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# A REPORT ON WALMART: RECENT EARNINGS RELEASE AND OUTLOOK

By Onat Karacan, Market Research Analyst

## Business Overview

Walmart has evolved from being a traditional retailer into an omnichannel business. The company has made significant investments in its e-commerce platforms in order to adapt to the changing retail ecosystem and to compete with fierce performers such as Amazon and Target. Walmart provides almost everything from groceries, cosmetics, electronics, stationery, home furnishing, apparel, etc. Walmart operates variety stores, discount stores, supercenters, and Sam's Clubs. Their online websites include "Walmart.com" and "Samsclub.com".

Walmart's largest revenue segment comes from the U.S., but still operates in Canada, Chile, China, India, Mexico, Africa, and Central America. As of this September, Walmart operated 11,500 stores under 56 banners across 27 countries.

DISTRIBUTION OF REVENUE (Q3 2021)

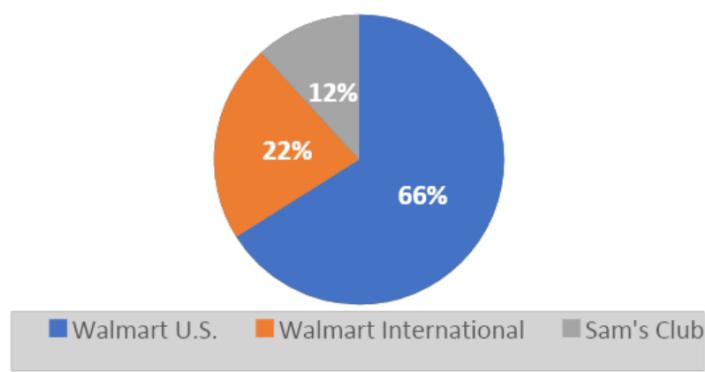


Figure 1: Distribution of Revenue per Business Segment

Walmart divides its operations into three segments: Walmart U.S., Walmart International, and Sam's Club (membership warehouse clubs).

The primary figure displays the percentage of revenue associated with each segment. The secondary figure displays the growth of each segment over the past five years.

(in millions \$USD)	FY2016	FY2017	FY2018	FY2019	FY2020
<b>Walmart U.S.</b>	298,378	307,833	318,477	331,666	341,004
% growth	-	<b>3.2%</b>	<b>3.5%</b>	<b>4.1%</b>	<b>2.8%</b>
<b>Walmart International</b>	123,408	116,119	118,068	120,824	120,130
% growth	-	<b>-5.9%</b>	<b>1.7%</b>	<b>2.3%</b>	<b>-0.6%</b>
<b>Sam's Club</b>	56,828	57,365	59,216	57,839	58,792
% growth	-	<b>0.9%</b>	<b>3.2%</b>	<b>-2.3%</b>	<b>1.6%</b>

Figure 2: Annual Segmented Revenue Growth Over Past Five Years (2016-2020)

## Competitor Updates: Amazon

Amazon is one of Walmart's greatest competitors, and this can be seen recently in their increased e-commerce sales. Within the last year, Amazon has almost gained 70% in their share price. However, during the earlier stages of the pandemic, Amazon struggled to maintain their delivery periods due to the influx of online orders due to social distancing efforts and general fear around in-person shopping. In recent news, Amazon is opening 1,000 – 1,500 warehouses in suburban neighbourhoods to compete with Walmart and others such as Target who have same-day deliveries. They have also hired approximately 175,000 new workers in the last year and have taken their delivery into their own hands by mimicking the logistics and operations of UPS. It is estimated that Amazon will delivery 67% of their own packages this year and increase that to 85%.

Amazon wants to gain market penetration in the U.S. by offering more competitive delivery times, which can be quite harmful to Walmart, who thrived off same-day delivery during increased e-commerce sales. Amazon's initiative in their self-delivery system is also concerning, as they may no longer rely on old-time strategic partnerships with U.S. Postal Service and United Parcel Service Inc. This allows them to cut operational costs in the long-term while minimizing reliance on other partners, essentially minimizing risk.

