Aware%	Shopped%	Platform	Aware%	Shopped%
1	[illegible]	94%	68%	[illegible]	93%	68%	[illegible]	86%	62%	[illegible]	93%	69%
2	淘宝网 Taobao.com	86%	57%	淘宝网 Taobao.com	92%	58%	淘宝网 Taobao.com	88%	55%	淘宝网 Taobao.com	94%	64%
3	JD.COM	91%	56%	JD.COM	88%	54%	JD.COM	85%	50%	JD.COM	89%	51%
4	苏宁易购 suning.com	82%	40%	苏宁易购 suning.com	77%	37%	苏宁易购 suning.com	76%	36%	唯品会 vip.com	81%	40%
5	亚马逊 amazon.cn	71%	36%	1号店	78%	36%	酒仙网	70%	35%	聚美优品 JUMEI.COM	79%	38%

Source: OC&C FMCG Ecommerce Survey 2016.

Alibaba is a significant competitor against JD in almost every category, as shown in Exhibit 14. In **apparel**, Alibaba has B2C market share of 73% compared to JD's less than 10%. In **FMCG**, Alibaba has a 13% market share in B2C but Alibaba's total FMCG GMV is 4.4x that of JD's total FMCG GMV[13]. Alibaba has also promised to commit as much as it takes in order to stifle JD's growth. Even in JD's **core 3C/appliance category**, Alibaba is a strong competitor with a 43% market share. Goldman predicts this can increase to 46% and Alibaba also is determined not to lose market share to JD.com. Alibaba has also coined the term "New Retail"[14], which emphasizes the company's strategy to partner with brick-and-mortar retailers across different verticals. Alibaba has already made significant investments in this space in Intime Retail, Suning and Sanjiang Shopping Club.

[13] Based on Yipit data for Q1 2017.
[14] http://www.alibabagroup.com/en/news/press_pdf/p170124.pdf

Exhibit 14: BABA leads in apparel and FMCG and a strong competitor in 3C/appliances

	AVERAGE ORDER SIZE	AVE. TAKE RATE	MARKET SHARE & GS FORECASTS (%)
APPARELS	Rmb100	5%-8%	
ELECTRONICS (3C) & APPLIANCES	Rmb400	2%-3% 6% for parts	
FMCG/GROCERIES (PERSONAL CARE, FOOD)	Rmb150	1%-5%	

Source: Goldman Sachs research

Profitability is a long shot in JD's 1P FMCG model

As JD hits saturation in the 3C/appliance segment, **JD is looking at FMCG as its new avenue for GMV growth**. FMCG is seen to be the fastest growing segment in China because of online penetration of only ~5%[15]. According to Goldman Sachs, FMCG-related online sales should increase from RMB 600 bn ($89 bn) to RMB 1.8 tn ($267 bn) by 2020. But while FMCG is a growing segment, **competition also is intensely fierce**, **margins are very low**, and **fulfilment expenses high** due to the **small order size**.

JD has spent more than $2bn[16] on its recent acquisition of **Yihaodian** and investment in **Yonghui Superstores** in its attempt to grow its FMCG GMV. JD has given guidance that its supermarket and FMCG unit can achieve **RMB 100 bn ($14.8 bn) in GMV** in 2017. JD may be again spending investor capital on making acquisitions that may help grow its GMV and revenue but may **not produce a profit**. The $1.5 bn acquisition of Yihaodian, a loss-making business, is a good example. The seller, **Walmart**, an established grocery specialist **could not turn Yihaodian around** despite several changes of CEO. If a specialist can't, can JD? As for Yonghui, JD invested $610 mm for a 10% stake in August 2016. But after the acquisition, Yonghui now sees JD more as a competitor than a synergistic shareholder hence dimming the prospect of meaningful collaboration.

The bottom-line is, competition is red-hot and margins are razor-thin. The **sheer number of SKUs involved** and the **scale of FMCG operations** make this business extremely difficult to manage via the **1P business model**. Alibaba is also looking to aggressively expand in the FMCG segment, but is relying on its 3P business model to gain market share. Alibaba has smartly been seeking out multiple partners to assist its Tmall platform with supply-chain and cold-chain logistics as well as fulfilment. JD, on the other hand, believes in the doing-it-all-yourself philosophy even though FMCG is a tough business where most dominant global and local retailers have yet to produce meaningful profits.

Source: Company filings, website, press releases, news articles, channel checks, sell-side analysts. *Note: $1 = RMB 6.75.*

[15] Source: Goldman Sachs Global Investment Research.

[16] JD issued 144.95mm shares to Walmart, valued at approx. $1.5bn at the time of the transaction. JD also invested RMB 4.23 bn ($610 mm) in Yonghui for ~10% stake in the company.

Importantly, Alibaba has mentioned that it is particularly focused on expanding FMCG and is willing to invest "multiple-times"[17] that of other competitors. Alibaba also promised $300 mm of subsidies for shoppers and an additional $300 mm of new investments to improve its logistics and supply chain[18]. Below is a statement made by Alibaba's CFO, Wei Xu, during the Q1 2016 earnings call.

Exhibit 15: Alibaba Q1 2016 Earnings Call – remarks by Wei Xu, CFO

it -- we wouldn't be -- hesitate to invest them all. ~~So for Tmall supermarket,~~ for FMCG, while the other companies talking about building investments, we are willing to invest multi times of that number because this is just a category that we think we should be in ~~and with great potential~~, and we are the one could provide better service in this area.

Source: Alibaba earnings transcript; CapitalIQ.

Structural factors impeding operational cost improvement

Fulfilment cost will increase faster than consensus estimates; marketing expense will rise

The consensus view is that economies of scale will kick in as JD scales up. But JD's operating expense as a percentage of net revenue[19] actually increased from 10.7% in 2013 to 16.0% in 2016, debunking the **economies of scale** argument. This is instructive considering 1P margins have stubbornly stayed low at 6.0 – 7.5%. JD does not report its expenses for 1P and 3P separately, but given 1P accounts for ~91% of revenues and lack of segment disclosure, we look at the consolidated operating expense structure. In Exhibit 16, we illustrate JD's operating cost structure. JD breaks its operating cost into **four items** – **Fulfilment**, **Marketing**, **Technology and Content**, and **General and Administrative**.

Exhibit 16: JD's operating expenses since 2013

(in RMB '000)	2013	2014	2015	2016
Fulfillment	**4,108,939**	**8,067,048**	**13,920,988**	**20,950,501**
% YoY Growth	*34.2%*	*96.3%*	*72.6%*	*50.5%*
% of total net revenues	*5.9%*	*7.0%*	*7.7%*	*8.1%*
Marketing	**1,590,171**	**4,010,280**	**7,736,172**	**10,573,024**
% YoY Growth	*45.0%*	*152.2%*	*92.9%*	*36.7%*
% of total net revenues	*2.3%*	*3.5%*	*4.3%*	*4.1%*
Technology and content	**963,653**	**1,835,919**	**3,453,804**	**5,380,907**
% YoY Growth	*51.4%*	*90.5%*	*88.1%*	*55.8%*
% of total net revenues	*1.4%*	*1.6%*	*1.9%*	*2.1%*
General and administrative	**760,338**	**5,260,064**	**2,876,989**	**4,663,383**
% YoY Growth	*19.0%*	*591.8%*	*-45.3%*	*62.1%*
% of total net revenues	*1.1%*	*4.6%*	*1.6%*	*1.8%*
Total Operating Expense	**7,423,101**	**19,173,311**	**27,987,953**	**41,567,815**
% YoY Growth	*36.6%*	*158.3%*	*46.0%*	*48.5%*
% of total net revenues	***10.7%***	***16.7%***	***15.4%***	***16.0%***

- Fulfillment expense at 8.1% of net revenues is more than 50% of the total operating expense
- Operating expense has increased from 10.7% in 2013 to 16% in 2016

APS View:

- Operating expense ratio will continue to increase

Source: Company filings.

Fulfillment cost ratio will continue to increase due to falling GMV per order, wage inflation and inability to increase shipping fees

Fulfilment expenses have been rising from 5.9% of net revenues in 2013 to 8.1% in 2016, representing about 50% of the total operating expense in 2016. We believe understanding the structure of fulfilment expenses helps estimate future profitability. We would argue that fulfilment costs will pressure future margins for the following reasons:

[17] https://www.bloomberg.com/news/articles/2016-08-12/alibaba-pledges-billions-to-stock-china-s-kitchens-bathrooms; http://adage.com/article/digital/alibaba-fast-moving-consumer-goods-business/305435/
[18] http://www.caixinglobal.com/2017-01-26/101003203.html
[19] 1P and 3P revenues.

- **Falling GMV per order:** Order value will decline as JD expands into FMCG and other low ticket items, and into lower tier cities. Mobile shopping behavior is also causing average order value to drop.

  Bigger order sizes do decrease fulfillment cost. However for JD, average GMV per order[20] declined to RMB ~400 in 2016, from RMB ~420 in 2015 and RMB ~460 in 2014[20]. Although the data for orders fulfilled combine 1P and 3P and is therefore not perfect, the trend paints a picture. GMV per order should continue to drop as JD aggressively expands into i) general merchandise including FMCG that are typically **low ticket items**, ii) **lower tier cities**, and iii) 3P business.

  3C products have higher GMV per order than general merchandise. If contribution from general merchandise and FMCG products increase, order size would drop, which would then imply higher fulfilment expenses. Additionally, as JD expands its ecommerce business into lower tier cities, the company will need to add warehouses and hire many more staff to fulfil the orders, which will drive cost higher. We have confirmed this in our checks with a large online competitor. Similarly, if 3P-related orders' fulfilment increase, the GMV per order also should drop; 3P orders have a higher split rate since products are typically purchased from multiple merchants/sellers. JD will not be able to control orders placed with 3P merchants. This means **fulfillment expense must rise**.

  At the same time, China's ecommerce industry is seeing a rapid shift in the **mobile shopping trend**. Mobile shopping GMV as a percentage of total online shopping GMV has increased from under 2% in 2011 to over 70% in 2016[21]. Mobile shoppers make more frequent purchases and buy fewer items purchased and hence lower GMV per order. This inevitably results in higher fulfillment cost for JD.

- **JD's labor-intensive model is burdened by wage inflation, which is exacerbated by competition with other logistics companies for manpower.** What is worrisome is the fact that the biggest line item under fulfilment expense is compensation or labor cost, which accounted for RMB 4.1 bn, RMB 7.3 bn and RMB 10.8 bn in the last 3 years (refer to Exhibit 18). The table below shows that JD had 120,622 full-time employees as of December 2016, having increased from 68,000 in 2014. What disadvantaged JD is the fact that over 100,000 or 83% of JD's employees worked in the fulfilment department

Exhibit 17: Breakdown of JD and Alibaba's full-time employees

JD Employees - As of Dec 2016	# Employees	%
Fulfilment	**100,556**	**83%**
Delivery	*65,968*	55%
Warehouses	*17,544*	15%
Customer Service	*11,699*	10%
Procurement	*5,345*	4%
Technology	9,091	8%
General and Administrative	5,434	5%
Other	5,541	5%
Total Full-time Employees	**120,622**	**100%**

Alibaba Employees - As of Mar 2016	# Employees	%
Research & Development	18,737	51%
Operations	7,877	22%
Sales and Marketing	6,606	18%
General and Administrative	3,226	9%
Total Full-time Employees	**36,446**	**100%**

- 83% of JD's employees are involved with fulfilment
- 75% increase in full-time employees in the last 2 years
- Approx. 30% of JD's full-time employees
- Alibaba has over 50% of employees in R&D

Source: JD and Alibaba Annual reports.

[20] Calculated as Core GMV (excluding virtual items) divided by total fulfilled orders (excluding virtual orders).
[21] Source: iResearch and sell-side estimates.

Full-time delivery employees numbered ~65,000[22] or ~60% of the total employees and ~65% of JD's fulfilment employees.

As we can see from Exhibit 18, for FY 2016, ~52% of the fulfilment expense was due to employment compensation related to fulfillment. The compensation expense as a percentage of the fulfillment expense has increased from ~49% in 2013 to ~52% in 2016. We attribute this primarily to wage inflation in a labor-intensive delivery model. Over the past few years, China has experienced double-digit wage inflation.

Exhibit 18: Breakdown of JD's fulfillment expense

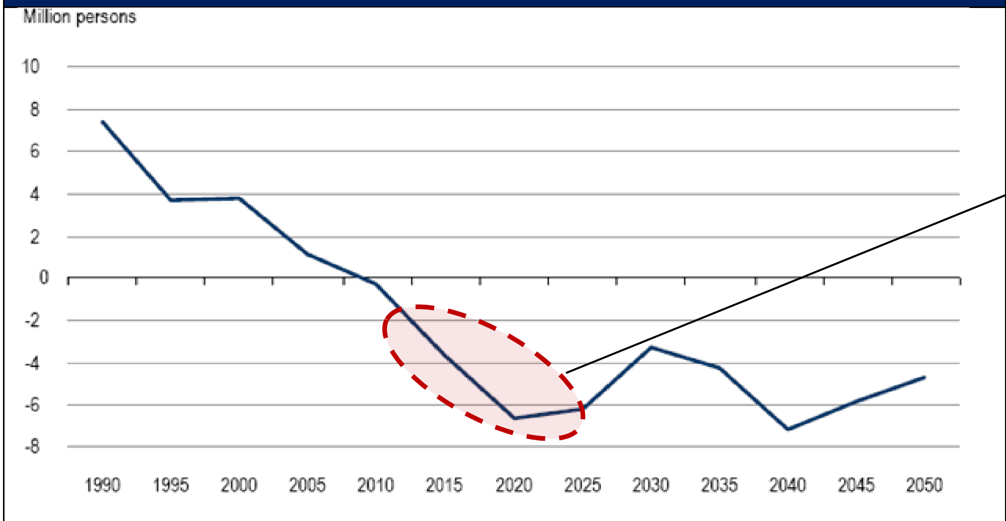
(in RMB millions)	2013	2014	2015	2016
Fulfillment	**4,109**	**8,067**	**13,921**	**20,951**
% YoY Growth	*34.2%*	*96.3%*	*72.6%*	*50.5%*
% of total net revenues	*5.9%*	*7.0%*	*7.7%*	*8.1%*
Compensation costs	**2,005**	**4,111**	**7,289**	**10,845**
% of fulfillment	*48.8%*	*51.0%*	*52.4%*	*51.8%*
% YoY growth rate	*31.3%*	*105.0%*	*77.3%*	*48.8%*
Rental expenses	**422**	**715**	**1,243**	**1,990**
% of fulfillment	*10.3%*	*8.9%*	*8.9%*	*9.5%*
% YoY growth rate	*50.2%*	*69.4%*	*73.8%*	*60.1%*
Shipping third party contracter	**794**	**1,290**	**2,059**	**3,387**
% of fulfillment	*19.3%*	*16.0%*	*14.8%*	*16.2%*
% YoY growth rate	*20.1%*	*62.5%*	*59.6%*	*64.5%*
Other	**888**	**1,951**	**3,330**	**4,729**
% of fulfillment	*21.6%*	*24.2%*	*23.9%*	*22.6%*
% YoY growth rate	*102.6%*	*85.1%*	*40.9%*	*42.0%*

- Compensation cost is more than 50% of fulfilment expense.

Source: Company filings.

Unfortunately for JD, wage inflation pressures in China are not abating because of a **shortage of manual labor due to the one child policy and rising number of college graduates as per the below chart**. Although there has been debate on flexible staffing, it is early days to extrapolate this as JD has thus far veered more towards permanent staffing.

Exhibit 19: Dwindling supply of manual labor in China



- Supply of new manual labor will be low at least until 2025.
- We believe this will impact wages due to supply constraints

Source: CEIC, UNDP, CS.

[22] Source: JD Q4 2016 investor presentation.

Additionally, according to a Goldman Sachs report, express parcel volumes in China are expected to grow 2.6x by 2020, which implies that China will require 4 mm express delivery staff by 2020. 4 mm express delivery staff would account for 2-3% of China's males aged 20-40. According to AliResearch, the number of packages delivered per day is expected to jump to **1 bn per day (more than 10x increase)**[23].

