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# JD.com: Tulips, Anyone?

The market celebrated JD.com's Q1 2017 results by buying up the stock to an all-time high; it has risen 58% YTD. JD reported its first quarterly GAAP net profit in its 13-year history, making US$35 mm. The CFO did temper investors' optimism by cautioning that remaining quarters in 2017 may not be as good as Q1. Even at this optimistic run rate, JD would be trading at an **eye-popping 410x 2017 PE,** while still bogged down by cumulative losses of $3.1 bn, saddled with $5.04 bn[1] of gross debt and declining tangible equity of only $850 mm[2]. What is not well understood is that JD has a **problematic product mix and structural cost issues** which do not allow it to enjoy economies of scale. By contrast, when Amazon's market cap was $50 bn in 2009, it had already achieved a GAAP profit of $900 mm followed by another profit of $1.2 bn in 2010, trading at 45-55x PER. The stock was trading at 50x PER.

Many investors and sell-side analysts forecast that **JD will become 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 worth $100 bn or $200 bn. We believe this is a misplaced comparison for a plethora of reasons. The stark disparity between valuation is just one. More importantly, Amazon is a serial technology disrupter while JD is an online retailer. Amazon Web Services (AWS), the company's cloud business has an annualized $15 bn revenue and $3.6 bn operating income (89% of Amazon's profits!). JD, however, has yet to produce an annual profit after 13 years in business.

This CIO Note attempts to explain these significant issues by analyzing JD's business model and financial statements and by cross-checking with JD's competitors, former employees, partners, industry experts and other sources. We are in the midst of completing an in-depth paper on these and other significant issues, which we will send to investors soon.

**Trapped in a Profitless Black Hole**

JD grew **gross merchandize volume (GMV)** quickly by selling profitless 3C products, especially cell phones and computers. They were easy to sell for as long as they are sold at a loss. Not only are there thousands of offline and online retailers, but price-sensitive Chinese consumers can in a matter seconds find the lowest priced retailer by checking a price app on their cell phone. In such an environment can any retailer make a dime? The President of a competitor to JD confided to us that there is no money to be made through selling these products.

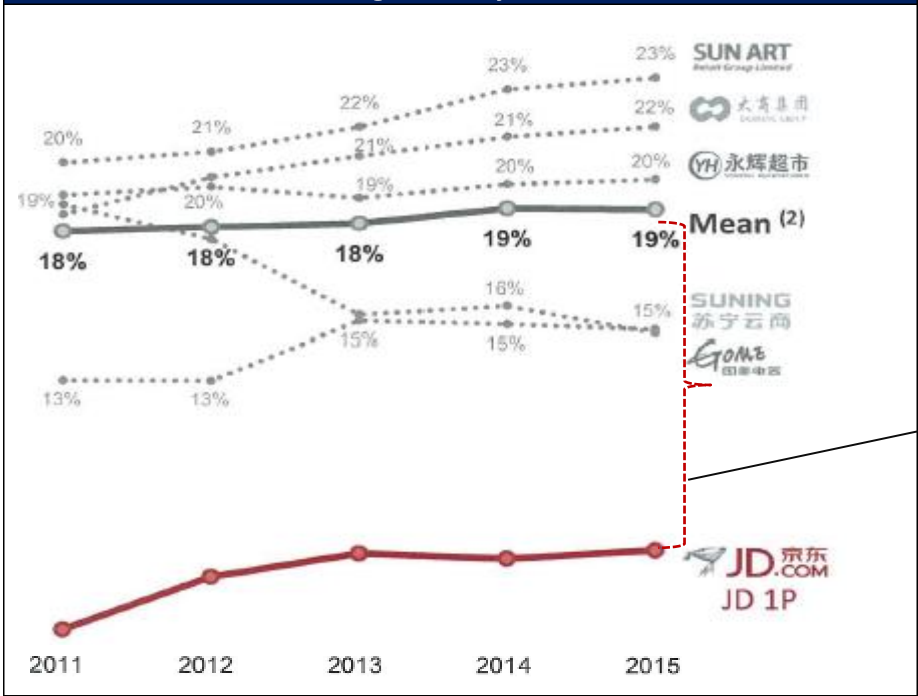
In its core 1P business (92% of revenue), JD derived 24% of direct sales GMV[3] from cell phones and 20%[3] from computers in Q1 2017, according to Yipit (JD does not explicitly disclose its 1P 3C GMV). Yipit estimates $29 bn of 1P GMV in the last 12 months came from commoditized 3C products: cell phones accounted for $14.4 bn, computers $11.8 bn and electronics $2.85 bn. JD has grown its revenue by being trapped in a profitless 'black hole'. I liken it to a black hole because JD has been sucked into and stuck in it, and now can't escape from it because JD cannot stop selling these products. Instead, it has to sell more of these profitless products in order to grow GMV and revenue. We therefore believe that **JD is today**