## Recent Earnings Release

Walmart recently reported their third quarterly earnings report for Fiscal Year 2021 on November 17, 2020. Below are highlights of the earnings report:

### Highlights:

- Consolidated revenue grew from \$128.0B in Q3 FY20 to \$135.8B in Q3 FY21, which is a **year-over-year growth of 6.1%**, while the consensus estimate was \$133B

- Adjusted earnings grew from \$1.16 in Q3 FY20 to 1.34 in Q3 FY21, which is a **year-over-year growth of 15.5%**.
- Walmart U.S. revenue grew from \$83.2B in Q3 FY20 to \$88.4B in Q3 FY21, which is a **year-over-year growth of 6.2%**
  - Walmart U.S. Comparable sales (same-store-sales) grew by 6.4% year-over-year
- Walmart International revenue grew from \$29.2B in Q3 FY20 to \$29.6B in Q3 FY21, which is a **year-over-year growth of 1.3%**
- Sam's Club revenue grew from \$14.6B in Q3 FY20 to 15.8B in Q3 FY21, which is a **year-over-year growth of 8.3%**

## **Further Details by Segment:**

Same-store-sales in the Walmart U.S. segment were fueled by general merchandise, food and health & wellness. Walmart found that customers are consolidating their shopping trips which is most likely due to COVID-19, as they have found that the average basket size has increased. In addition, transaction volumes have also increased due to extended store hours. Walmart U.S. also experienced increased sales in September due to a delayed back-to-school spending which carried through October. However, the most noticeable difference came from e-commerce sales, which grew by 79%. Marketplace, pickup & delivery sales jumped at triple-digit rate.

The increase in e-commerce sales is a recurring trend in many companies during the global pandemic due to social distancing efforts and lockdowns being enforced by governments. The fear factor also contributes significantly to consumer behaviour, as most people refrain from in-person shopping to avoid contraction of the disease, and resort to same-day delivery or pickup.

Walmart International sales lagged due to pandemic-related operational hurdles, mainly in Central America and Africa. E-commerce sales also had a positive contribution internationally, as they contributed 14% of total segment sales.

Sam's Club sales were hurt by lower tobacco sales, however experienced a strong increase in new member sign-ups and renewal rates. E-commerce sales rose by 41% over the quarter and fueled comparable stores by 2.30%.

## **How the Stock Reacted to the Earnings Release**

The Figure 3 on the following page displays the price movement of the stock the day of the earnings release.



Figure 3: Historical 1-Month Chart of Walmart Stock

The Walmart shares retreated 2% in Tuesday's trading, after a sharp increase in pre-trading hours. This was a bit unexpected, due to the significant beat in earnings that was reported. This could be due to Walmart's selling of Seiyu, their Japanese retail store, which they sold to private equity fund KKR and Rakuten, who own a 65% and 20% stake respectively. Walmart also announced Walmart+, which is meant to rival Amazon's Amazon Prime.

Walmart+ offers same-day delivery on online orders, early access to sales and events, as well as a discounted access to Walmart's new Express two-hour delivery option. Walmart+ also introduces a new Scan & Go service in stores, allowing subscribers to scan their groceries and pay their bill without waiting in line. The subscription is annual at \$98, or \$12.95/month. Amazon Prime is \$119 in comparison and offers essentially the same perks (Amazon Prime Now, Prime Early Access, etc.)

## Investment Drivers and Risks

**(Positive) Aggressive E-Commerce Initiatives:** Walmart's focus on e-commerce and their omnichannel business has been stronger and more relevant than ever, especially amongst the pandemic-induced distancing that is being enforced. Walmart has doubled their U.S. store associate count this year to support the digital and omnichannel efforts. Through

buyouts, alliances, and improved delivery and payment systems (investment in Ninjacart, partnership with Flipkart, etc.), Walmart has taken on many e-commerce initiatives. As mentioned before, e-commerce sales grew 79% in the U.S. and 41% in Sam's Club stores.

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**(Positive) Strong Comparable Store Growth:** Walmart has taken many efforts to enhance their merchandise assortments, remodel their stores (upgrade with attractive digital innovations), etc. Walmart has enhanced over 205 stores in the third quarter. As mentioned before, **comparable sales growth has increased 6.4% in the U.S.**

**(Positive) Financial Health and Flexibility:** Walmart's debt-to-capitalization ratio improved from 0.41 in the second quarter to 0.38 in the third quarter. Their long-term debt remained stable, while their cash on hand increased significantly to \$14.3B, from \$9.5B in the previous quarter.

**(Negative) Stock Is Expensive/Overvalued:** Walmart currently has a trailing P/E ratio of 28.87x, whereas the industry average is currently 25.81x.