- **Express shipping is not a luxury customers are willing to pay for in lower tier cities:** JD's GMV growth can predominantly be attributed to its expansion in Tier 1 and 2 cities and by selling 3C/appliance goods. Customers in Beijing and Shanghai may be willing to pay a premium for JD's fast delivery service, however as JD expands into **tier 3 and lower-tier cities**, JD will face two problems: i) JD will have to deal with price sensitive customers who will be reluctant to pay for express and quality delivery, and ii) higher fulfilment expense in these less densely populated cities.

In the final analysis, **JD's fulfilment costs will not decline but instead will have to rise** in coming years. This is not helpful for profitability, unless it can pass through this cost increase to its customers. But that is unlikely to happen as online retail is intensely competitive and consumers are getting accustomed to paying almost nothing for shipment. JD will risk losing business if it attempts to pass through the shipment cost to its customers. This is a risk that JD cannot afford to take.

Marketing expense will rise with increasing customer acquisition cost after the Tencent deal expires in 2019

Marketing expense as percentage of revenue has increased from 2.3% in 2011 to 4.1% in 2016 (see Exhibit 20).

Exhibit 20: Marketing expense as % of total net revenues for JD

(in RMB million)	2011	2012	2013	2014	2015	2016
Marketing Expense	**479**	**1,097**	**1,590**	**4,010**	**7,736**	**10,573**
% YoY Growth	*217.7%*	*128.8%*	*45.0%*	*152.2%*	*92.9%*	*36.7%*
% of total net revenues	2.3%	2.7%	2.3%	3.5%	4.3%	4.1%

Source: Company Filings.

We believe that JD's customer acquisition cost has stayed low mainly due to its **strategic partnership with Tencent**. In March 2014, JD entered into an agreement with Tencent to acquire 100% interests in Tencent's Paipai and Wanggou marketplace, a 9.9%[24] stake in Shanghai Icson, etc. The partnership gave JD a headline slot on Tencent's WeChat app that dominates China's smartphones.

As part of the deal and strategic cooperation, Tencent got a 15% equity stake in JD[25]. This was a great financial deal for Tencent, allowing it also to get rid of loss-making businesses. JD's market cap at IPO did receive a boost from the Tencent halo but we think Tencent got the better deal. We see the 15% stake as upfront compensation to Tencent for customer acquisition costs for 5 years. JD does not **fully amortize this cost** in the marketing expense, which helps to keep it low. The strategic partnership with **Tencent will expire in 2019 (5-year term).** We believe that post 2019, Tencent will charge JD for its services, which can drive **JD's customer acquisition cost** and **marketing expenses** higher.

23 https://www.thestreet.com/story/14147070/2/alibaba-jd-intensify-battle-over-china-s-750-billion-e-commerce-market.html
Source: Company filings, website, press releases, news articles, channel checks, sell-side analysts. *Note: $1 = RMB 6.75.*
24 In April 2016, JD paid another $123mm in cash to acquire the remaining stake in Shanghai Icson.
25 2014 20F

Exhibit 21: JD's strategic partnership with Tencent

Transactions with Tencent

On March 10, 2014, we acquired certain e-commerce businesses and assets from, and entered into a strategic cooperation agreement and formed a strategic partnership with, Tencent, a leading internet company serving the largest online community in China. Tencent offers a wide variety of internet services in China including instant messaging, social networking, online games and online media. As part of the strategic partnership, Tencent agrees to offer us prominent level 1 access points in its mobile applications Weixin and Mobile QQ and provide internet traffic and other support from other key platforms to us. Level 1 access points refer to entries and links that Tencent users can directly access on the interfaces that will launch after one click on the home interface on Tencent's mobile applications. We launched level 1 access on Tencent's Weixin platform for selected Weixin users in Beijing and Shanghai first in May 2014 and subsequently rolled it out to all Weixin users in June 2014, and we also launched direct access on Tencent's Mobile QQ in August 2014. We expect our prominent level 1 access on Weixin and Mobile QQ will help us generate mobile user traffic from Tencent's large mobile user base and enhance our customers' mobile shopping experience.

The two parties agree to cooperate in a number of areas including mobile-related products, social networking services, membership systems and payment solutions. The strategic cooperation agreement has a term of five years and applies within the territory of the Greater China, including Hong Kong, Macau and Taiwan. Under the strategic cooperation agreement, we are Tencent's preferred partner for all physical goods e-commerce businesses, and Tencent agrees not to engage in any direct sales or managed marketplace business model in physical goods e-commerce businesses in Greater China and a few selected international markets for a period of eight years, whether through a direct sales or managed marketplace business model, other than through its controlled affiliate Shanghai Icson E-Commerce Development Company Limited, or Shanghai Icson. We expect to further leverage the strategic partnership with Tencent to enhance our customers' online shopping experience, reach Tencent's large mobile and internet user base and further expand our presence on mobile commerce.

- The strategic partnership with Tencent offers JD level 1 access on its mobile apps
- JD's strategic partnership with Tencent is for a term of 5 years; **expires in 2019 and share lock up has already expired**

Source: 2014 20F page 62

Technology expense is scant relative to peers like Amazon and Alibaba

JD's technology related expense since 2011 is shown in Table 22. Technology expense as a percentage of revenue has increased from 1.1% in 2011 to 2.1% in 2016. However, in comparison with peers like Alibaba and Amazon, JD spends minute amounts on technology.

Exhibit 22: Technology & Content expense for JD has been in 1.1% - 2.1% range

(in RMB million)	2011	2012	2013	2014	2015	2016
Technology and Content	**240**	**636**	**964**	**1,836**	**3,454**	**5,381**
% YoY Growth	*217.7%*	*165.2%*	*51.4%*	*90.5%*	*88.1%*	*55.8%*
% of total net revenues	1.1%	1.5%	1.4%	1.6%	1.9%	2.1%

Source: Company filings.

More importantly, what exactly has the tech spend focused on? While JD does not break down its expenditure, we believe that in the last 2 years, **technology related to JD Finance** has been the real focus. **JD's technology related spend on its core business and new initiatives like cloud, big data and machine learning has been virtually non-existent or paltry.**

We searched for evidence that JD is a tech-centered ecommerce company—one that can become the Amazon of China—but found no such evidence or indication in its balance sheet or in its business model.

Supposing JD has these plans now, it will have to spend billions a year to just catch up with its peers and even if it is willing to do so, it hasn't got the funds and even if shareholders are willing to give it the funds, it may be too late.

Given the above reasons, we believe that JD's operating cost structure, particularly fulfilment, will remain challenged and margins will continue to stay under pressure, disappointing the optimists.

2 JD is Not China's Amazon – Tech Disruptor vs. Old School Retailer

"To succeed in two different big businesses in a huge way, I can't think of another example like it"
– Warren Buffett on Jeff Bezos

A major bull thesis of **US-based internet investors** to justify JD's $60 bn price tag is that JD is China's Amazon. The thinking is, China's consumer market is not only the second largest in the world but also has the most potential. So JD must surely be a multi-bagger. **We believe this is a misplaced comparison for a plethora of reasons** and the list of differences could be a 50-page report in itself. Put simply, Amazon is a serial tech disruptor while JD is an old school retailer.

Buffett has repeatedly heaped praise on Bezos for transforming not just retail but also technology industries. Amazon Web Services (AWS), Marketplace, Prime, Alexa, Amazon Go, Kindle and media/video are all examples of bold technology innovations of Amazon.

At a headline level, Amazon has spent over $60 bn since 1998 on technology and content. The company's combined technology and content expenses averages about 9.1% of sales. While technology related investments typically drop for most companies over time, for Amazon it has been rising. In 2016 alone, Amazon spent $16 bn on technology or 11.8% of total sales!

JD's balance sheet shows no evidence of substantial tech assets. At a high level, JD has spent 1.1-2.1% of net revenues on technology. In 2016, JD spent $0.8 bn or 2.1% of net revenue on technology. Most of JD's equity investees have **produced $1bn+ in impairments instead of technological edge**. Other key differences between Amazon and JD include:

- **AWS (Amazon Web Services):** AWS was invented by Amazon more than a decade ago. In the 2006 annual report Jeff Bezos remarked "*it's highly differentiated, and it can be a significant, financially attractive business over time*". **Bezos was right on the money**. Going by Q1 2017 numbers, Amazon's AWS is expected to generate over **$15 bn in revenues** and **$3.6 bn in operating profits** on an annualized basis. This business accounted for 89% of Amazon's operating income in Q1 2017 and AWS revenue grew **49%, 70%, 60% and 43%** in 2014, 2015, 2016 and Q1 2017 respectively. **AWS alone would be worth $270 bn (50x 2018 operating earnings)**. Exhibit 23 below highlights AWS' operating profits. What is impressive is that Amazon has achieved this growth despite passing on cost savings to customers.

  AWS has **over 1 mm customers** in 190 countries and has the highest worldwide market share, beating pure technology companies like Microsoft, IBM and Google. AWS offers more than 70 services for computing, storage, databases, analytics, mobile, Internet of Things, and enterprise applications. JD has not come close to Amazon's technology spend and technological innovation. We would argue that without AWS, Amazon's market cap would not be where it is now. It would seem that JD is benefitting from an AWS halo effect it does not deserve. Competitors like Alibaba and Tencent have invested billions in this segment. Even if (and it is a big if) JD decides today to enter the cloud business, it does not have the balance sheet to compete with Alibaba, Tencent and many others.

Exhibit 23: AWS $3.1 bn operating income in 2016 – what is there to compare with JD?

AWS	2014	2015	2016
Net sales	$ 4,644	$ 7,880	$ 12,219
Operating expenses	3,984	6,017	8,513
Operating income before stock-based compensation and other	660	1,863	3,706
Stock-based compensation and other	202	356	598
Operating income	$ 458	$ 1,507	$ 3,108

Source: Amazon 2016 annual report. Figures in USD millions.

- **Amazon's Marketplace has sheer size and reach:** Marketplace was founded over 16 years ago and in 2016 had retail third party seller services revenue of **$23 bn (see Exhibit 24)**. According to the filings, **Amazon hosted over 2 mm merchants** from over 150 different countries last year, and helps connect them with **customers in 189 countries**. JD's revenue from the "services and other" segment was $3.2 bn in 2016, of which we estimate the core 3P revenue is likely less. JD has 0.12 mm merchants; a smaller and different model to Amazon. In a later section, we discuss why JD's 3P business is dwarfed by Alibaba.

Exhibit 24: Amazon derives significant revenue from marketplace (3P) business

	Year Ended December 31,		
	2014	2015	2016
Net Sales:			
Retail products (1)	$ 68,513	$ 76,863	$ 91,431
Retail third-party seller services (2)	11,747	16,086	22,993
Retail subscription services (3)	2,762	4,467	6,394
AWS	4,644	7,880	12,219
Other (4)	1,322	1,710	2,950
	$ 88,988	$ 107,006	$ 135,987

Source: Amazon 2016 annual report. Figures in USD millions.

- **Amazon's investments dwarf JD's:** As per Exhibit 25, Amazon's **net PP&E is $29 bn** as the company has significant assets related to its fulfilment and tech investments. For JD's market cap, its balance sheet shows a tiny **~$1 bn in net PP&E** and this figure has barely changed since IPO 3 years ago. JD's assets are primarily 5-6 owned warehouses (95% are leased), delivery vans, its internet platform and its HQ office (nearly $230 mm). **JD's cumulative depreciation over 13 years is a paltry $600 mm**, supporting our view that little has been spent on technology whereas **Amazon's cumulative depreciation is over $13.3 bn**. JD sometimes tells investors it is spending heavily on technology but where is the evidence of that?

Exhibit 25: Amazon's net PPE of $30bn vs JD.com of $1bn – what is there to compare?

Amazon's Net PPE (in USD mm)

	December 31,	
	2015	2016
Gross property and equipment (1):		
Land and buildings	$ 9,770	$ 13,998
Equipment and internal-use software (2)	18,417	25,989
Other corporate assets	334	649
Construction in progress	1,532	1,805
Gross property and equipment	30,053	42,441
Total accumulated depreciation (1)	8,215	13,327
Total property and equipment, net	$ 21,838	$ 29,114

JD's Net PPE (in RMB '000s)

	As of December 31,	
	2015 RMB	2016 RMB
Electronic equipment	3,089,415	4,422,833
Office equipment	202,422	266,411
Vehicles	843,922	1,091,556
Logistic and warehouse equipment	1,105,245	1,578,653
Leasehold improvement	306,352	496,887
Software	149,590	196,713
Building and building improvement	2,526,948	3,069,651
Total	8,223,894	11,122,704
Less: Accumulated depreciation	(1,990,788)	(3,725,675)
Net book value	6,233,106	7,397,029

Source: Amazon and JD's 2016 annual report.

- **Amazon is present internationally:** As per Exhibit 26, Amazon is an international company and is dominant in many markets outside the US. JD has no international presence[26].

Exhibit 26: Amazon has significant international revenue – JD has none

Net sales generated from our internationally-focused websites are denominated in local functional currencies. Revenues are translated at average rates prevailing throughout the period. Net sales attributed to countries that represent a significant portion of consolidated net sales are as follows (in millions):

	Year Ended December 31,		
	2014	2015	2016
United States	$ 54,717	$ 70,537	$ 90,349
Germany	11,919	11,816	14,148
United Kingdom	8,341	9,033	9,547
Japan	7,912	8,264	10,797
Rest of world	6,099	7,356	11,146
Consolidated	$ 88,988	$ 107,006	$ 135,987

Source: Amazon 2016 annual report. Figures in USD millions.

- **Amazon Prime:** Amazon Prime is a key business propelling the revenues and earnings for Amazon. Exhibit 27 highlights retail annual and monthly fees associated with Amazon Prime membership. In 2016, **Prime membership contributed approx. $6.4 bn** or 4.7% to its $136 bn revenue (up from 3.2% in 2014)[27]. Amazon offers its Prime customers access to a number of benefits including free 2-day shipping, videos, music, etc. Amazon in return gets loyal customers that are estimated to shop 4x more than non-Prime customers. Prime has become an all-you-can-eat, physical-digital hybrid that members love. Membership grew over 50%, including 47% growth in the U.S. and there are now **tens of millions of loyal members** worldwide.

  To replicate Amazon Prime's success, JD has recently started JD Plus loyalty program, which is focused on delivery and reward points for shopping. Members have to pay an annual fee of RMB 149 ($22.10), and in return get up to 5 free deliveries per month, and special discounts and rewards. But unlike Amazon Prime, JD Plus does not offer free digital entertainment services; in China, consumers have easy access to pirated digital content anyway. So JD Plus is only focused on enhancing shopping experience and has not been successful in capturing customer loyalty. Amazon customers however shop for a wide variety of goods and can make multiple purchases in a short time frame.

Exhibit 27: Amazon Prime revenue

	Year Ended December 31,		
	2014	2015	2016
Net Sales:			
Retail products (1)	$ 68,513	$ 76,863	$ 91,431
Retail third-party seller services (2)	11,747	16,086	22,993
Retail subscription services (3)	2,762	4,467	6,394
AWS	4,644	7,880	12,219
Other (4)	1,322	1,710	2,950
	$ 88,988	$ 107,006	$ 135,987

Source: Amazon 2016 annual report. Figures in USD millions.

[26] JD entered Indonesia in 2015 with JV with Provident Capital Partners. We discount JD's Indonesia operations given it is currently a very smaller player in the country.
[27] Source: Amazon annual report; net sales from retail subscription services.

- **Amazon has created significant value through innovation whilst JD is a pure online retailer and, not a technology innovator**: We highlight below an interesting presentation[28] given at the Ira Sohn Conference in New York in 2016. As Chamath Palihapita of Social Capital highlights in Exhibit 28, Amazon has created nearly $239bn of additional value in innovations. Amazon has turned every major investment into a source of revenue. This comes back to our point that Amazon is a serial tech disruptor.

Exhibit 28: Amazon has created significant value by being a technology disruptor

...a significant source of revenue & value

($B)	2015 Revenue	2015 Value
amazon kindle	$3	$6
amazon basics	$0.5	$1
amazon fire	$1.5	$3
amazon echo	$0.3	$3
fulfillment by amazon	$5	$25
amazon webservices	$8	$150
amazon Prime	$4	$50
amazon payments	$0.1	$1
Total		$239

Source: Social Capital presentation at Ira Sohn in 2016.