[1] Includes $2.1bn of non-current and current securitization debt. JD Finance to be spun off in Q2 2017.
[2] Excluding goodwill, intangible and equity investee
[3] Sources: Yipit, sell-side research, APS

**trapped in this profitless black hole: damned if you sell and damned if you don't.** This is the principal reason why, despite its current size, JD still cannot produce a relevant annual profit.

In March 2017, JD used Exhibit 1 to rationalize why the company's low gross margin will rise from 7% to the mid-teens, as economies of scale kick in. JD's CFO uses the term "economies of scale" almost as often as GMV. (This exhibit omitted many struggling retailers in China like Walmart, Carrefour, Yihaodian and 3C retailers).

**Exhibit 1: JD's Gross Margin vs Major Chinese Offline Retailers'**




Source: Company filings, investor presentation

**Holy Grail?**

JD's investor presentation highlights that 1P margins could increase from 7% to well over the mid-teens or over 15%. This is highly unlikely for the following reasons:

**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**

A company can produce a profit in one of two ways: **raise prices or reduce costs**. Raising prices isn't an option for JD because half of its 1P business comes from cell phones and computers. Like other retailers, JD has been selling them at a loss and raising prices would mean losing market share. Weaning itself off this business would reduce losses and improve profitability but revenue would shrink. This is not an option because its $55bn market cap is due to its 3C products' shiny GMV and revenue.

JD has argued that it will be able to enjoy bulk discounts for 3C products as it grows but its competitors tell us that they get the same prices because it is just not in the long-term interest of the brand owners to kill off their major retailers.

The other problem is, JD's core business is probably slowing from here on. JD is primarily a 1P online company (92% of JD's revenue). In 2016, 76% of 1P sales came from 3C and appliances which contributed to over 70% of net revenue of the entire company. Online penetration in this segment has reached 40%, according to Goldman Sachs. When growth slows, competition intensifies and companies bleed more.

As for appliances, we know from GOME's and Suning's filings that these goods enjoy **higher gross margins** of 17%-18%; as the segment accounts for **60-75% of GOME's and Suning's revenues**, they manage to turn a small profit. JD however derives much less—only 25%-27%[4] of revenues—from appliances because consumers prefer to buy high-priced appliances from physical stores rather than online. How many customers would buy a $1,000 washer or hifi system online? GOME and Suning are specialist retailers in this category and have both online as well as thousands of offline stores each nationwide where customers can see, touch and feel the actual products before committing. Even Amazon[5] has not been successful here although it does not face ruthless competition like JD does in China. JD's competitor Alibaba has taken a $5 bn stake in Suning so it has the capital to fight a long war.

Price wars are common in this segment in China and elsewhere and the longstanding players have well-honed competitive instincts. GOME and Suning initiated a price war more than a decade ago which forced an industry consolidation. Today they are China's two most successful and dominant home appliance retailers. They have exclusive products, creative tactics for attracting shopper traffic and other strategies for staying on top. As a purely online retailer stuck with commoditized goods, JD has not been able to match them in the higher-margin home appliance market.

JD Mall's progress has been stymied by **management departures**, according to media reports[6] and our primary checks. A high profile departure was JD Mall's CEO, Haoyu Shen, who resigned and was replaced by Richard Liu himself last August. In order to allay investor concerns JD explained that he was relocated to the US as President of JD International Operations. He left a month later and, according to Bloomberg, is now at Hillhouse.

Seeking profits elsewhere by varying its product mix, JD acquired **Yihaodian** several months ago, a loss-making FMCG e-commerce company for $1.5bn from Walmart by issuing new JD stock. If Walmart, an experienced and savvy FMCG specialist retailer, couldn't turn it around under 2 previous CEOs, what are the chances of an inexperienced FMCG retailer like JD turning it around? Indeed, competition is red-hot and margins are razor-thin. JD also sank in $650 mm for a 10% stake in Yonghui in August 2016. But after the acquisition, **Yonghui** now sees JD more as a competitor than a shareholder hence dimming the prospect of any meaningful collaboration. JD should have been more thoughtful and strategic in making its foray into the FMCG business. Perhaps JD again had GMV/revenue in mind but not profits.