**(Negative) Intense Competition:** Walmart faces significant competition from Target, Amazon, and all other retailers, drug and speciality stores, dollar stores, e-commerce businesses, supermarkets, etc. This may affect Walmart's performance.

## Conclusion of Report

Walmart is continuously pouring investments into their e-commerce business, improving comparable stores, and creating new endeavours such as Walmart+. Walmart continues to experience tremendous growth in their U.S. operations and Sam's Club, with promising renewal rates and subscriptions under Sam's Club. Their balance sheet is also very calming to low risk-tolerance investors, as they have a record-high cash balance at \$14.3B. The stock is currently a bit overpriced, as seen by their relative P/E ratio (28.87x Walmart - 25.81x Industry). Their e-commerce sales will continue to soar through the currently

unresolved pandemic, as customer trends continue to follow the same suit, with increased pickup and delivery options being utilized by customers, increased basket sizes, and increased transaction volumes. Walmart will also employ specific strategies to boost sales in upcoming holiday seasons, such as their reinvented Black Friday Event, "Black Friday Deals for Days", which extends Black Friday from one day to three separate events in November, allowing Walmart to control customer demand while attracting more online customers. Walmart plans on continuing to upgrade existing stores with attractive and innovative experiences, offering competitive delivery timing and competitive product pricing, while utilizing such strategies to maximize the gain during the global pandemic. Walmart hopes that with the introduction of Walmart+, that their increased e-commerce sales will transition into increased in-person sales after the resolution of COVID-19.

[1] [stock.walmart.com/investors/financial-information/annual-reports-and-proxies](http://stock.walmart.com/investors/financial-information/annual-reports-and-proxies)

[2] <https://www.bloomberg.com/news/articles/2020-09-16/amazon-plans-to-put-1-000-warehouses-in-neighborhoods>

[3] <https://www.investors.com/news/walmart-stock-walmart-earnings-q3-2020-seiyu-stake-sold/>

# Ant Group IPO Halted: Is This a Regulatory Overreaction or a Timely Move to Prevent Another Financial Crisis?

By Kelly Wan, Market Research Analyst

On November 3rd, the Shanghai Stock Exchange suspended the world's largest IPO – Ant Group's IPO (\$37B) just two days before the scheduled listing. According to China Securities Regulatory Commission, this is due to: "Significant issues such as the changes in financial technology regulatory environment, which may result in the company not meeting the conditions for listing or meeting the information disclosure requirements."

Some analysts believe this is a protection for investors and consumers from another subprime mortgage crisis while others suppose this is a punishment for Ant's founder Jack Ma's criticism on the Chinese financial regulation system. This article will discuss the giant's valuation briefly, the risk in Ant's business model and the impact of the suspension on the investors.

## The biggest IPO of all time

Ant Group is a Chinese FinTech company established in 2014 and owned by Alibaba Group, the world's largest retailer and e-commerce company. Ant Group offers services across five domains – payments, wealth management, credit scoring, lending, and insurance.

Ant Group operates Alipay, the world's largest mobile and online payment platform, its mobile payments volume was greater than both PayPal and Square combined [1]. It also runs Yu'e Bao, one of the world's largest money market fund as well as a credit scoring service called Sesame Credit. Its CreditTech business - Huabei (Just Spend) and Jiebei (Just Lend), is the single biggest revenue maker, contributing 39% of the total revenue in the first half of 2020. Ant also offers Xianghubao (Mutual Protection), an InsureTech service that focuses on critical illness insurances [2]. Other than that, Ant already formed strategic partnerships with mobile payments providers in India, Thailand and Mexico [3].

With its dominance across main FinTech sectors in the Chinese market and its potential to grow globally, the company's valuation based on the pricing would be \$313.37 billion, larger than some of the biggest banks in the U.S., including Goldman Sachs and Wells Fargo [4]. Ant's IPO also created a frenzy in both Hong Kong and Shanghai that retail investors bid for a record \$3 trillion worth of shares in Ant's dual listings, exceeded the value of the shares on the offer by more than 870 times [5].

## How does Ant Group make money?

Ant Group's revenue sources are split into three parts: CreditTech, InvestmentTech and InsureTech. Huabei and Jiebei are its CreditTech services, where Ant originates loans and then are independently underwritten by their partner financial institution. This segment accounts for 39% of Ant's total revenue in the first half of 2020, the largest segment by revenue. Yu'e Bao, its InvestmentTech service, accounts for 15.6% and its InsureTech service including Xianghubao is the smallest revenue contributor [6].