In the U.S., Amazon is dominant with ~43% market share and has no real competitor to contend with. JD on the other hand, is a **distant number two to Alibaba in China.** JD has only ~12%[29] of the ecommerce market share in China while Alibaba has over 70% of the total ecommerce market share and ~49% of the B2C market[29]. Alibaba boasts $20 bn in cash on the balance sheet, $9 bn in annual profits and $7 bn in free cash flow and therefore has the financial resources to outspend any of its rivals. JD grows and invests with mostly debt and not from free cash flows. Alibaba even has a Business Intelligence team that does nothing but tracks every move JD makes. JD meanwhile has cumulative losses of $3.1 bn, gross debt of $5.04 bn[30] and tangible equity of only $850 mm[31]. JD cannot hope to make more profits and at the same time aspire to take market share from while Alibaba.

It is notable that the Oracle of Omaha actually sold most of his Walmart stake—after Walmart took a stake in JD. Why would the Oracle sell his Walmart stake if the next multi-bagger, Chinese equivalent of Amazon was in hand?

In conclusion, we find not a single iota of evidence, from vision to strategy to technology to sources of profit, to potential support the supposition that JD is the Amazon of China – if anything, the evidence patently shows both companies are diverging rather than converging.

[28] http://www.valuewalk.com/wp-content/uploads/2016/05/palihapitiya_sohn.pdf
[29] iResearch, sell-side estimates.
[30] Includes $2.1bn of non-current and current securitization debt. JD Finance to be spun off in Q2 2017.
[31] Excluding goodwill, intangible and equity investee

3 Follow the Smart Money – Hillhouse Sells ~$1.8bn in 3 Quarters

HILLHOUSE CAPITAL

Based on Hillhouse's quarterly 13F filings, we note Hillhouse has sold almost ~44 mm shares (~$1.8bn) over the last 3 quarterly filings (see Exhibit 29). We note that after the **Walmart** alliance was announced, Hillhouse sold more stock than all of the previous filings combined. Given Hillhouse's long-term orientation on JD, this is baffling and disconcerting.

Readers can follow this trend here: https://www.sec.gov/cgi-bin/browse-edgar?CIK=0001510589

Exhibit 29: Insider Hillhouse's stock sales have picked up in the last 3 Filings

Filing date	Shares	Change	QoQ	YoY
15/5/2017	78,899,475	-18,068,586	-18.6%	-36.0%
14/2/2017	96,968,061	-17,687,917	-15.4%	-20.9%
14/11/2016	114,655,978	-8,551,753	-6.9%	-16.1%
15/8/2016	123,207,731	0	0.0%	-13.8%
16/5/2016	123,207,731	599,139	0.5%	-14.1%
16/2/2016	122,608,592	-13,999,600	-10.2%	-19.6%
16/11/2015	136,608,192	-6,339,624	-4.4%	-
14/8/2015	142,947,816	-453,849	-0.3%	-
15/5/2015	143,401,665	-9,020,000	-5.9%	-
17/2/2015	152,421,665	-	-	-

Hillhouse insider sales have picked up in the latest 3 quarterly filings. As Walmart comes in, Hillhouse has been selling

Source: SEC filings

Exhibit 30 presents the 2016 20-F that was filed by JD. The figures are for Class A shares (1 ADR represents 2 ordinary shares). This filing shows that Hillhouse sold 193.9mm Class A Shares or 96.9mm ADRs as of December 31, 2016. Since the 2016 JD annual report, Hillhouse has sold another 18.1 mm ADR shares.

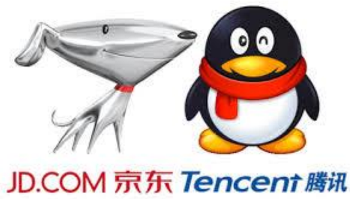
Founder of Hillhouse, Zhang Lei reportedly enjoys a special relationship with Richard Liu of JD. It seems inconsistent to us that Hillhouse would sell close to $1.8 bn of stock after Walmart's entry and when **JD plans to set up 1mm convenience stores in 5 years as well as invest another $2-3 bn in modern logistics—and make profits from both ventures from day one. Former CEO of JD Mall joined Hillhouse last year but that did not deter Zhang Lei from cashing in almost $1.8bn of stock.**

Exhibit 30: Hillhouse has been a seller of JD.com stock in the last 1 year

	Class A Ordinary Shares	Class B Ordinary Shares	Total Ordinary Shares	%	% of Aggregate Voting Power
Directors and Executive Officers:					
Richard Qiangdong Liu	30,537,566(1)	421,507,423(1)	452,044,989(1)	15.8(1)	80.0(2)
Martin Chiping Lau(3)	—	—	—	—	—
Ming Huang(4)	*	—	*	*	*
Louis T. Hsieh(5)	*	—	*	*	*
David Daokui Li(6)	*	—	*	*	*
Shengqiang Chen	*	—	*	*	*
Ye Lan	*	—	*	*	*
Rain Yu Long	*	—	*	*	*
Sidney Xuande Huang	*	—	*	*	*
Chen Zhang	*	—	*	*	*
All Directors and Executive Officers as a Group	39,189,387	421,507,423	460,696,810	16.1	80.1(2)
Principal Shareholders:					
Max Smart Limited(7)	27,937,566	421,507,423	449,444,989	15.7	71.7
Huang River Investment Limited(8)	516,974,505	—	516,974,505	18.1	4.4
Walmart(9)	289,053,746	—	289,053,746	10.1	2.5
Hillhouse Capital Management, Ltd.(10)	193,936,122	—	193,936,122	6.8	1.6
Fortune Rising Holdings Limited(11)	—	48,874,410	48,874,410	1.7	8.3

Source: JD 2016 annual report

At APS, we take seriously the moves of smart money, especially in China. The empirical evidence does suggest that they do outsmart most of us.



Next is Tencent's plan for its 15% stake in JD which came as part of a strategic cooperation agreed in March 2014. The 3-year lock-up has just expired on 10 March 2017. The 2014 deal was a smart business move by Tencent where it took the opportunity to also offload two loss-making C2C ecommerce businesses which it wanted to get rid of. Within a year, JD had to shut both down.

Exhibit 31: Tencent share lock up expired on March 10, 2017

As consideration for the Transaction, the Company issued 351,678,637 ordinary shares to Huang River Investment Limited, a wholly-owned subsidiary of Tencent, representing 15% shares on a fully diluted basis under treasury method upon the closing of the Transaction, on March 10, 2014.

The Group has performed the following steps to estimate the cost of the assets and business acquired with the assistance from an independent valuation firm: 1) estimate the total fair value of 351,678,637 ordinary shares issued to Huang River Investment Limited as the consideration of the transaction on March 10, 2014 using the income approach, or the discounted cash flow, or DCF method; 2) estimate the stand-alone fair value of the Combined Platform Business as well as fair value of each of Strategic Cooperation Agreement, Non-Compete, Investment in Shanghai Icson, Logistic workforce and Land Use Right (collectively "Asset Acquisition"); 3 The excess of (1) over sum of (2) and net cash acquired in the Transaction has been allocated to each individual asset of the Asset Acquisition and the Combined Platform Business based on their relative fair values. Additionally, in accordance with the relevant accounting guidance, non-transferability relating to lock-up period associated with the shares issued to Huang River Investment Limited for a period of three years commencing from March 10, 2014, is factored in estimating the fair value of shares issued to acquire Strategic Cooperation, Non-compete, Investment in Shanghai Icson, Logistic Workforce and Land use right, but is not factored in estimating the fair value of shares issued to acquire Combined Platform Business.

Source: JD 2016 annual report

The bulls argue Walmart's 10% stake in JD is a plus but the reality is that Walmart still competes head on with JD in FMCG. What many investors do not know is that it was a packaged deal where Walmart made a commitment to buy about $2bn worth of stock in the open market in exchange for offloading a loss-making company to JD at a price that the market viewed as being over the top. Walmart has been a frantic acquirer, as evidenced by its string of loss-making ecommerce company acquisitions like Jet.com and Yihaodian (sold to JD) and a seller of struggling, loss-making subsidiaries.

Exhibit 32: Agreement between JD and Walmart on June 20, 2016

Certain Agreements with Walmart

In June 2016, we entered into a series of agreements with Walmart in relation to our strategic alliance with Walmart. Set forth below is a summary of certain of the agreements.

Share Subscription Agreement. On June 20, 2016, we entered into a share subscription agreement with Newheight, a wholly-owned subsidiary of Walmart, pursuant to which Newheight subscribed for 144,952,250 of our newly issued Class A ordinary shares, which amounted to approximately 5% of our total outstanding shares as of the date of the agreement. In return, Walmart transferred to us Yihaodian marketplace platform assets, including the Yihaodian brand, websites and mobile apps, and entered into business cooperation arrangements with us.

Investor Rights Agreement. On June 20, 2016, we entered into an investor rights agreement with Newheight. Pursuant to the investor rights agreement:

- *Observer right.* So long as Newheight and certain other wholly-owned subsidiaries of Walmart hold no less than 289,053,746 shares of our Class A ordinary shares (including ADSs representing Class A ordinary shares), Newheight has the right to designate one of its senior executives to attend all meetings of our board of directors in a non-voting observer capacity;

Walmart had committed to increase its stake in JD to 10% to get an observer seat on JD's Board

Source: JD 2016 20F.

4 JD's Free Cash Flow is Actually Negative in 2016

Since Q2 2016, JD has been presenting to shareholders an "**operating cash flow**" figure, after reclassifying two items in cash flow statements (shown below). The market **seemed to have accepted at face value the company's claim that operating cash flows have improved dramatically. A scrutiny of the cash flow items** showed that it is a fallacy.

As can be seen in the detailed cash flow statement from the recent 2016 20-F, JD has reclassified two items, **accounts receivables** and **loans receivables** in 2014 and 2015. Due to this reclassification, the total amount reclassified from "operating cash" to "investing cash" was **RMB 3.5 bn** in 2015 and **RMB 274.8 mm** in 2014.

Using the company's reclassification[32] methodology, we calculated that in 2016, the reclassification would be in excess of RMB 10.3 bn ($1.5 bn).

Exhibit 33: JD's Cash flow from operations – Old vs Revised

Cash flow statement (in RMB '000)	Dec-14 (old)	Dec-15 (old)	Dec-14 (new)	Dec-15 (new)	Dec-16
Net loss	**-4,996,358**	**-9,387,582**	**-4,996,358**	**-9,117,506**	**-3,413,724**
Depreciation and amortization	1,650,533	2,619,061	1,650,533	2,619,061	3,633,346
Share-based compensation	4,249,548	1,193,945	4,249,548	1,193,945	2,343,785
Allowance for doubtful accounts	74,332	420,750	74,332	420,750	867,233
Loss from disposal of property, equipment and software	26,043	7,714	26,043	7,714	18,478
Non-cash marketing services contributed by certain shareho	0	0	0	0	0
Deferred income tax	-4,169	-42,584	-4,169	-42,584	-34,782
Share of results of equity investees	-638	**3,134,283**	-638	**2,852,677**	2,785,343
Foreign exchange (gains)/losses	28,980	57,395	28,980	57,395	146,354
Impairment of goodwill and intangible assets	-	2,750,129	-	2,750,129	-
Impairment of investments cost method and available for sale	-	611,108	-	611,108	637,583
Gain from the sales of investments	-	-1,507	-	-1,507	-1,232,853
Amortization of discounts/ issuance of senior notes	-	-	-	-	8,622
Cash flow from operations before changes in WC	**1,028,271**	**1,362,712**	**1,028,271**	**1,351,182**	**5,759,385**
Changes in operating assets and liabilities:	**Dec-14 (old)**	**Dec-15 (old)**	**Dec-14 (new)**	**Dec-15 (new)**	**Dec-16**
Accounts receivable	-2,004,884	-7,395,424	-1,861,364	-6,167,483	-9,697,221
Restricted cash	-689,499	-1,076,628	-689,499	-1,076,628	526,646
Inventories	-5,804,688	-8,348,700	-5,804,688	-8,348,700	-8,369,883
Loan receivables	-125,935	-2,306,631	5,430	-26,699	-74,458
Investment securities	-	-	-	-	-3,703
Advance to suppliers	-160,203	-18,010	-160,203	-18,010	-487,320
Prepayments and other current assets	-1,210,697	252,397	-1,210,697	252,397	-533,596
Other investments	-	-	-	-	-252,223
Amount due from related party	-412,314	-402,795	-412,314	-402,795	-481,774
Other non-current assets	-66,485	-1,170,454	-66,485	-1,170,454	169,144
Accounts payable	4,902,844	13,113,084	4,902,844	13,113,084	13,693,690
Advance from customers	2,611,035	2,507,225	2,611,035	2,507,225	4,454,299
Deferred revenues	-65,725	**-472,800**	-65,725	-461,270	-707,966
Taxes payable	-42,615	-132,949	-42,615	-132,949	494,438
Accrued expenses and other current liabilities	2,988,499	2,207,476	2,988,499	2,207,476	4,247,921
Amount due to related party	67,412	69,946	67,412	69,946	29,638
Changes in operating assets and liabilities	**-13,255**	**-3,174,263**	**261,630**	**345,140**	**3,007,632**
Net cash (used in)/provided by operating activities	**1,015,016**	**-1,811,551**	**1,289,901**	**1,696,322**	**8,767,017**
Delta			**274,885**	**3,507,873**	

Source: *Company financials.*

In 2014, JD's revised operating cash flow statement shifted RMB 0.13bn of Loans Receivables and RMB 0.14bn of Accounts Receivables to investing cash flow

In 2015, JD's revised operating cash flow statement shifted RMB 2.3bn of Loans Receivables and RMB 1.3bn of Accounts Receivables to investing

- Operating cash flow increased by RMB 0.27bn and 3.5bn due to the revision

JD defines free cash flow as adjusted operating cash flow less capital expenditures. Adjusted operating cash flow is defined as net cash provided by operating activities adding back JD Finance net originations/(repayments) included in operating cash flow. JD Finance net originations primarily include "Jingbaobei," "Jingxiaodai" and "JD Baitiao" that the company provides to suppliers, merchants and customers, respectively. JD has not defined JD Finance net originations. Company has also not disclosed the net origination amount.

[32] Refer to Exhibit 50 for JD's explanation for reclassification of operating and investing cash flows

Exhibit 48 examines the cash flow from investing, into which the operating items were moved:

Exhibit 48: JD's Cash flow from investing – Old vs Revised

Cash flows from investing activities:	Dec-14 (old)	Dec-15 (old)	Dec-14 (new)	Dec-15 (new)	Dec-16
Purchase of short term investments	-19,104,408	-5,022,000	-19,104,408	-5,022,000	-16,969,213
Maturity of short term investments	7,853,607	16,625,621	7,853,607	16,625,621	12,738,475
Changes of deposits for capital verification	545,000	0	545,000	0	0
Purchases of investment securities	-421,133	-1,139,386	-421,133	-1,139,386	-1,116,200
Cash received from disposal of investment securities	0	0	0	0	361,893
Purchase of other investments	0	0	0	0	-24,165,716
Maturity of other investments	0	0	0	0	6,703,594
Prepayments and investments in equity investees	-434,585	-7,156,789	-434,585	-7,156,789	-7,660,513
Cash received from disposal of equity investees	0	0	0	0	34,558
Changes in restricted cash	0	0	0	0	-2,803,688
Cash paid for loan originations	-	-	-662,511	-10,784,220	-45,152,496
Cash received from loan repayments	-	-	387,626	7,276,347	34,836,743
Purchase of property, equipment and software/office bld	-1,424,534	-2,826,830	-1,424,534	-2,826,830	-2,372,035
Cash paid for construction in progress	-1,036,513	-1,540,615	-1,036,513	-1,540,615	-1,359,364
Purchase of intangible assets	-17,935	-6,556	-17,935	-6,556	-50,438
Purchase of land use rights	-423,084	-925,758	-423,084	-925,758	-678,328
Cash paid for business combination, net of cash acquired	1,260,337	-290,339	1,260,337	-290,339	-615,849
Net cash used in investing activities	**-13,203,248**	**-2,282,652**	**-13,478,133**	**-5,790,525**	**-48,268,577**
Delta			**274,885**	**3,507,873**	

Accounts and Loans receivables were moved to investing cash flow

For 2016, the net cash paid for Loan Origination was RMB 10.3bn

Source: Company financials.