What about JD's 3P business? Its 3P GMV is one-quarter the size of Alibaba's Tmall. Compared with Tmall's and Taobao's combined GMV, JD is just one-tenth. Clearly, JD is a David compared to the Goliath Alibaba. Jack Ma and Richard Liu are not the best of friends and have regularly exchanged barbs in the media. Jack Ma seems determined to have JD face Alibaba on every street. Alibaba regularly coerces or persuades its larger merchants to sell exclusively on its platform. Last year, Alibaba successfully forced Uniqlo to completely withdraw from JD's 3P platform. Third-party merchants, faced with a choice, would rather go with a much larger and tech-savvy market-dominant platform i.e. Alibaba.

**Structural Factors Contributing to a Stubbornly High Cost Structure**

First, JD looks to be **headed for diseconomies of scale**. If there are economies of scale to be enjoyed, it will be in the densely populated cities such as Beijing and Shanghai but JD has limited room to grow from here. As JD expands into the lower-tier Chinese cities, it is only natural that diseconomies of scale will kick in and costs will unavoidably rise rather than decline.

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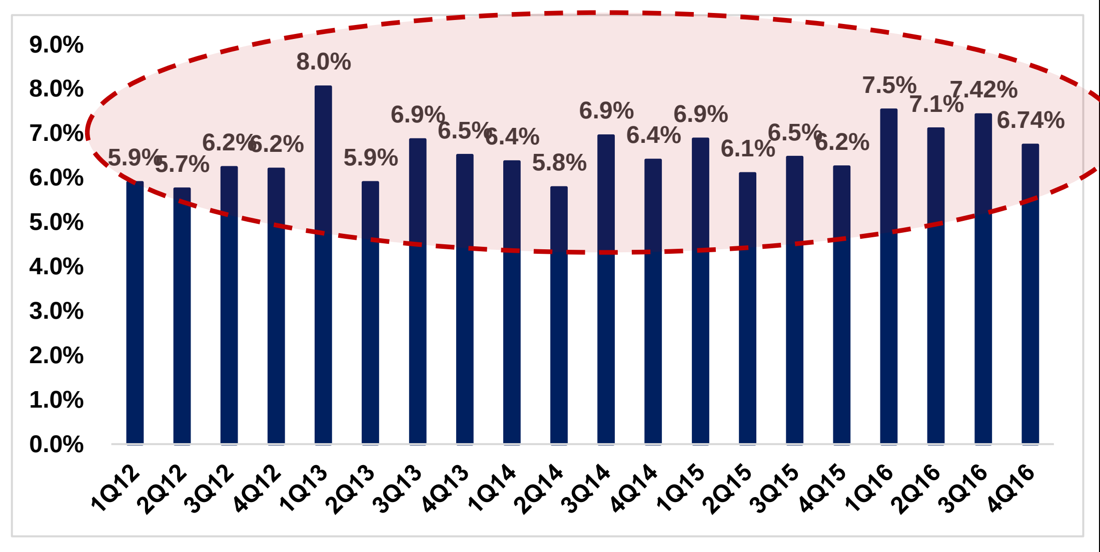
[4] APS estimate; JD does not disclose the split between 3C and household appliances

[5] https://consumerist.com/2017/05/12/amazon-wants-to-sell-you-more-furniture-appliances-but-can-it-deliver/

[6] http://business.sohu.com/20160722/n460477405.shtml

Inevitably, owning warehouses and delivery infrastructure across a vast country like China will be expensive and will probably earn abysmal returns on capital. Alibaba has chosen the more optimal route in our view, by partnering with and investing in specialist logistics players. It does not help when the bulk of rural consumer purchases will likely be low-end cell phones, cheap household appliances, etc. JD's CFO has regularly stated in quarterly earnings calls that the business enjoys economies of scale. However, **GMV grew fourfold over the last 5 years and yet gross margins for direct sales have not risen at all** (see Exhibit 2), defying their economies of scale argument.

**Exhibit 2: JD's 1P quarterly gross margins**




**Diseconomies of scale?**

Due to JD's product mix and its expansion into lower tier cities, we think economies of scale are highly unlikely

*Source: Company filings and APS estimates*

Indeed, JD has "aggressive expansion plans"[7] especially in logistics. In the Q1 2017 earnings call with management, JD's CFO Sidney Huang warned that "We expect our capex to significantly increase. And as a result, our free cash flow will likely decline in the remainder of 2017[7]." We believe diminishing FCF is not entirely because of capex but because JD will be deconsolidating JD Finance. Without the finance business, there will be better transparency and less room to obfuscate quarterly income and cash flow statements.