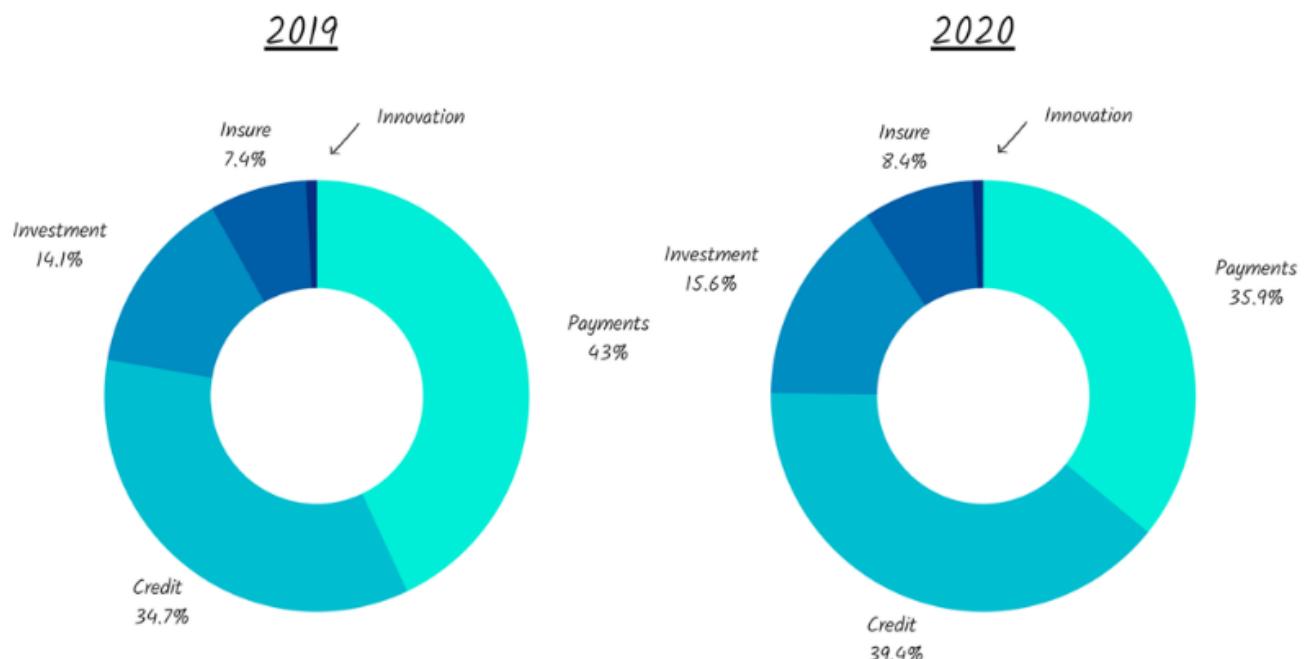


Figure 1: Ant Group Prospectus Figures

The combining profits from its collaboration with the banks and the sale of more than 200B yuan (\$23 billion) asset-backed securities by October, makes Ant Group a very profitable business [9]. On the other hand, this business model involves a large portion of unsecured loans, which would lead to the sub-prime consumer risk and an accumulation of systemic financial risk.

# Ant's dangerous business model might lead to another subprime crisis

Ant has the potential to create a crisis similar to the sub-prime mortgage crisis in the United States as shown in the diagrams below. In brief, the subprime mortgage crisis origins from the large decline in the housing price after the collapse of a housing bubble. At that time, a lot of financial institutions were lending money to low-income groups in the U.S. without due diligence as housing price increased dramatically. In 2006, when home prices fell as rising interest rate made it harder to afford a house, high risk borrowers couldn't afford the mortgage payments anymore, the risk spread into these financial institutions and led to a global recession. The heart of this crisis began with insufficient background checks on mortgage applicants and the originate-to-distribute structure.