JD's reclassification of operating and investing cash flows inflates operating cash flow (OCF). By reclassifying JD Finance's accounts receivables and loans receivables in 2016, JD's OCF improved by RMB 10.3bn ($1.5bn) to post a $1.26 bn figure. Without the reclassification, OCF would be negative.

While this accounting reclassification is acceptable to some degree, we are baffled as to why the company added RMB 11.3 ($1.7bn) of JD Finance's net originations to show a **free cash flow**[33] of $2.25 bn in 2016.

Exhibit 49: JD's Free Cash Flow adds back JD Finance Net Origination

For the full year of 2016, free cash flow of the company was as follows:

	For the year ended		
	December 31, 2015	December 31, 2016	December 31, 2016
	RMB	RMB	USD
		(In thousands)	
Net cash provided by operating activities	1,696,322	8,767,017	1,262,713
Add: JD Finance net originations included in operating cash flow	10,664,135	11,304,412	1,628,174
Less: Capital expenditures	(5,299,759)	(4,460,165)	(642,397)
Free cash flow	7,060,698	15,611,264	2,248,490

Source: Company filings.

We know that other ecommerce companies in China like Vipshop and Alibaba also add back cash from internet finance-related activities while presenting the free cash flow numbers, but the magnitude of the add backs are significantly lower compared to JD (refer Appendix E).

[33] JD defines free cash flow as adjusted operating cash flow less capital expenditures. Adjusted operating cash flow is defined as net cash provided by operating activities adding back JD Finance net originations/(repayments) included in operating cash flow. JD Finance net originations primarily include "Jingbaobei," "Jingxiaodai" and "JD Baitiao" that the company provides to suppliers, merchants and customers, respectively. JD has not defined JD Finance net originations. Company has also not disclosed the net origination amount.

Why has JD.com made this move? The only disclosure given is: "As JD Finance business has changed from supporting the overall JD platform to an independently operated and self-funded business, loans to consumers and merchants in marketplace business and third parties are made mainly for investment purpose".

Exhibit 50: JD's explanation for reclassification of operating cash flows in 2016

As JD Finance business has changed from supporting the overall JD platform to an independently operated and self-funded business, loans to consumers and merchants in marketplace business and third parties are made mainly for investment purpose. Accordingly cash flows resulted from loan receivables are reclassified from operating activities in cash flows to investing activities in cash flows. Cash flows resulted from loan receivables of RMB1.3 billion and RMB3.5 billion for the fourth quarter of 2015 and the full year of 2015 have been reclassified from operating activities to investing activities in cash flow statements. Free cash flow remains the same for all the presented and prior periods.

Source: Company filings.

JD Finance's loan book helped to boost GMV and cash flow

With JD's ability to raise money in the asset-backed securities market, it has made hay while the sun shone. Its internet finance loan book has grown exponentially (see Exhibit 51) and this has boosted both ecommerce GMV and financial engineering of cash flow. After JD Finance is spun off, we expect JD's cash flow to remain challenged in 2H 2017 and 2018.

Exhibit 51: JD Finances loan advances since December 2014

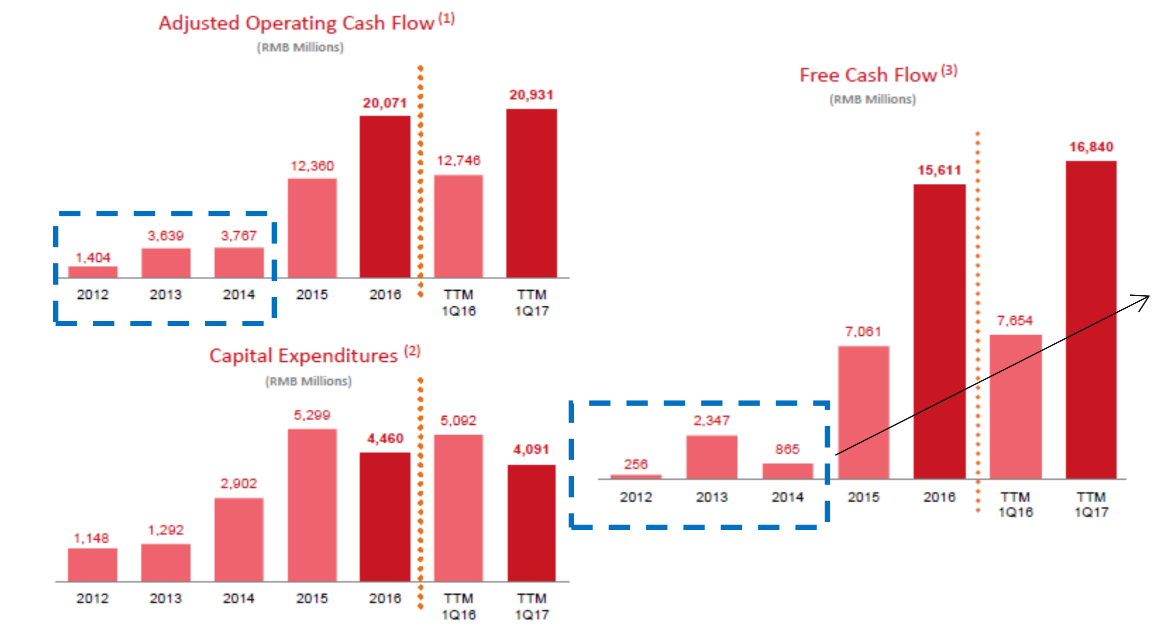
JD Finance (RMB in millions)	Dec-13	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17
Consumer financing	-	-	500	1,100	1,565	4,000	5,300	10,000	11,500	17,700	19,700	25,300	29,100
YoY growth rate	-	-	-	-	-	-	1060.0%	909.1%	734.8%	442.5%	371.7%	253.0%	253.0%
Accounts receivable (current) - consumer financi	-	-	*500*	*1,100*	*1,365*	*3,800*	*4,800*	*6,400*	*9,100*	*11,900*	*11,900*	*14,300*	*14,600*
Loan receivables (current) - consumer financing	-	-	-	-	-			**2,600**	*2,200*	*4,900*	*7,000*	*9,300*	*12,200*
Other non-current assets - consumer financing	-	-	-	-	*200*	*200*	*500*	*1,000*	*200*	*900*	*800*	*1,700*	*2,300*
Supply chain financing	100	1,400	1,400	1,623	2,338	4,987	6,835	6,000	6,200	9,400	10,100	11,600	12,400
YoY growth rate	-	-	-	-	-	-	488.2%	369.7%	265.2%	188.5%	147.8%	193.3%	200.0%
Loan receivables (current) - Supply chain	-		0	123	291	650	1,597	**1,100**	1,300	1,900	2,800	3,400	4,200
Advance to suppliers (current) - Supply chain	-				47	437	1,138	200	200	700	1100	1200	1300
Accounts Payable - supply chain **net off** (1P suppli	100	1,400	1,400	1,500	2,000	3,900	4,100	4,700	4,700	6,800	6,200	7,000	6,900
Business financing	0	-	-	0	0	0	0	500	300	400	300	700	700
YoY growth rate	-	-	-	-	-	-	-	-	-	-	-	140.0%	233.3%
Accounts receivable (current) - business financing	-	-	-	-	-	-	-	300	300	400	300	600	600
Amounts due from related parties	-	-	-	-	-	-	-	200	-	-	-	100	100
Total	100		1,900	2,723	3,903	8,987	12,135	16,500	18,000	27,500	30,100	37,600	42,200
YoY growth rate	-	-	-	-	-	-	638.7%	605.9%	461.2%	306.0%	248.1%	227.9%	234.4%

Source: Company filings.

Indeed, in the pre-financial engineering days when cash flow was "clean" and JD Finance's loan book was tiny, JD generated little to no OCF from 2012-2014 (see Exhibit 52).

It is instructive to note that neither the company's flat gross margins nor rising cost structure since 2014 could explain the company's improved "adjusted operating cash flow". It was down to accounting engineering.

Exhibit 52: JD's Cash flows from operations[34]



Myth or reality?

JD barely showed operating cash from 2012-2014; this was a CLEAN OCF figure with no internet finance.

Adjusted operating cash flow in our view is creative accounting engineering

Source: JD investor presentation

[34] JD defines free cash flow as adjusted operating cash flow less capital expenditures. Adjusted operating cash flow is defined as net cash provided by operating activities adding back JD Finance net originations/(repayments) included in operating cash flow. JD Finance net originations primarily include "Jingbaobei," "Jingxiaodai" and "JD Baitiao" that the company provides to suppliers, merchants and customers, respectively. JD has not defined JD Finance net originations. Company has also not disclosed the net origination amount.

5 JD's Logistics – No Moat, Intense Competition

JD's network of 256 warehouses (95% leased) and last mile delivery is seen by bulls as a source of long-term advantage. Historically, JD developed a **vastly different strategy** from Alibaba by building its own fulfilment chain including last mile delivery because China's logistics infrastructure had a lot of issues that created a bottleneck to expanding ecommerce beyond the tier-2 cities. **<u>So, this was not a bad idea a decade ago. But times have changed.</u>**

京东物流 JD Logistics

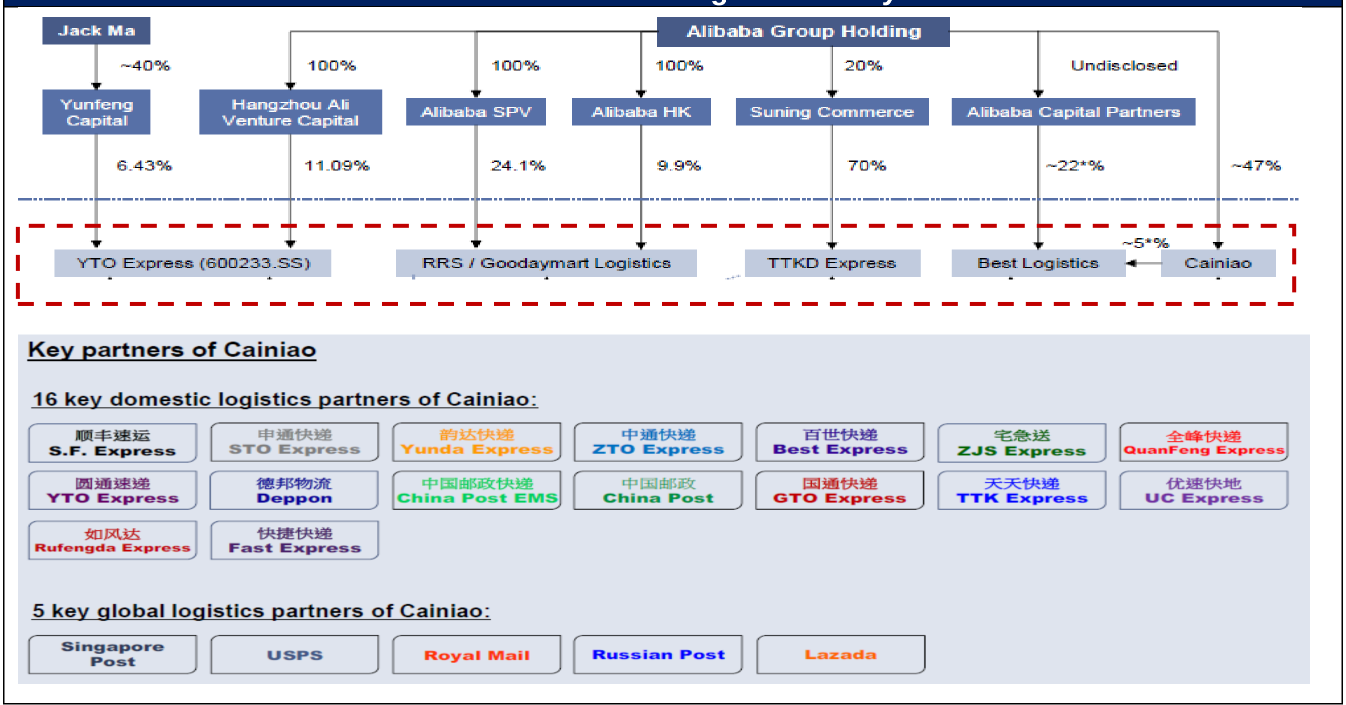
The Chinese logistics landscape has evolved significantly over the last few years with a flood of IPO listings and capital raisings from the likes of **Best Logistics, ZTO, YTO, STO and SF Express**. Today and in the future, the competitive edge lies in managing increasingly complex logistics ecosystems. Towards that end, there is now a plethora of **new logistics companies** offering a wide range of services.

Our research shows that it takes innovative tech-driven solutions to navigate this complexity and JD falls behind on tech as explained in an earlier section. JD is running up against Alibaba's formidable platform-driven logistics aimed at solving complexities using data and technology.

CAINIAO 菜鸟网络

In 2013 Alibaba, along with other partners, developed **Cainiao network**, an open and shared logistics platform that partnered with a number of third-party logistics companies (**ZTO, YTO, Yunda, STO** are key delivery partners). Cainiao's data and technology-driven systems have tremendously improved the efficiency and have digitized the logistics system in China. Alibaba also has separate tie-ups with category-specific solutions providers like Haier/RSS for large appliances and Suning/TTKD for electronic shipments.

Exhibit 53: Alibaba's Logistics Ecosystem



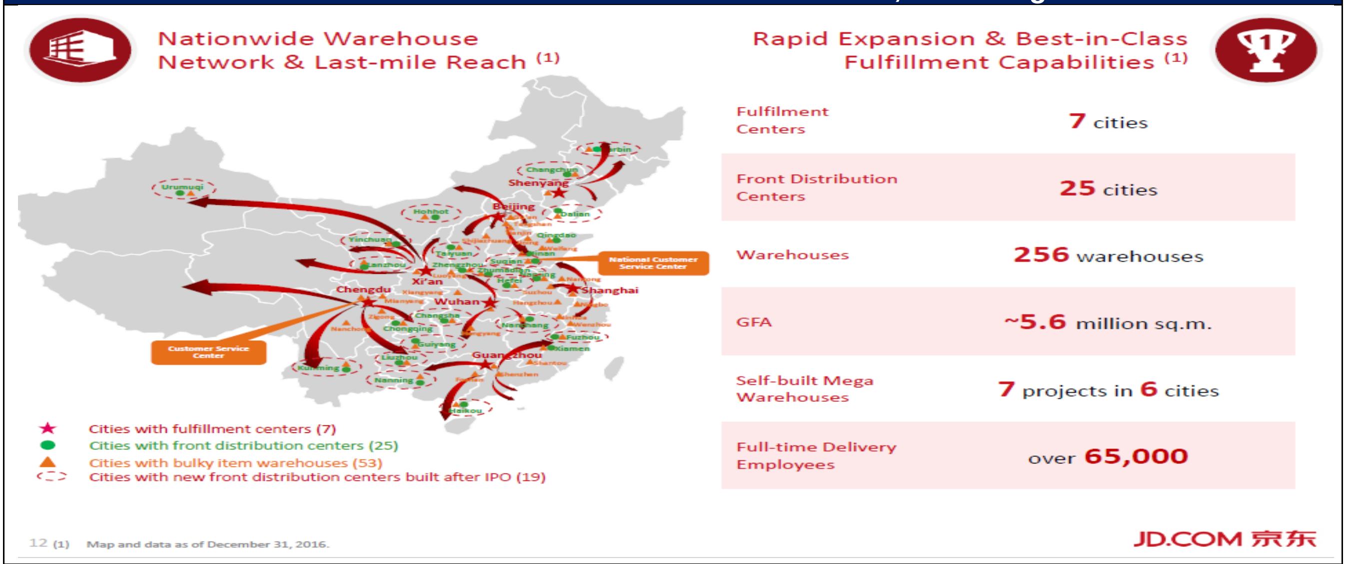
Source: Company filings, Goldman Sachs

Both merchants and customers benefit from the Cainiao model. Merchants enjoy access to a range of logistics partners on Cainiao, competitive prices and better quality. Additionally, Alibaba is currently subsidizing fulfilment costs through Cainiao which means lower selling costs for merchants. Customers benefit from fast and more efficient delivery due to digitization.