Second, costs are rising for JD. Wage inflation in a **labor-intensive business** (83% of JD staff work in fulfilment running its warehouses, last-mile delivery and other infrastructure) can erode margins. Wages have risen at double-digit rates over the last 5 years and JD's payroll keeps growing. The number of full-time employees has grown from 68,000 in 2014 to 121,000 in 2016. Although the company and some analysts are optimistic that fulfillment costs will decline, the evidence suggests otherwise. Shipping in China is very competitive too as there are at least a dozen very large listed and private equity-funded logistics companies which are competing to gain market share.

**Why should margins now double when the structural factors remain as formidable as ever?**

[7] Bloomberg Transcript, Q1 2017 earnings call with JD

**JD is Not China's Amazon**

Amazon is a **serial technology disruptor** with inventions like **Alexa**, **Amazon Go**, **Kindle**, **Prime**, **AWS**, **media/video**, etc. The company has invested well over $60bn on technology and content since 1998, representing 9.1% of cumulative sales over the same period. While technology-related investments drop for most companies, it continues to rise at Amazon. Last year, it reported $16 bn worth of investments into technology and content or 11.8% of total sales. As a result, Amazon has innovative products and services such as Amazon Web Services (AWS) which annualize nearly $15 bn in revenues and $3.6 bn in operating profits based on Q1 2017. This business accounts for 89% of Amazon's operating income in Q1 2017 and is growing over 50% per annum! We would argue that without AWS, Amazon's market cap would not be where it is now and JD is benefitting from an AWS halo it does not have. Truth be told, Amazon is still struggling to make money in their 1P and 3P consumer product businesses.

By marked contrast, JD has spent minimally on technology, equivalent to just 2% of revenue. While Amazon's net PP&E is $29 bn, JD's balance sheet shows only $1 bn in tangible fixed assets although it's 3 years post IPO. Its 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 $550 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 we find no evidence of that. For instance, JD has not even started investing in cloud while competitors Alibaba and Tencent have invested billions. Even if JD decides today to enter the cloud business, it is far too late to catch up. Amazon's filings do not mention the word GMV; why is JD so obsessed with GMV if it is the Amazon of China?

Let's also look at the competitive landscape. Amazon is dominant in the US and does not have a strong competitor in its backyard. However, JD faces a formidable Alibaba which boasts $20 bn in cash on the balance sheet, $9 bn in annual profits, $7 bn in free cash flow and therefore has the financial resources to outspend any of its rivals. Alibaba even has a Business Intelligence team that does nothing but tracks every move JD makes. For instance, when JD acquired Yihaodian, announcing that it would budget $150 mm over 3 months to promote its grocery business, Alibaba responded that it would spend many "multiples"[8] of the amount. Like 3C products, FMCG goods also earn razor-thin gross margins and with Alibaba determined to make sure its turf is not encroached upon, JD will not have an easy time in this new business segment either.

The stark differences between Amazon and JD are also manifested in the vision of their respective founders and their execution of that vision. Without Amazon's vision, strategy and the requisite investment in technology, can JD ever become the Amazon of China? What is the basis of comparison? There is nothing that we have uncovered to suggest that JD has tracked Amazon's business model closely in the last 10 years If anything, they are moving more and more apart with every passing year. All said and done, JD is at heart a pure **low-margin** online retailer.

Investors who choose to believe in this "Amazon of China" illusion may end up in a tragedy, as Jack Ma once famously said to friends but made public in Sina.com and other social media sites. Although he apologized for his remark, did Jack Ma actually know something that fund managers and analysts do not know?

[8] https://www.bloomberg.com/news/articles/2016-08-12/alibaba-pledges-billions-to-stock-china-s-kitchens-bathrooms

## Conclusion

JD’s **2 major structural challenges**—1P **low-margin product mix** and rising wages in a **labor-intensive model**—can’t be altered and improved in the medium-term. For these structural reasons, JD will struggle to make a relevant GAAP profit.

Ultimately, JD is a low-margin online retailer with $1 bn of assets whilst Amazon has become a serial technology disruptor having invested well over $60 bn in technology. All said and done, it is absurd to even suggest that JD may become the Amazon of China. In our view, that day will never arrive.

In the final analysis, how much to 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, its’ **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 baffling!

We have no doubt that irrational expectation 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 $55 bn market cap. 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).

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