Similar to the subprime mortgage crisis, Huabei and Jiebei are based on the originate-to-distribute model with over 16x leverage, while the leverage ratio for traditional Chinese banks is around 10x [10]. Ant offers consumer loans from 500 yuan (\$76) to 50000 yuan (\$7614) to its Alipay users based on their credit score [7]. A lot of these consumer loans are to low-income youth and small businesses. This includes customers who could not get loans from the traditional banks. Ant uses its big data analytic tools to accurately assess borrowers' credit profiles and earn fees by providing a digital platform for banks to reach small borrowers and small size loans [8]. These loans are then packaged into financial instruments of different risk levels and sold to investors including banks, insurance and individual investors. According to Yahoo Finance, "As of June 30, Ant Group was working with over 100 banks, including policy banks, large national state-owned banks, all national joint-stock banks, leading city and rural commercial banks, international banks that operate in China, as well as trust companies."

## 2008 U.S. Subprime Mortgage Crisis

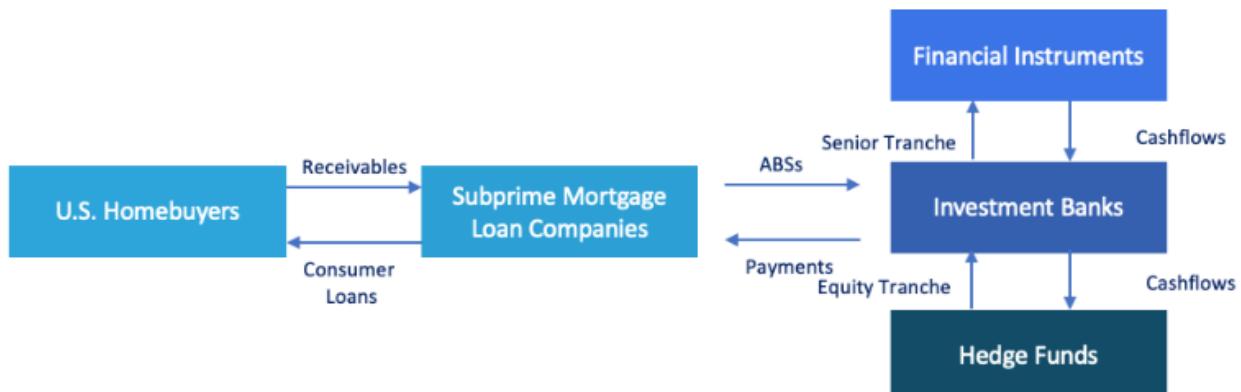


Figure 2: 2008 U.S. Subprime Mortgage Crisis

## 2020 Ant Financial (Huabei/ Jiebei) Business Model

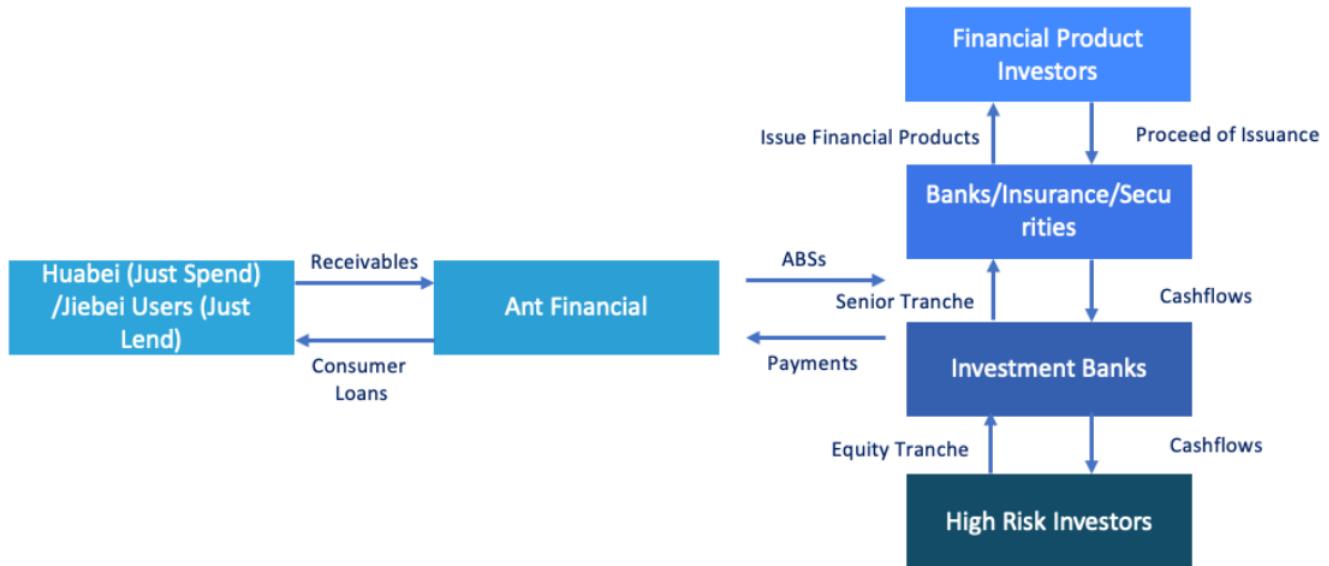


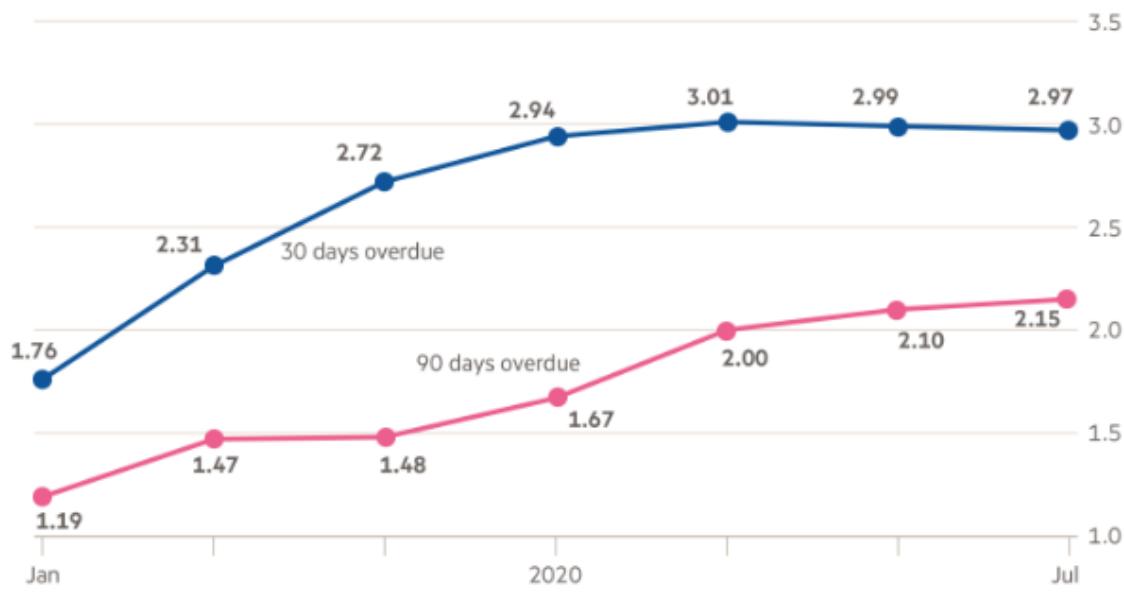
Figure 3: 2020 Ant Financial (Huabei/ Jiebei) Business Model

The collaboration with major banks does not make Ant Financial a totally safe business. As we mentioned before, the borrowers of Huabei and Jiebei included college students who have no income with a common credit limit of 2000 yuan (\$400). In addition, during the Taobao (the largest online shopping website owned by