JD's strategy of doing everything itself, by contrast, will be self-limiting as competition hots up. For example, its warehouses average just ~22,000 sqm and are **suited to standardized, bulky 3C/appliance goods**, not high margin goods. Alibaba's strategy of working with a variety of logistics partners enables a much broader variety of goods to be fulfilled.

Indeed, our channel checks speaking to **Alibaba** and others indicate that in the medium to long run, JD's logistics system is not a moat anymore. Tmall has grown at 85% over the last two years, while being profitable, so there is no concrete evidence that JD's logistics has been an advantage. What stops competitors leasing warehouses and hiring delivery people?

Exhibit 54: 95% Leased and Suited for Standardized, Low Margin Goods



Source: JD investor presentation, March 2, 2017.

Below is a comparison of JD's and Alibaba's logistics ecosystem and the reach and capacity of each:

	JD Logistics Network	Alibaba's Logistic Ecosystem
Coverage	▪ ~7k delivery stations	▪ 180k+ delivery stations
Average Daily Packages	▪ ~4.8 mm orders[35]	▪ ~33 mm packages[36] domestic; ~4 mm cross-border packages
Same / Next day delivery	▪ 1,410 counties/districts (Dec' 16)	▪ 600+ counties/districts (May' 16)

Source: Alibaba company filings; JD company filings; sell-side estimates.

Alibaba has also reported that it would invest as much as $16 bn in the next 5-8 years on logistics to make the delivery process more efficient and stave off competition[37].

To conclude, we do not see how JD, a company that is still loss-making, can find the money to invest heavily in expanding and upgrading its logistics network. We believe JD's logistics network no longer provides a moat for growing its ecommerce business. **With Alibaba planning to invest heavily in its logistics infrastructure, JD's initial advantage will ebb.**

Source: Company filings, website, press releases, news articles, channel checks, sell-side, industry analysts. *Note: $1 = RMB 6.75*

[35] Based on JD's annual report; 1,755.4 mm orders fulfilled in 2016.

[36] http://www.alibabagroup.com/en/ir/pdf/160614/11.pdf

[37] http://www.investopedia.com/news/alibaba-invests-best-logistics-baba/

6 Irrelevant Metrics – GMV and Other Fake News

As fundamental investors, we continue to avoid focusing on irrelevant metrics like GMV and non-GAAP metrics. In the absence of relevant profitability, JD has continued to discuss **irrelevant metrics like GMV** and its plans for **profitability** from day one in logistics and convenience stores. We would argue that these things mask a non-competitive business struggling to make a profit. We highlight four examples below that sound too good to be true.

1. RMB 1 tn of GMV for JD Finance: Designed to inflate valuation

In late Feb 2017, Chinese news media reported[38] figures that were "leaked" from a JD Finance document. The key points disclosed where i) the GMV of JD Finance in 2016 hit RMB **1.1 tn**, up 108.6% from 2015.

Ex-JD Finance employees and industry experts tells us that the internet finance business' GMV is a meaningless metric for 2 major reasons: i) this figure is not audited and ii) e-transfers are included. To get a higher valuation, most internet finance companies blatantly overstate this figure. According to China Internet Finance Association's report[39] for 2015, the country's internet finance GMV totaled RMB 2,042 tn, 27.5x China's GDP. This surely doesn't make any sense, does it?

2. 3C and Home Appliance GMV: Trust the Government Data or JD?

In August 2016, China's Ministry of Industry and Information Technology (MIIT) published a report[40] stating that total online GMV of 3C and home appliances products for H1 2016 reached RMB 184.8 bn and JD's market share was 59.9%.

中华人民共和国工业和信息化部

However, according to JD's filings, its total GMV from 3C and home appliances (excluding Paipai) was RMB 150.6 bn, 81% market share. Surely, both parties can't be right.

The bigger point is that investors must not be taken in by the glittering figures thrown around about China's supposedly unlimited ecommerce growth prospects.

3. 1 mm convenience stores in 5 years, Wow!: Profitable from day 1! Really?

In early April, JD's founder Richard Liu announced that the company is planning to establish **1 mm convenience stores** in the next 5 years[41]. The company said the stores will be operated on a franchisee model. To establish 1 mm convenience stores in 5 years would require JD to sign on 548 franchisees a day, 7 days a week and for 5 straight years! Surely, this is too good to be true. To put JD's plan into perspective, 7-Eleven, the international convenience store, has only ~60,000 stores in over 15 countries after having been in the business for 50 years.

When asked during the Q1 2017 results call on May 8 how he proposed to do so, Richard Liu circumvented the question and categorically said that the convenience store model will be **profitable from day one** unlike the e-commerce business. In our view, it is inappropriate for a listed company to make such a big public announcement without details.

Source: Company filings, website, press releases, news articles, channel checks, sell-side, industry analysts. *Note: $1 = RMB 6.75.*

[38] http://www.readhouse.net/articles/237092856/
[39] https://466220.kuaizhan.com/21/40/p38572442412dab
[40] http://www.chinabgao.com/freereport/73272.html
[41] http://finance.qq.com/a/20170412/029586.htm

Exhibit 55: JD Management on 1 mm convenience stores during Q1 2017 earnings call

And lastly, for all of these models, from day one, we adapt philosophy not to – unlike to our e-commerce model that we burned some – quite a bit of money in the beginning. We do expect all of these models to be profitable since day one.

Source: JD Q1 2017 earnings transcript from Bloomberg.

4. JD Logistics will be profitable from day 1

Recently JD announced that it would carve out its logistics arm into a new unit called "**JD Logistics Business Group**"[42]. JD also said that it could potentially be seeking independent financing and spin-off of JD Logistics sometime in the future[43]. On the Q1 2017 earnings call, the company also mentioned that JD Logistics will be profitable from day 1 once it starts to operate under the new structure.

Exhibit 56: JD Management's comment on logistics during Q1 2017 earnings call

Yeah. So, because we just started to reorganize within the group. So, we don't have separate P&L yet. But I can assure you that once it started to operate on the new structure, it should be profitable from day one.

Source: JD Q1 2017 earnings transcript from Bloomberg.

In our view, this statement is incongruous because the logistics company's customer will largely be JD. JD Logistics' ability to post profits will be largely dependent on what it charges JD for the logistics services. **JD Logistics can only be profitable from day one if it charges higher fees. This is tantamount to saying that JD will 'sponsor' JD Logistics' profits.**

Against this backdrop, **Alibaba which has adopted an asset-light model** mentioned last year that it will be spending as much as **$16 bn over the next 5-8 years** on logistics to stave off competition[44]. Alibaba warned that logistics would continue to incur losses. Is it then possible for JD to know it will make money from logistics from day one without knowing how aggressive Alibaba will be in pricing their logistics services?

[42] http://ir.jd.com/phoenix.zhtml?c=253315&p=irol-newsArticle&ID=2264212
[43] http://www.chinadaily.com.cn/regional/bda/2017-04/26/content_29091350.htm
[44] http://www.investopedia.com/news/alibaba-invests-best-logistics-baba/

7 David vs Goliath– JD's 3P Business is a Distant Second to Alibaba's

To have a business commensurate with its $60 bn valuation, JD needs more than its 1P unit. This segment's margins are too low to warrant such a steep valuation, yet it accounts for 91.4% of revenues in 2016. If we strip out non-core revenues (logistics, internet finance payments, etc.) from "services and other", 1P contribution would be as high as 94%.

Exhibit 57: JD's revenue contribution from "Services and Other" segment

(in RMB million)	2013	2014	2015	2016
Services and Other - Revenue	**2,322**	**6,453**	**13,566**	**22,484**
% YoY Growth	*122.0%*	*177.9%*	*110.2%*	*65.7%*
% of total net revenues	3.3%	5.6%	7.5%	8.6%

Source: Company filings.

According to JD, the New Businesses segment contributed **RMB 2.0 bn in 2015** and **RMB 4.6 bn in 2016**. **Inter-segment related transactions** for 2015 and 2016 were RMB 1.69 bn and RMB 2.58 bn, respectively. On a net basis, New Business contributed RMB ~0.3 bn in 2015 and Rmb ~2.0 bn in 2016. The RMB 2.0 bn net revenue contributions from New Business imply **~9% of "services and other" revenue** was from non-3P related activities as illustrated in Exhibit 58.

Exhibit 58: JD 3P revenue is obfuscated due to non-core 3P items

For the full year of 2016, net revenues of the reported segments were as follows:

	For the year ended		
	December 31, 2015	December 31, 2016	December 31, 2016
	RMB	RMB	USD
		(In thousands)	
Net revenues:			
JD Mall	180,963,402	258,196,109	37,187,975
New Businesses	2,014,242	4,572,335	658,553
Inter-segment[10]	(1,690,689)	(2,582,669)	(371,982)
Total consolidated net revenues	181,286,955	260,185,775	37,474,546

RMB 2.0 billion of revenue represents ~9% of "services and other" revenues

Source: JD Q4 2016 results.

In our analysis, JD must meaningfully grow its 3P business to make a strong profit to justify its valuation. However, JD has to face a formidable competitor, Alibaba whose 3P is substantially larger than and considerably ahead of JD's.

Alibaba is estimated to have around 250,000 merchants on its B2C platform compared to JD's 120,000 merchants[45]. Alibaba's Tmall has over 100,000 brands on its platform[46]. As of March 2017, 75% of the consumer brands ranked in **Forbes' Top 100 World's Most Valuable Brands** have established digital operations on Alibaba's Tmall.

Alibaba's Tmall GMV is 4-5x that of JD's. When Tmall's and Taobao's GMV are combined, it is 10x larger than JD's. Alibaba also has 454 mm active buyers, double JD's.

Alibaba also dominates mobile based online shopping with over 80% market share[47]. <u>Merchants on average sell goods worth more than 2x on Tmall compared to JD's 3P platform</u>. These merchants, faced with a choice, would rather go with a much larger and tech-savvy market-dominant platform like Alibaba.

天猫 TMALL.COM

JD.COM 京东 多・快・好・省

Source: Company filings, website, press releases, news articles, channel checks, sell-side, industry analysts. *Note: $1 = RMB 6.75.*

45 Alibaba and JD's company filings, sell-side estimates.

46 Alibaba 2016 annual report.

47 iResearch and UBS estimate.

Alibaba's ecosystem currently has over ~443 mm active buyers compared to JD's ~227 mm. Customers generally like to shop on JD's 1P platform for 3C products whilst they go to Alibaba's platform to shop for general merchandise, which explains Alibaba's humongous size.

JD does not offer merchants a meaningfully differentiated service to incentivize them to switch platforms. Consumers also like the one-stop shop platform of Alibaba where they can get almost anything. Merchants also have gravitated to Taobao and Tmall as Alexa[48] ranks Taobao and Tmall ahead of JD.com in every category.

What makes matters worse for JD is that Alibaba seems determined to stifle JD's growth in 3P. Alibaba has an unspoken policy of discouraging its larger merchants to also list on JD's platform. More than a year ago, it successfully coerced Uniqlo to terminate its business relationship with JD[49]. Additionally, Alibaba has from time to time reduce its **take rates** and **ad monetization rates** to incentivize its merchants and enter into a price war with JD. Alibaba's advantages are that it has a powerful war chest and makes $10 bn a year[50]. It knows that it can afford and win a prolonged price war against a rival with a weak balance sheet if it thinks that its market share is threatened.

Alibaba's data and technology driven logistics platform Cainiao works with most of China's top logistics providers. Merchants on Alibaba's platform have the choice to select their shipper based on price and quality. Additionally, Alibaba is currently subsidizing the shipping costs to its merchants (Alibaba is losing money here), but merchants are benefitting and have the added incentive to sell on Alibaba's platform.

Clearly, if JD wants to be successful in its 3P business, it has no option but to formulate a long-term strategy and prepare a war chest to fight a prolonged vicious war against a formidable Goliath, Alibaba.

[48] http://www.alexa.com/topsites/countries/CN
[49] http://asia.nikkei.com/Business/Companies/Uniqlo-s-exit-from-JD.com-raises-claim-of-favor-to-rival-Alibaba
[50] FY 2017 Adjusted EBIT for Alibaba. Source: Company Q4 2017 presentation.

8 JD Finance—Selling for a Neat Profit?

JD will be spun off soon. There is little disclosure of JD' Finance's balance sheet and business but to complete the analysis of JD, we make an attempt at also analyzing JD Finance. In March 2017, JD entered into a definitive agreement to spin off its equity interest in JD Finance. JD will dispose of its **entire 68.6% ownership for RMB 14.3 bn (US$2.1 bn) in cash** and 40% profit sharing rights. JD has provided limited disclosure on the financial support and the losses absorbed for JD Finance. Without knowing all the details it is not possible to know whether JD would make a profit from this sale.

While JD has not disclosed the finance business' GMV and revenue numbers, the media has reported "leaked" JD Finance numbers. According to several Chinese news media[51], JD Finance's estimated **GMV for 2016 was RMB 1.1 tn ($163 bn)**, up 108.6% from **2015 GMV of RMB 560 bn ($83 bn)**. Revenue for 2016 was **RMB 4.11 bn ($0.61 bn)**, up 110.1% from 2015. What is interesting is the fact that numbers like GMV and revenue are "leaked" to the press but the net profit/loss numbers are not.

What's more interesting is the fact that JD likes to compare JD Finance with **Alibaba's Ant Financial** (Ant), the largest internet finance company in China (refer to JD Finance's "leaked" presentation at http://www.investide.cn/news/248153). Ant is the financial-services arm of Alibaba and was valued at $60 bn (approx. RMB 405 bn) in its last financing round in April 2016[52].

Based on media reports[53], the revenue of Ant in 2015 was estimated to be RMB 24.9 bn; implying Ant was valued at around 16x revenue. By comparing JD Finance to Ant, JD is hinting to investors and sell-side analysts that JD Finance deserves similar multiples to that of Ant. However, there are two notable differences:

1) While JD Finance and Ant might offer similar products, Ant dominates the market and is not dependent on Alibaba's ecosystem. JD Finance is predominantly dependent on JD to drive its revenues. In addition, Ant is profitable (net income in 2015 was RMB 4.875 bn; net margin 19.5%)[53] while JD Finance has yet to make a profit.

   Ant's main revenue driver is **payments**, **a low risk segment**. JD Finance, on the other hand, focusses on its consumer finance business – a higher risk segment. Consumer lending is essentially a tool for JD to boost its ecommerce revenues.

2) **JD Finance's revenue figure is not a reliable metric for valuation**: If investors are using price-to-revenue to value JD Finance, then they need to be extremely cautious about how the revenue is calculated. For example, when customers buy goods on JD and their payments go through JD Finance, the revenue is the payment take rate agreed between JD and JD Finance. By simply agreeing a higher take rate, JD Finance can increase its revenues. Currently, a higher take rate will potentially not impact JD's gross profits since the financials are consolidated – higher cost of revenue for JD is squared off by higher gross profits for JD Finance.

   In a talk on China internet finance, a **former senior employee of JD Finance** disclosed that JD Finance charges JD a high take rate for the payment service provided. Currently, the high take rate is benefitting both parties as it inflates JD Finance's revenues enabling it to receive a high valuation during the spinoff. Post spinoff, a high take rate would negatively impact JD's gross margins.

Exhibit 59: Former JD Finance employee on payment take rate

[redacted]n 2015, JD Finance charged JD.com at 0.8%. In 2016, the take rate fell down to slightly lower than 0.6%. The rate in fact varies from sector to sector, depending on the negotiations between JD Finance and the divisions of JD.com. For example, for certain sectors such as 3C, the rate remains at 0.8%. In general, the take rate of JD Finance is much higher than that of the industry, which is usually about 0.15% if the third-party payment companies handle the payment.

Source: Former JD Finance senior employee. English translated transcript. Name hidden for confidentiality.

[51] http://www.readhouse.net/articles/237092856/
[52] https://techcrunch.com/2016/04/25/ant-financial-the-alibaba-affiliate-that-operates-alipay-raises-4-5b-at-a-60b-valuation/
[53] https://xueqiu.com/8689584849/68948141

Post spinoff, JD and JD Finance will have to contend with this potentially huge conflict of interest. Currently JD Finance uses JD's ecosystem to generate the majority of its revenues. At the same time, JD is benefitting from JD Finance's aggressive lending practice to generate more sales on its platform. We believe JD Finance has been aggressively growing its consumer financing loan book for the upcoming sale (see Exhibit 60). At the end of Q1 2017, the consumer loans outstanding totaled RMB 29.1 bn ($4.3 bn), which was 449% higher compared to the loan outstanding in Q3 2015.

Exhibit 60: JD Finance - consumer finance loans outstanding

Loan Outstanding (RMB mm)	Q3 2015	Q4 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017
Consumer Financing	5,300	10,000	11,500	17,700	19,700	25,300	29,100
% QoQ Increase		*89%*	*15%*	*54%*	*11%*	*28%*	*15%*
% Increase Since Q3 2015		*89%*	*117%*	*234%*	*272%*	*377%*	*449%*

Source: Company filings.

Consumer lending in China is a **highly risky** business and JD Finance hasn't got much experience in managing credit risk. In fact, the consumer lending business has been the major contributor of losses at JD Finance. **In many ways, JD Finance's consumer lending arm has existed almost purely to boost JD's ecommerce revenues.** Post spinoff, JD Finance will have a new set of shareholders and management who will focus on profitability. Their objectives would not be to boost JD's GMV or revenue.

Redemption rights associated with JD Finance spin off

JD assumes a contingent liability when it raised capital for JD Finance from investors in Jan 2016. Investors were granted redemption rights where they could redeem their investments (with 8% compound interest) if JD Finance was not able to IPO with a market cap of at least RMB 93 bn within 5 years from January 2016. Below is the statement from JD's 2016 20F:

Exhibit 61: JD Finance redemption rights and Qualified IPO definations from JD's 2016 20F

Redemption rights

The Investors have the right to require Suqian Limao to purchase all the shares from the Investors within 60 months after the closing of the issuance by the holders in the event that (i) a qualified initial public offering ("Qualified IPO") has not occurred, or (ii) any significant incompliance with laws, cancellation of significant business license, which causes a substantial obstacle to the Qualified IPO, or (iii) a change in control in JD Finance. The redemption need to be done within 180 days from the date on which the Investors raise their written request. The redemption price equals initial investment plus 8% annual compound interests. In the event that Suqian Limao fails to timely repay the redemption price to the Investors upon the Investors' redemption request pursuant to above conditions, Suqian Limao shall pay the Investors a penalty interest of 0.05% per day, until such redemption price and interest are fully paid.

The Qualified IPO is defined as a firm commitment underwritten registered public offering or Back-door listing in China or oversea stock market, with the market cap of JD Finance being at least RMB93,000,000.

Source: JD 2016 20F.

While JD has not disclosed if the current spinoff includes similar redemption rights, we understand from Chinese media sources[54] that it does—and this time, the compound interest is even higher, at 9.38%[54]. In JD's 2016 20F, the company has only defined the "Liquidity Events Payment"[55] terms i.e. payment by JD Finance to JD in the event JD Finance is unable to transfer 40% equity interest before the liquidity event. The liquidity event description also includes a qualified IPO which values JD Finance at no less than RMB 93 bn, though there is no timeline for the event[55].

JD Finance is currently a loss-making company and listing on a Chinese main board would require the company to be profitable for at least 3 years. A qualified IPO valuation of RMB 93 bn may be a high hurdle if JD Finance cannot produce meaningful profits or market conditions turn challenging for internet finance IPOs.

A skeptic would ask, "If JD Finance's prospects are as wonderful as claimed, is there a need to offer buyers a profit guarantee buy-out clause?" In China, lending is a risky business. What if new shareholders of JD Finance make a mess by lending recklessly? It looks like the new shareholders will have a put option on JD. As to why JD is taking so huge a risk for its shareholders is not clear.

[54] https://www.chinamoneynetwork.com/2017/03/23/jd-finance-is-raising-new-funding-at-rmb50b-valuation
[55] JD 2016 20F page 125.

Concluding Remarks

JD's 2 major structural challenges—1P low-margin product mix and rising wages in a labor-intensive model focused on logistics which no longer offers a moat—can't easily be improved in the medium term. For these structural reasons, JD will struggle to make a relevant GAAP profit. Without the reclassification of accounts receivable and loans receivable, JD's operating cash flow in 2016 would have been negative. Whilst this reclassification is acceptable to some extent, the addition of net origination to free cash flows is a red flag and is unacceptable. Ultimately, JD is a low-margin online retailer with only $1 bn of assets.

JD is simply not Amazon is genuinely a serial technology disruptor having invested well over $60 bn in technology and content. All said and done, it is absurd to even suggest that JD can become the Amazon of China because the two companies' business models are diverging at a furious pace—not converging.

In the final analysis, how much should investors pay for an online retailer with a low-margin 1P business model, a poor track record of capital allocation, rising wages in a labor-intensive business model, high senior management turnover and zero prospect of transforming into an Amazon? Going by JD's Q1 $35 mm profit and the CFO's guidance that upcoming quarters will not be as good as Q1, making $140 mm in 2017 would be a stretch. Assuming it did, JD's PER would be 410x. And if earnings were to double annually over the next two years, its PER would still be 103x in 2019. As the growth rate assumptions are already very generous for a company with practically no economies of scale, JD's stratospheric valuation is incongruous!

We have no doubt that irrational expectations of JD's business model, exuberance over China's internet potential and the belief that JD will soon become the Amazon of China all have contributed to JD's current $60 bn market cap. What is worrisome is that Hillhouse has been selling heavily in the last 3 quarters. And history has taught us that when irrational exuberance or mania ends, the scene will not be pretty.

Wong Kok Hoi
The Founder and CIO, Wong Kok Hoi, has over 35 years of investment experience, including CIO at Cititrust Japan, Senior PM at Citibank HK, and Senior Investment Officer of GIC. He was the recipient of the prestigious Mombusho Scholarship in Japan, and graduated with a Bachelor of Commerce (Honors) degree from the Hitotsubashi University (1981). Mr. Wong also graduated from the Investment Appraisal and Management Program at Harvard University (1990).

For more information, please contact cs@aps.com.sg

Appendix A: Financial Summary – Income Statement

Income Statement (in RMB '000)	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Q1 2016	Q2 2016	Q3 2016	Q4 2016	FY 2016	Q1 2017
Net revenues:											
Online direct sales	**20,888,011**	**40,334,551**	**67,017,977**	**108,549,258**	**167,720,984**	**49,975,605**	**59,705,701**	**55,172,944**	**72,847,736**	**237,701,986**	**69,749,089**
% YoY Growth	*143.8%*	*93.1%*	*66.2%*	*62.0%*	*54.5%*	*44.7%*	*40.1%*	*35.8%*	*45.9%*	*41.7%*	*39.6%*
% contribution	*98.9%*	*97.5%*	*96.7%*	*94.4%*	*92.5%*	*92.6%*	*91.5%*	*90.9%*	*90.8%*	*91.4%*	*91.5%*
Electronics and home appliance	18,387,816	34,011,756	56,814,078	90,890,026	134,346,243	-	-	-	-	179,636,669	-
% YoY Growth	-	*85.0%*	*67.0%*	*60.0%*	*47.8%*	-	-	-	-	*33.7%*	-
% of total net revenues	*87.0%*	*82.2%*	*81.9%*	*79.0%*	*74.1%*	-	-	-	-	*69.1%*	-
% of 1P revenues	*88.0%*	*84.3%*	*84.8%*	*83.7%*	*80.1%*					*75.6%*	
General merchandise	2,500,195	6,322,795	10,203,899	17,659,232	33,374,741	-	-	-	-	58,065,317	-
% YoY Growth	-	*152.9%*	*61.4%*	*73.1%*	*89.0%*	-	-	-	-	*74.0%*	-
% of total net revenues	*11.8%*	*15.3%*	*14.7%*	*15.4%*	*18.4%*	-	-	-	-	*22.3%*	-
% of 1P revenues	*11.970%*	*15.676%*	*15.226%*	*16.268%*	*19.899%*	-	-	-	-	*24.4%*	-
Services and others	**240,948**	**1,045,970**	**2,321,835**	**6,453,059**	**13,554,441**	**3,994,058**	**5,531,054**	**5,552,837**	**7,405,840**	**22,419,659**	**6,476,571**
% YoY Growth	*1317.3%*	*334.1%*	*122.0%*	*177.9%*	*110.0%*	*90.9%*	*67.0%*	*60.1%*	*57.8%*	*65.4%*	*62.2%*
% contribution	*1.1%*	*2.5%*	*3.3%*	*5.6%*	*7.5%*	*7.4%*	*8.5%*	*9.1%*	*9.2%*	*8.6%*	*8.5%*
Total net revenues	**21,128,959**	**41,380,521**	**69,339,812**	**115,002,317**	**181,275,425**	**53,969,663**	**65,236,755**	**60,725,781**	**80,253,576**	**260,121,645**	**76,225,660**
% YoY Growth	*146.2%*	*95.8%*	*67.6%*	*65.9%*	*57.6%*	*47.3%*	*42.0%*	*37.7%*	*47.0%*	*43.5%*	*41.2%*
Cost of revenues	**-19,976,528**	**-37,898,387**	**-62,495,538**	**-101,631,443**	**-157,008,329**	**-46,212,860**	**-55,466,733**	**-51,077,961**	**-67,941,173**	**-220,698,727**	**-63,989,962**
% YoY Growth	144.5%	89.7%	64.9%	62.6%	*54.5%*	*43.6%*	*38.6%*	*34.4%*	*45.2%*	*40.6%*	*38.5%*
Reported Non-GAAP Gross Margin %	*5.5%*	*8.4%*	*9.9%*	*11.6%*	*13.4%*	*14.4%*	*15.0%*	*15.9%*	*15.3%*	*15.2%*	*16.1%*
Less: revenue from business cooperation	-	-	-	-	-520,351	-210,462	-225,579	-235,791	-256,073	-927,905	
Adjusted non-GAAP gross profit	**1,152,431**	**3,482,134**	**6,844,274**	**13,370,874**	**23,746,745**	**7,546,341**	**9,544,443**	**9,412,029**	**12,056,330**	**38,559,143**	**12,235,698**
% non-GAAP gross profit (excl equity inve	*5.5%*	*8.4%*	*9.9%*	*11.6%*	*13.1%*	*14.0%*	*14.6%*	*15.5%*	*15.0%*	*14.8%*	*16.1%*
1P gross profit	911,483	2,436,164	4,522,439	6,917,815	10,712,655	3,762,745	4,238,968	4,094,983	4,906,563	17,003,259	5,759,127
Fulfillment	**-1,515,245**	**-3,061,024**	**-4,108,939**	**-8,067,048**	**-13,920,988**	**-4,504,126**	**-5,112,584**	**-5,122,940**	**-6,210,851**	**-20,950,501**	**-5,852,594**
% YoY Growth	217.7%	102.0%	34.2%	96.3%	*72.6%*	*68.2%*	*57.2%*	*48.1%*	*37.0%*	*50.5%*	*29.9%*
% of total net revenues	7.2%	7.4%	5.9%	7.0%	7.68%	8.3%	7.8%	8.4%	7.7%	8.1%	7.7%
Marketing	**-479,325**	**-1,096,765**	**-1,590,171**	**-4,010,280**	**-7,736,172**	**-2,116,270**	**-2,598,184**	**-2,192,641**	**-3,665,929**	**-10,573,024**	**-2,709,000**
% YoY Growth	139.7%	128.8%	45.0%	152.2%	*92.9%*	*48.4%*	*31.1%*	*31.9%*	*37.5%*	*36.7%*	*28.0%*
% of total net revenues	2.3%	2.7%	2.3%	3.5%	4.3%	3.9%	4.0%	3.6%	4.6%	4.1%	3.6%
Technology and content	**-239,923**	**-636,346**	**-963,653**	**-1,835,919**	**-3,453,804**	**-1,111,318**	**-1,338,905**	**-1,462,600**	**-1,468,084**	**-5,380,907**	**-1,556,752**
% YoY Growth	410.5%	165.2%	51.4%	90.5%	88.1%	57.8%	70.6%	65.3%	35.9%	55.8%	40.1%
% of total net revenues	1.1%	1.5%	1.4%	1.6%	1.9%	2.1%	2.1%	2.4%	1.8%	2.1%	2.0%
General and administrative	**-321,981**	**-639,097**	**-760,338**	**-5,260,064**	**-2,876,989**	**-889,955**	**-1,078,499**	**-1,285,817**	**-1,409,112**	**-4,663,383**	**-1,274,254**
% YoY Growth	203.8%	98.5%	19.0%	591.8%	*-45.3%*	*85.5%*	*75.6%*	*70.3%*	*37.1%*	*62.1%*	*43.2%*
% of total net revenues	*1.5%*	*1.5%*	*1.1%*	*4.6%*	1.6%	1.6%	1.7%	2.1%	1.8%	1.8%	1.7%
Impairment of goodwill - Paipai	**-**	**-**	**-**	**-**	**-2,750,129**	**-**	**-**	**-**	**-**	**-**	
Total operating expenses	**-22,533,002**	**-43,331,619**	**-69,918,639**	**-120,804,754**	**-187,746,411**	**-54,834,529**	**-65,594,905**	**-61,141,959**	**-80,695,149**	**-262,266,542**	**-75,382,562**
% of total net revenues	*-106.6%*	*-104.7%*	*-100.8%*	*-105.0%*	*-103.6%*	*-101.6%*	*-100.5%*	*-100.7%*	*-100.6%*	*-100.8%*	*-98.9%*
Loss from operations	**-1,404,043**	**-1,951,098**	**-578,827**	**-5,802,437**	**-6,470,986**	**-864,866**	**-358,150**	**-416,178**	**-441,573**	**-2,144,897**	**843,098**
% of total net revenues	*-6.6%*	*-4.7%*	*-0.8%*	*-5.0%*	*-3.6%*	*-1.6%*	*-0.5%*	*-0.7%*	*-0.6%*	*-0.8%*	*1.1%*
Other income/(expense)											
Share of results of equity investees	-	-	-	-	-2,852,677	-164,011	-1,081,362	-469,603	-1,429,516	-2,785,343	-520,683
Interest income	56,098	175,751	343,770	637,641	414,999	66,553	105,462	139,417	170,186	481,618	108,301
Interest expense	0	-8,324	-8,437	-28,825	-82,507	-33,467	-91,262	-71,731	-63,197	-259,657	-66,268
Others, net	64,200	60,325	193,555	216,587	-140,597	148,239	1,337,550	12,812	210,449	1,474,055	83,840
Other income/(expense) - total	120,298	227,752	528,888	825,403	191,895	181,325	1,351,750	80,498	317,438	1,696,016	125,873
Loss before tax	**-1,283,745**	**-1,723,346**	**-49,939**	**-4,977,034**	**-9,131,768**	**-847,552**	**-87,762**	**-805,283**	**-1,553,651**	**-3,234,224**	**448,288**
Income tax (expenses)/benefits	0	-6,127	40	-19,324	14,262	-19,700	-44,324	-2,658	-112,818	-179,500	-92,592
Net loss	**-1,283,745**	**-1,729,473**	**-49,899**	**-4,996,358**	**-9,117,506**	**-867,252**	**-132,086**	**-807,941**	**-1,666,469**	**-3,413,724**	**355,696**
Preferred shares redemption value accret	-1,660,619	-1,587,454	-2,435,366	-7,957,640	-	-	-	-	-	0	-
Net loss attributable to non-controlling inte	0	0	0	0	-9,566	-635	-11,000	-20,161	-19,795	-51,591	-22,505
Net loss due to mezzanine non-controlling	-	-	-	-	-	43,175	131,223	133,810	136,449	444,657	139,139
Net loss attributable to JD.com	**-2,944,364**	**-3,316,927**	**-2,485,265**	**-12,953,998**	**-9,107,940**	**-909,792**	**-252,309**	**-921,590**	**-1,783,123**	**-3,806,790**	**239,062**

Source: Company Filings.