Alibaba) shopping festival, Huabei would temporarily raise users' credit limits up to 10,000 yuan (\$2400) to encourage online shopping. Here is the problem, since temporarily credit limit is widely known among consumers, let's assume that no-income college students with high credit score, use the increased limit during the shopping event. But they made their purchases impulsively and now they realize they couldn't afford the repayment. Even though the business model doesn't involve collateral like the sub-prime crisis, a potential significant number of delinquencies with the originate-to-distribute structure would trigger another financial crisis.

However, based on the delinquency rate, during the time that China was under strict lockdown (January – April), the rise in delinquency rate is still in an acceptable range even though almost every business was closed, and the curve was flattened in May. This shows that Huabei can fairly handle the financial risk brought by an economic recession, which means the risk for another sub-prime crisis is low.

## Coronavirus causes rise in delinquency rate

By balance (%)



Source: Ant Group  
© FT

Figure 4: Coronavirus Causes Rise in Delinquency Rate

## The suspension is to suppress the Ant Group's excessive power in the Chinese FinTech market

Jack Ma, the founder of Ant Group, criticized policymakers behind international financial regulations over the weekend before Ant's IPO. "The Basel Accords are like an old people's club ... we can't use yesterday's methods to regulate the future," Ma reportedly said [13]. He said the rules aren't suited to specifically apply to development and innovation in China and exclude opportunities for developing countries and young consumers, according to the Financial Times.

Compared to the United States and Europe, China has the loosest regulation over FinTech. Europe has the most stringent consumer protection laws and data privacy regulations, and the U.S. has complex regulation that makes it difficult for FinTech companies to offer country-wide services, whereas the state-dominated banking structure leads to the loose regulation over FinTech in China [13]. Unlike in the US and Europe, the backward-looking nature of China's regulatory bodies allow forward-looking start-ups to experiment first before regulating them [14]. Therefore, the delay of the Ant IPO is more likely a regulatory warning to FinTech companies like Ant Group in China. "The Chinese government is waking up,"

up to the fact that they cannot allow these companies that dominate a particular sector and particularly the financial sector", said Mobius on a virtual panel at CNBC's East Tech West conference [15].

As shown below, Alipay and Tencent Financial, the two major players in the China digital payments market are private companies. Now the IPO of Ant Group might speed up the scale of dominance in the FinTech sector. This is before the launching of the digital Yuan that is still developing by the Chinese Central Bank and this would eventually result in the government losing control of financial stability.

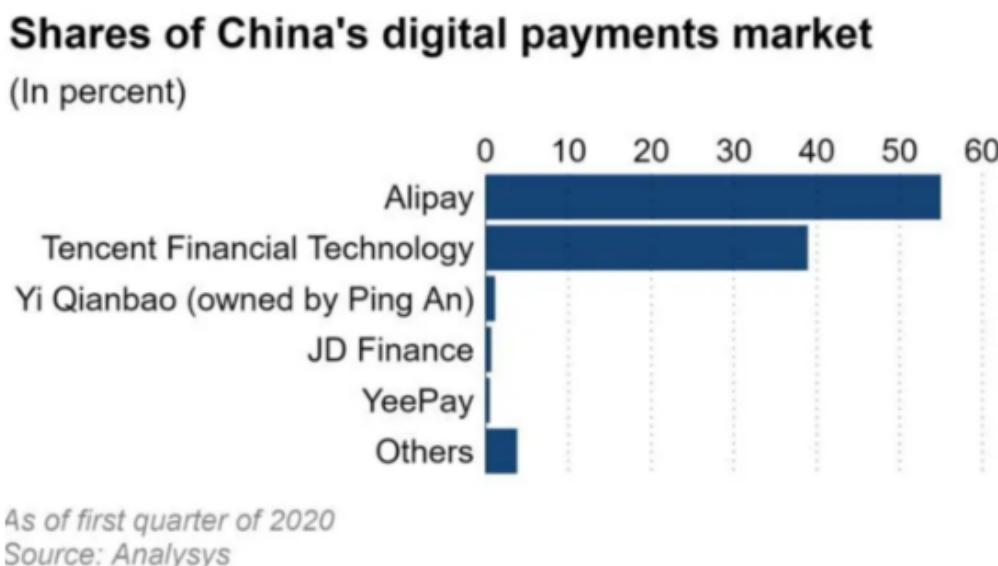


Figure 5: Shares of China's Digital Payments Market

## What does this mean for investors?

After the announcement of the Ant Group suspension, a number of Chinese tech stocks were selling off. The E-commerce giant Alibaba (BABA) which owns about a 33% stake in Ant was down 5.8% while Tencent (TCEHY), Ant's competitor was down 2.6%, and another Chinese technology company Momo (MOMO) was down 3.2% on that day [16].

Ant's IPO and the later suspension was much more than a stock offering. It was a symbol of China's rise of financial technology and a statement that China no longer needs US capital markets to finance its corporations [17]. The later suspension showed the Chinese Communist Party's power over private companies in China. Therefore, with the frequent updates on the delayed IPO, this would most likely affect investors interested in the Chinese capital market and the Chinese stocks listed in the United States.

# Final Thoughts

Based on the analysis of Ant's business model and the Chinese regulation over private FinTech companies, the risk of another sub-prime crisis is low. However, it is important to note that the suspension decision was last minute and was a few days after Jack Ma's criticism on the Chinese regulation. In addition, Chinese regulators immediately changed the rules after the suspicions which included that online lenders need to maintain not less than 30% of capital of their stability sheets. This indicates that Ant might need an additional \$20B in capital reserves [18]. Then, I believe the main factor of this might be related to the dominance of Ant Group in the FinTech sector and the loose regulation.