Appendix B: Financial Summary – Balance Sheet

Current assets (RMB '000)	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15 (new)	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17
Cash and cash equivalents	6,288,777	7,177,294	10,812,339	16,914,651	17,863,868	31,054,994	36,381,637	24,834,595	19,771,695	23,624,192
Restricted cash	289,971	1,920,130	1,887,387	3,038,286	2,114,913	3,425,025	3,665,741	3,829,218	4,391,955	6,218,778
Short-term investments	0	1,080,000	1,903,224	12,161,643	2,780,482	52,157	3,350,110	6,737,059	7,173,626	5,193,544
Accounts receivable, net	245,534	479,138	502,089	**2,436,256**	**8,193,665**	**10,990,484**	**14,166,681**	**14,763,482**	**17,464,408**	**18,076,924**
Advance to suppliers	168,397	109,765	769,765	930,026	927,177	906,969	1,342,337	1,718,411	1,423,736	1,559,075
Inventories, net	2,763,587	4,753,829	6,386,155	**12,190,843**	**20,539,543**	**20,393,161**	**23,989,777**	**22,602,658**	**28,909,438**	**26,860,550**
Loan receivables, net	0	0	0	**123,344**	**3,698,488**	**2,745,540**	**6,812,639**	**9,791,386**	**12,697,915**	**16,338,463**
Prepayments and other assets	124,594	159,418	219,102	1,734,334	1,486,441	924,857	1,200,197	1,948,847	2,198,906	2,618,458
Amount due from related parties	1,500	0	0	412,314	863,516	1,174,536	1,267,540	1,403,029	1,410,050	1,220,320
Investment securities - new	-	-	-	-	-	-	-	**108,000**	-	-
Other investments - new	-	-	-	-	-	-	-	**5,485,034**	-	-
Investment securities and other investments	-	-	-	-	-	-	-	-	**11,490,369**	**16,052,384**
Total current assets	**9,882,360**	**15,679,574**	**22,480,061**	**49,941,697**	**58,468,093**	**71,667,723**	**92,176,659**	**93,221,719**	**106,932,098**	**117,762,688**

Non-current assets (RMB in '000)	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17
Investment in equity investees	**840**	**2,840**	**36,502**	**586,959**	**8,713,219**	**8,794,403**	**11,725,861**	**15,925,428**	**15,235,020**	15,499,685
Investment securities and other investments	0	0	0	434,118	1,005,831	743,162	959,905	1,575,255	8,058,057	6,954,197
PP&E, net	320,476	639,334	1,024,428	2,408,438	6,233,106	6,742,660	7,215,844	7,075,552	7,397,029	7,319,199
Construction in progress	0	361,913	1,237,644	1,928,899	1,266,992	1,255,310	1,314,963	1,732,341	1,992,123	2,187,932
Intangible assets, net	2,381	229,793	215,802	6,877,947	5,263,983	4,917,881	9,367,912	8,912,322	8,454,297	8,007,623
Land use rights, net	96,565	528,001	598,853	1,067,253	1,928,192	2,039,942	2,206,874	2,194,913	2,447,511	2,473,900
Goodwill	0	14,649	14,649	2,622,470	29,050	29,050	6,541,668	6,541,668	6,541,668	6,541,668
Other non-current assets	276,347	429,950	401,873	625,391	2,106,673	2,296,854	4,729,223	2,122,962	3,315,715	3,991,492
Other investments - new	0	0	0	0	0	0	0	**4,907,817**	-	-
Total non-current assets	**696,609**	**2,206,480**	**3,529,751**	**16,551,475**	**26,547,046**	**26,819,262**	**44,062,250**	**50,988,258**	**53,441,420**	**52,975,696**
Total assets	**10,578,969**	**17,886,054**	**26,009,812**	**66,493,172**	**85,015,139**	**98,486,985**	**136,238,909**	**144,209,977**	**160,373,518**	**170,738,384**
Total assets (exclude goodwill/intangibles)	**10,575,748**	**17,638,772**	**25,742,859**	**56,405,796**	**71,008,887**	**84,745,651**	**108,603,468**	**112,830,559**	**130,142,533**	**140,689,408**

Current Liabilities	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17
Short-term bank loans	0	867,399	932,826	1,890,771	3,040,209	5,226,500	5,984,474	5,916,778	8,333,317	12,380,081
Nonrecourse securitization debt	0	0	0	0	579,843	2,247,219	4,769,880	7,793,675	9,389,213	7,863,853
Accounts payable	3,636,101	8,096,753	11,018,865	16,363,671	**29,819,341**	**30,837,464**	**38,912,974**	**41,475,284**	**43,988,087**	**43,747,397**
Advance from customers	286,275	896,880	2,055,625	4,666,660	7,173,885	7,862,112	9,574,180	9,981,379	11,632,766	12,364,852
Deferred revenues	61,017	105,269	208,527	157,080	983,721	1,055,858	1,173,314	1,279,136	1,221,865	1,394,750
Taxes payable	88,874	165,305	278,256	236,160	103,211	103,542	98,979	355,041	575,848	509,657
Amount due to related parties	1,428	4,885	0	325,119	104,726	101,863	522,393	132,447	167,655	147,875
Accrued expenses and other current liabilities	571,440	1,340,878	2,269,798	5,311,832	7,178,065	7,969,150	12,435,879	20,848,167	29,431,484	32,561,051
Deferred tax liabilities	0	6,127	6,087	43,812	-	921	938,185	914,378	-	-
Total current liabilities	**4,645,135**	**11,483,496**	**16,769,984**	**28,995,105**	**48,983,001**	**55,404,629**	**74,410,258**	**88,696,285**	**104,740,235**	**110,969,516**
Non-current liabilities:	**Dec-11**	**Dec-12**	**Dec-13**	**Dec-14**	**Dec-15**	**Mar-16**	**Jun-16**	**Sep-16**	**Dec-16**	**Mar-17**
Deferred revenues	0	0	0	0	2,556,345	2,487,530	2,727,043	2,518,551	2,156,835	1,931,652
Nonrecourse securitization debt	0	0	0	0	2,753,699	3,991,781	6,009,120	3,662,925	4,077,627	6,660,250
Unsecured senior notes	-	-	-				6,523,473	6,572,524	6,831,012	6,797,264
Other non current liabilities	-	-	-				460,736	444,089	440,670	417,731
Deferred tax liabilities					1,228				907,356	891,823
Non-current liabilities:	**0**	**0**	**0**	**0**	**5,311,272**	**6,479,311**	**15,720,372**	**13,198,089**	**14,413,500**	**16,698,720**
Total liabilities	**4,645,135**	**11,483,496**	**16,769,984**	**28,995,105**	**54,294,273**	**61,883,940**	**90,130,630**	**101,894,374**	**119,153,735**	**127,668,236**

Shareholders equity:	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17
Ordinary shares	163	182	199	358	358	358	377	377	377	377
Additional paid-in capital	5,025,325	5,654,991	6,251,869	47,131,172	48,393,126	48,838,972	58,192,223	58,663,556	59,258,417	60,428,627
Statutory reserves	0	0	2,648	15,009	55,560	55,560	55,560	55,560	132,938	132,938
Treasury stock	-11,712	-7,781	0	-4	-3	-3	-338864	-4,367,347	-5,181,880	-5,100,198
Warrants	15,327	0	0	0	0	0	0	0	0	0
Accumulated deficit	-2,481,604	-4,212,915	-4,263,624	-9,272,343	-18,420,834	-19,600,702	-19,678,613	-20,466,393	-21,860,345	-21,482,144
Accumulated other comprehensive loss	-146,375	-153,921	-268,618	-376,125	554,826	509,342	939,785	1,378,390	1,543,393	1,635,780
Total JD shareholders' equity	**2,783,391**	**1,662,823**	**2,066,565**	**37,498,067**	**30,583,033**	**29,803,527**	**39,170,468**	**35,264,143**	**33,988,447**	**33,988,447**
Non-controlling interests	0	0	0	0	137,833	144,079	151,149	130,988	269,962	258,709
Total shareholders' equity	**2,783,391**	**1,662,823**	**2,066,565**	**37,498,067**	**30,720,866**	**29,947,606**	**39,321,617**	**35,395,131**	**34,162,862**	**35,874,089**
Total capitalization	5,933,834	6,400,720	9,239,828	37,498,067	30,720,866	29,947,606	39,321,617	35,395,131	34,162,862	35,874,089
Total liabilities and shareholders equity	**10,578,969**	**17,884,216**	**26,009,812**	**66,493,172**	**85,015,139**	**98,486,985**	**136,238,909**	**144,209,977**	**160,373,518**	**170,738,384**

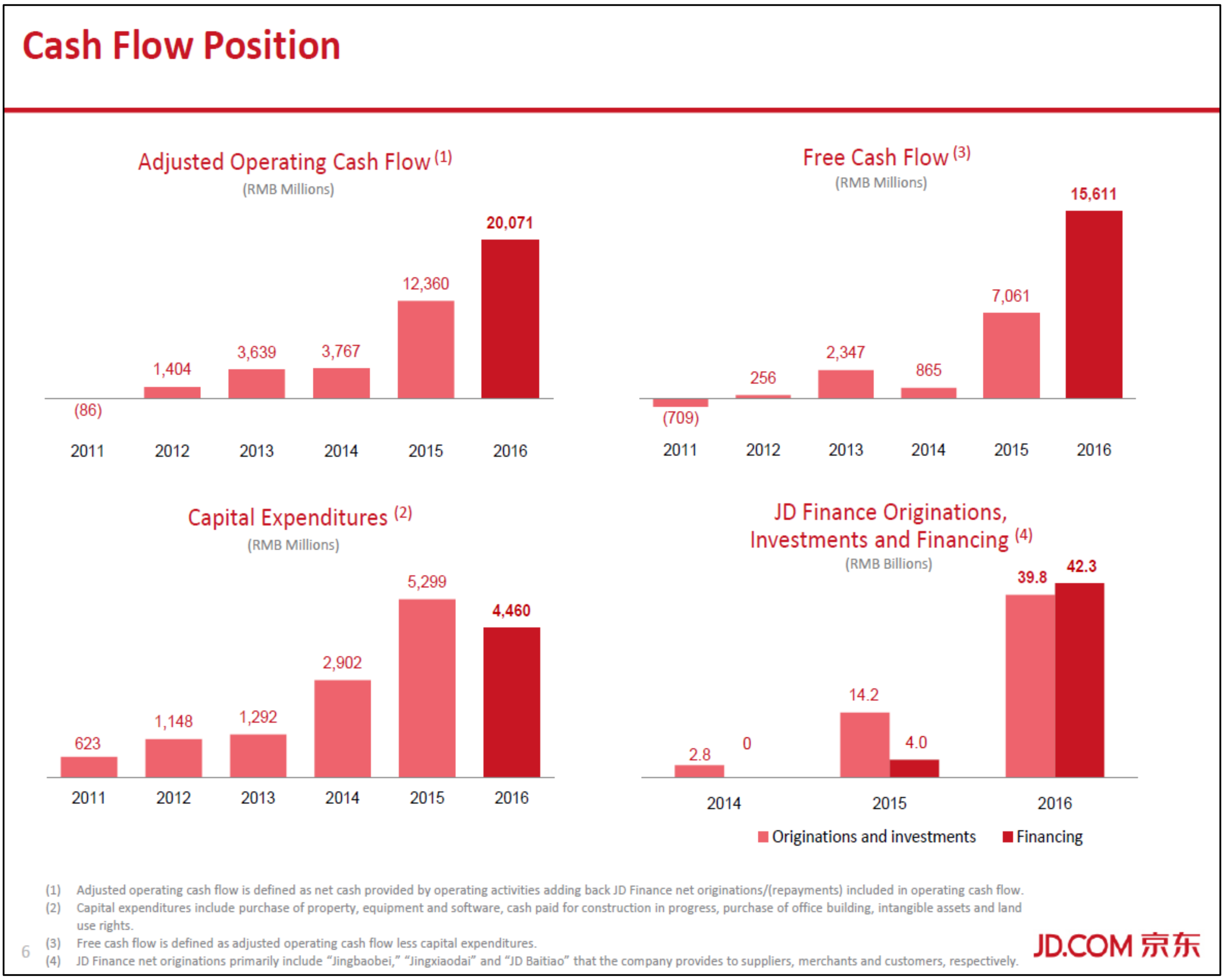
Source: Company Filings.

Appendix C: Financial Summary – Cash Flow Statement

Cash flow statement (in RMB '000)	FY 2011	FY 2012	FY 2012	FY 2014 (old)	FY 2015 (old)	FY 2014 (new)	FY 2015 (new)	Dec-16
Net loss	**-1,283,745**	**-1,729,473**	**-49,899**	**-4,996,358**	**-9,387,582**	**-4,996,358**	**-9,117,506**	**-3,413,724**
Depreciation and amortization	73,946	185,730	293,141	1,650,533	2,619,061	1,650,533	2,619,061	3,633,346
Share-based compensation	70,964	225,039	261,173	4,249,548	1,193,945	4,249,548	1,193,945	2,343,785
Allowance for doubtful accounts	17,921	-2,406	-107	74,332	420,750	74,332	420,750	867,233
Loss from disposal of property, equipment and software	6,834	10,982	22,726	26,043	7,714	26,043	7,714	18,478
Non-cash marketing services contributed by certain shareholder	0	0	24,682	0	0	0	0	0
Deferred income tax	0	6,127	-40	-4,169	-42,584	-4,169	-42,584	-34,782
Share of results of equity investees	0	0	309	-638	**3,134,283**	-638	**2,852,677**	2,785,343
Foreign exchange (gains)/losses	-41,309	-13,762	-92,761	28,980	57,395	28,980	57,395	146,354
Impairment of goodwill and intangible assets	-	-	-	-	2,750,129	-	2,750,129	-
Impairment of investments cost method and available for sale	-	-	-	-	611,108	-	611,108	637,583
Gain from the sales of investments	-	-	-	-	-1,507	-	-1,507	-1,232,853
Amortization of discounts/ issuance of senior notes	-	-	-	-	-	-	-	8,622
Cash flow from operations before changes in WC	**-1,155,389**	**-1,317,763**	**459,224**	**1,028,271**	**1,362,712**	**1,028,271**	**1,351,182**	**5,759,385**
Changes in operating assets and liabilities:								
Accounts receivable	-183,848	-226,931	-22,844	**-2,004,884**	**-7,395,424**	**-1,861,364**	**-6,167,483**	-9,697,221
Restricted cash	-25,063	-628,358	577,743	-689,499	-1,076,628	-689,499	-1,076,628	526,646
Inventories	-1,684,694	-1,989,996	-1,632,326	-5,804,688	-8,348,700	-5,804,688	-8,348,700	-8,369,883
Loan receivables	-	-	-	**-125,935**	**-2,306,631**	**5,430**	-26,699	-74,458
Investment securities	-	-	-	-	-	-	-	-3,703
Advance to suppliers	-109,288	58,651	-660,000	-160,203	-18,010	-160,203	-18,010	-487,320
Prepayments and other current assets	-76,655	-30,292	-59,684	-1,210,697	252,397	-1,210,697	252,397	-533,596
Other investments	-	-	-	-	-	-	-	-252,223
Amount due from related party	-	1,500	0	-412,314	-402,795	-412,314	-402,795	-481,774
Other non-current assets	-14,663	-101,350	-78,644	-66,485	-1,170,454	-66,485	-1,170,454	169,144
Accounts payable	2,420,088	4,155,911	2,687,361	4,902,844	13,113,084	4,902,844	13,113,084	13,693,690
Advance from customers	215,990	604,053	1,158,745	2,611,035	2,507,225	2,611,035	2,507,225	4,454,299
Deferred revenues	41,131	44,252	103,258	-65,725	**-472,800**	-65,725	-461,270	-707,966
Taxes payable	72,532	76,220	112,951	-42,615	-132,949	-42,615	-132,949	494,438
Accrued expenses and other current liabilities	412,040	754,298	928,920	2,988,499	2,207,476	2,988,499	2,207,476	4,247,921
Amount due to related party	1,428	3,457	-4,885	67,412	69,946	67,412	69,946	29,638
Changes in operating assets and liabilities	**1,068,998**	**2,721,415**	**3,110,595**	**-13,255**	**-3,174,263**	**261,630**	**345,140**	**3,007,632**
Net cash (used in)/provided by operating activities	**-86,391**	**1,403,652**	**3,569,819**	**1,015,016**	**-1,811,551**	**1,289,901**	**1,696,322**	**8,767,017**
Cash flows from investing activities:								
Purchase of short term investments	-300,000	-2,590,000	-9,966,200	-19,104,408	-5,022,000	-19,104,408	-5,022,000	-16,969,213
Maturity of short term investments	300,000	510,000	9,166,200	7,853,607	16,625,621	7,853,607	16,625,621	12,738,475
Changes of deposits for capital verification	0	0	-545,000	545,000	0	545,000	0	0
Purchases of investment securities	0	0	0	-421,133	-1,139,386	-421,133	-1,139,386	-1,116,200
Cash received from disposal of investment securities	0	0	0	0	0	0	0	361,893
Purchase of other investments	0	0	0	0	0	0	0	-24,165,716
Maturity of other investments	0	0	0	0	0	0	0	6,703,594
Prepayments and investments in equity investees	-840	-2,000	-35,133	-434,585	-7,156,789	-434,585	-7,156,789	-7,660,513
Cash received from disposal of equity investees	0	0	1,162	0	0	0	0	34,558
Changes in restricted cash	0	0	0	0	0	0	0	-2,803,688
Cash paid for loan originations				-	-	**-662,511**	**-10,784,220**	-45,152,496
Cash received from loan repayments				-	-	**387,626**	**7,276,347**	34,836,743
Purchase of property, equipment and software/office bld	-449945	-597,312	-439,881	-1,424,534	-2,826,830	-1,424,534	-2,826,830	-2,372,035
Cash paid for construction in progress		-136,122	-737,411	-1,036,513	-1,540,615	-1,036,513	-1,540,615	-1,359,364
Purchase of intangible assets	-4,635	-45,300	-10,237	-17,935	-6,556	-17,935	-6,556	-50,438
Purchase of land use rights	-168,830	-369,001	-104,552	-423,084	-925,758	-423,084	-925,758	-678,328
Cash paid for business combination, net of cash acquired		-139,719	0	1,260,337	-290,339	1,260,337	-290,339	-615,849
Net cash used in investing activities	**-624,250**	**-3,369,454**	**-2,671,052**	**-13,203,248**	**-2,282,652**	**-13,478,133**	**-5,790,525**	**-48,268,577**
Cash flows from financing activities:								
Proceeds from issuance of ordinary shares, net	6,248,610	1,571,431	2,720,076	17,447,653	0	17,447,653	0	0
Proceeds from exercise of Warrants-C	-	410,164	0	0	0	0	0	0
Proceeds from short-term bank loans	-	872,036	940,216	1,890,771	4,871,004	1,890,771	4,871,004	18,443,370
Repayment of short-term bank loans	-	-	-865,108	-946,396	-3,726,171	-946,396	-3,726,171	-13,150,262
Proceeds (net) from unsecured senior notes	-	-	-			-	-	6,355,969
Net Purchase of ordinary shares	-11,712	-	-	-	0	-	0	-5,338,274
Purchase of Capped Call Option	-	-	-			-	-	-543,882
Capital injection from non-controlling interest	-	-	-	-	146,185	-	146,185	177,800
Proceeds (net) from nonrecourse securitization debt	-	-	-	-	3,333,542	-	3,333,542	10,133,298
Proceeds (net) from sales of financial products	-	-	-			-	-	17,926,792
Proceeds from issuance of redeemable preferred shares of JD Fi	-	-	-			-	-	6,612,264
Proceeds from shares upon exercise of share awards	-	-	-	-	75,713	-	75,713	82,396
Net cash provided by financing activities	**6,236,898**	**2,853,631**	**2,795,184**	**18,392,028**	**4,700,273**	**18,392,028**	**4,700,273**	**40,699,471**

Source: Company Filings.

Appendix D: Free Cash Flow



Source: JD investor presentation

Appendix E: Competitor Free Cash Flow Presentation

1. **Vipshop (NYSE: VIPS) Cash Flow:** Vipshop also adds back impact from internet finance related lending although JD is on a much larger scale.

BALANCE SHEET AND CASH FLOW

As of March 31, 2017, the Company had cash and cash equivalents of RMB4.43 billion (US$644.3 million) and held-to-maturity securities of RMB746.2 million (US$108.4 million).

For the quarter ended March 31, 2017, operating cash was RMB0.74 billion, and free cash flow[9], a non-GAAP measurement of liquidity, was as follows:

For the three months ended	Mar 31, 2016	Mar 31, 2017	Mar 31, 2017
	RMB'000	RMB'000	US$'000
Net cash from operating activities	153,211	736,744	107,035
Add: Impact from Internet financing activities[9]	309,209	277,524	40,319
Less: Capital expenditures	(660,594)	(585,462)	(85,057)
Free cash flow (out) in	(198,174)	428,806	62,297

Free cash flow trailing twelve months ended	Mar 31, 2016	Mar 31, 2017	Mar 31, 2017
	RMB'000	RMB'000	US$'000
Net cash from operating activities	1,575,008	3,414,946	496,128
Add: Impact from Internet financing activities[9]	881,925	2,557,169	371,509
Less: Capital expenditures	(4,388,147)	(2,715,495)	(394,510)
Free cash flow (out) in	(1,931,214)	3,256,620	473,127

Source: Vipshop filings.

2. **Alibaba (NYSE: BABA) Cash Flow:** Alibaba also adds back impact from internet finance related lending although JD is on a much larger scale.

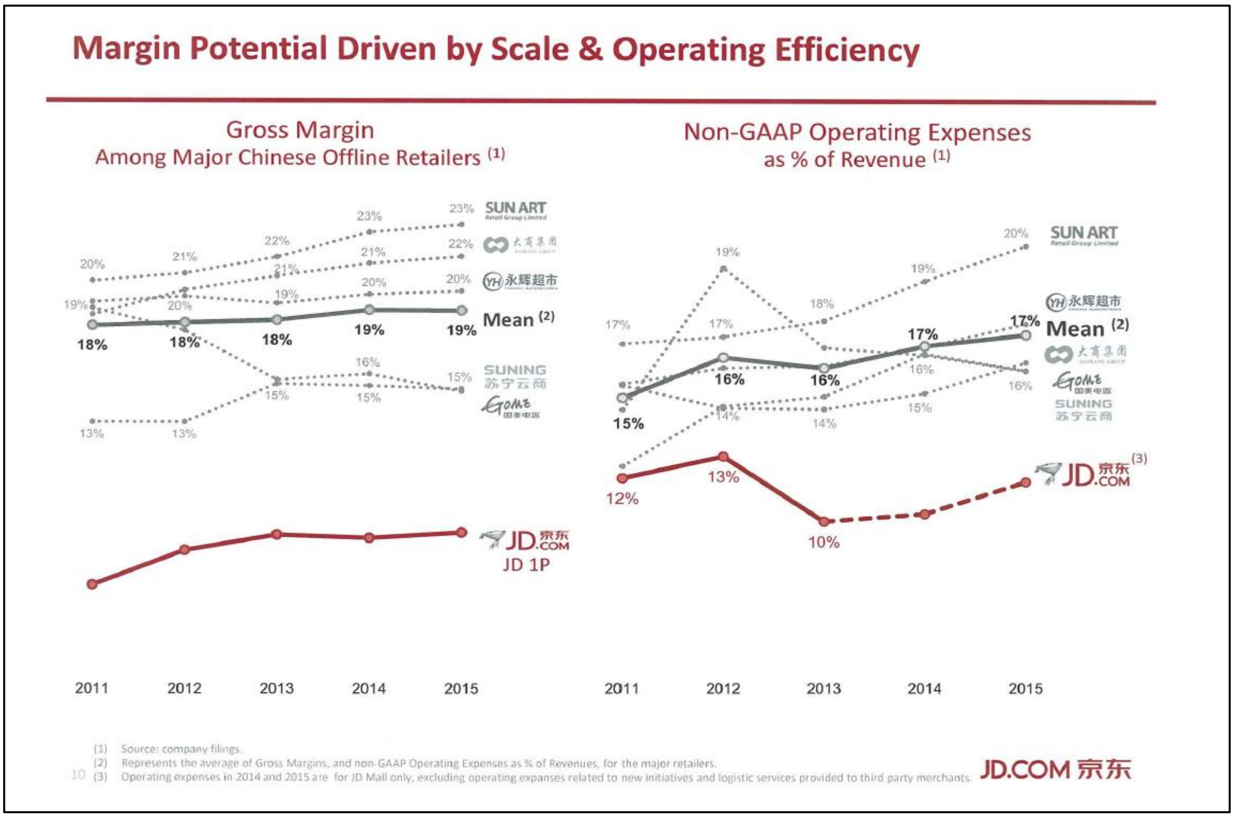
ALIBABA GROUP HOLDING LIMITED
RECONCILIATIONS OF NON-GAAP MEASURES TO THE NEAREST COMPARABLE GAAP MEASURES (CONTINUED)

The table below sets forth a reconciliation of net cash provided by operating activities to free cash flow for the periods indicated:

	Three months ended March 31,			Year ended March 31,		
	2016	2017		2016	2017	
	RMB	RMB	US$	RMB	RMB	US$
		(in millions)			(in millions)	
Net cash provided by operating activities	**5,082**	**10,746**	**1,561**	**56,836**	**80,326**	**11,670**
Less: Purchase of property and equipment and intangible assets (excluding land use rights and construction in progress)	(683)	(2,832)	(411)	(5,438)	(12,220)	(1,775)
Add: Changes in loan receivables, net and others	(11)	66	9	(119)	684	99
Free cash flow	**4,388**	**7,980**	**1,159**	**51,279**	**68,790**	**9,994**

Source: Alibaba filings.

Appendix F: JD Investor Presentation Illustrating Margin Potential



Source: JD investor presentation, march 2017.

Appendix G: GAAP and Non-GAAP Reconciliations

GAAP & Non-GAAP Reconciliations

Reconciliations of GAAP & Non-GAAP Net Income/(Loss) (in RMB Millions)	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
Net Loss	**(1,284)**	**(1,729)**	**(50)**	**(4,996)**	**(9,388)**	**(3,474)**
Add: Share-based compensation	71	225	261	4,250	1,194	2,344
Add: Amortization of intangible assets resulting from assets and business acquisitions	-	2	13	1,109	1,452	1,621
Add: Reconciling items on the share of equity method investments (1)	-	-	-	-	174	539
Add: Impairment of goodwill, intangible assets and investments	-	-	-	-	6,228	2,179
Reversal of: Gain on disposals of investments and business	-	-	-	-	-	(1,228)
Reversal of: Revenue from business cooperation arrangements with equity investees, and income from non-compete agreement	-	-	-	-	(520)	(981)
Non-GAAP Net Income / (Loss)	**(1,213)**	**(1,502)**	**224**	**363**	**(860)**	**1,000**
Non-GAAP Net Margin	***(5.7)%***	***(3.6)%***	***0.3%***	***0.3%***	***(0.5)%***	***0.4%***

(1) Represents reconciliation of JD's share of equity method investees' GAAP & Non-GAAP results, including their share-based compensations, amortization of intangible assets resulting from assets and business acquisitions, share of amortization of equity investments' intangibles not on their books, and net income attributable to mezzanine equity holder. Earning from equity method investments in publicly listed companies and certain privately held companies is recorded one quarter in arrears.

JD.COM 京东

Source: JD investor presentation, march 2017.

Appendix H: JD Finance Definitions

Before analyzing implications on JD's accounting statements (balance sheet/cash flow), it is important to first understand the structure of internet financing that being employed by JD.com. As per JD's disclosure Internet financing activities include financial products, primarily "Jingbaobei," "Jingxiaodai" and "JD Baitiao," the Company provides to suppliers, merchants and customers.

Internet finance	Description
Supply chain finance (Jing Bao Bei, Jing Micro Loan):	• From late 2013, JD started to provide supply chain financing to the Company's suppliers of the online direct sales business. • Accounts payable primarily include accounts payable to suppliers associated with the Company's online direct sales business and those to third-party sellers on the Company's online marketplace.
Consumer finance (JD Baitiao):	• From early 2015, JD started to provide consumer financing to its customers. • Accounts receivable primarily include amounts due from customers and online payment channels.
Business financing	• This part is small and included in accounts receivable, net
Others – selling wealth management products/etc.	• JD's balance sheet in Q3 2016 includes a RMB 10.5bn in "other investments" which was a net off

Source: JD filings.

Implication of internet financing on balance sheet and cash flows

Asset side balance sheet items	Footnote disclosure per JD filings
Accounts receivable, net (current)	• As a part of internet financing initiatives, company started providing consumer financing to selected customers causing increase in account receivables. As per JD's disclosure from Q3 2015 "Accounts receivable primarily include amounts due from customers and online payment channels. From early 2014, the Company started to provide consumer financing to its customers"
Loan receivable, net (current)	• Loan receivables consist primarily of micro loan services to small and medium size enterprises that are merchants on our online marketplace and qualified individual customers. Such amounts are recorded at the principal amount less allowance for doubtful accounts relating to micro loans, and include accrued interest receivable as of the balance sheet date. Allowance for doubtful accounts relating to micro loans represents our best estimate of the losses inherent in the outstanding portfolio of loans. The loan periods extended by us to merchants and individual customers generally range from one day to six months. Judgment is required to determine the allowance amounts and whether such amounts are adequate to cover potential bad debts, and periodic reviews
	• are performed to ensure such amounts continue to reflect the best estimate of the losses inherent in the outstanding portfolio of loans. As of December 31, 2015, allowance for doubtful accounts relating to micro loans was insignificant.
Advance to suppliers (current)	• This is a smaller line item compared to accounts and loan receivable.
Other non-current assets (non-current)	• This is currently smaller than current side of balance sheet. JD discloses in 2015 "The accounts receivable with the collection period over one year was classified into other non-current assets in the Consolidated Balance Sheets"
Current asset balance sheet items	**Footnote disclosure per JD filings**
Accounts payable	• Accounts payable include accounts payable to suppliers associated with our online direct sales business and those to third-party sellers on our online marketplace. From late 2013, we started to provide supply chain financing to our suppliers of online direct sales business

Source: JD filings.

Appendix I: JD Gross Debt and Change in Working Capital

JD balance sheet (RMB in '000)	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17
Gross debt (ex non recourse securitization)	**0**	**867,399**	**932,826**	**1,890,771**	**3,040,209**	**5,226,500**	**12,968,683**	**12,933,391**	**15,604,999**	**19,595,076**
Non-recourse securitization debt	0	0	0	0	3,333,542	6,239,000	10,779,000	11,456,600	13,466,840	14,524,103
Gross debt (incl nonrecourse securitization)	**0**	**867,399**	**932,826**	**1,890,771**	**6,373,751**	**11,465,500**	**23,747,683**	**24,389,991**	**29,071,839**	**34,119,179**
Total deferred revenue	61,017	105,269	208,527	157,080	3,540,066	3,543,388	3,900,357	3,797,687	3,378,700	3,326,402
Amortization of deferred revenue	3,051	5,263	10,426	7,854	177,003	177,169	195,018	189,884	168,935	166,320
Current assets less current liabilities	**5,237,225**	**4,196,078**	**5,710,077**	**20,946,592**	**9,485,092**	**16,263,094**	**17,766,401**	**4,525,434**	**2,191,863**	**6,793,172**
Working capital (current assets) - no adj	-	7,852,230	10,166,371	21,490,794	39,930,416	42,857,426	57,174,135	58,179,993	71,812,123	76,884,060
Working capital (current liabilities) - no adj	-	10,616,097	15,837,158	27,104,334	45,362,949	47,930,910	63,655,904	74,985,832	87,017,705	90,725,582
Net working capital	-	-2,763,867	-5,670,787	-5,613,540	-5,432,533	-5,073,484	-6,481,769	-16,805,839	-15,205,582	-13,841,522
Change in net working capital	-	-	2,906,920	-124,301	-2,326,441	-359,049	1,408,285	10,324,070	-1,600,257	-1,364,060

Source: Company filings.