- [1]<https://www.businessinsider.com/alipay-overtakes-paypal-as-the-largest-mobile-payments-platform-in-the-world-2014-2>
- [2]<https://www.bloomberg.com/news/articles/2020-08-30/as-ipo-looms-all-you-need-to-know-about-jack-ma-s-ant-group?sref=0Mdkq1G7>
- [3] <https://theconversation.com/ant-group-is-holding-the-biggest-ipo-of-all-time-heres-what-it-is-147403>
- [4]<https://www.cnbc.com/2020/10/26/ant-group-to-raise-tktk-billion-in-biggest-ipo-of-all-time.html>[
- 5] <https://www.ft.com/content/eb0746f1-51fe-438d-886b-18bb7cc9456f>
- [6] <https://www.reuters.com/article/us-ant-group-ipo-business-explainer-idUSKBN25M0XT>
- [7] <http://www.zhimeng.com.cn/question/6992.html>
- [8] <https://www.scmp.com/business/banking-finance/article/3108489/whats-next-worlds-largest-fintech-company-after-chinese>
- [9] <https://finance.yahoo.com/news/jack-mas-ant-group-does-093000429.html>
- [10] <http://finance.sina.com.cn/zl/bank/2020-11-16/zl-iiznctke1637659.shtml>
- [11] <https://www1.hkexnews.hk/app/sehk/2020/102484/documents/sehk20082500535.pdf>
- [12]<https://www.businessinsider.com/jack-ma-financial-regulations-ant-group-alibaba-2020-10#:~:text=Jack%20Ma%20criticized%20policymakers%20behind,smartphone%20apps%20and%20other%20tech.>
- [13] <https://www.mintcopywritingstudios.com/blog/fintech-landscape>
- [14] <https://hackernoon.com/is-china-making-a-mistake-on-fintech-regulation-8a805862c8d3>
- [15]<https://www.cnbc.com/2020/11/10/ants-ipo-is-a-sign-of-the-times-and-not-an-isolated-case.html>
- [16]<https://www.thestreet.com/investing/chinese-tech-stocks-slump-after-ants-ipos-are-suspended>
- [17] <https://www.ft.com/content/3d2f174d-aa73-44fc-8c90-45c2a554e97b>
- [18]<https://www.bloomberg.com/news/articles/2020-11-05/why-china-changed-the-rules-on-jack-ma-s-ant-group-quicktake?sref=0Mdkq1G7>

# Pfizer vs Moderna in the Coronavirus Vaccine Race

By Johnson Shih, Market Research Analyst

Pfizer (NYSE: PFE) and Moderna (Nasdaq: MRNA) have become leaders in the coronavirus vaccine race. Pfizer and its biotechnology partner BioNTech (NASDAQ: BNTX) last week became the first to apply for an emergency use authorization (EUA) for its research vaccine. Moderna may make the same request as early as the last week of November.

## Moderna's Stock Price Chart (YTD)



Figure 1: Moderna Stock Price Chart (YTD)

# Pfizer's Stock Price Chart (YTD)



Figure 2: Pfizer Stock Price Chart (YTD)

## If you are interested in investing in the COVID-19 vaccine stocks, which is a better buy?

Since we are interested in long-term investment, it is important to understand which of these two players can occupy a larger market share in the future. From a quality point of view, Pfizer and Moderna are at the same level. The analysis so far shows that the efficacy of Pfizer vaccine candidate is 95%, while the efficacy of Moderna vaccine is 94.5%. Safety data is also beneficial to both. [1]

	Pfizer/BioNTech	Moderna
Technology	mRNA	mRNA
Efficacy	95%	95%
Storage temperature	-94° F	-4° F
Shelf-life	5 days	1 month
Price per dose	\$19.50	\$32 to \$37
For profit?	Yes	Yes
Doses by end of 2020	50 million	20 million

Sources: American Council on Science and Health (ACSH.org), multiple news outlets

Figure 3: Pfizer/BioNTech vs. Moderna Vaccine Comparison

It seems that Moderna's vaccine strikes the best balance between efficacy and ease of storage and distribution. According to the data of the third stage, Pfizer's vaccine needs to be stored at extremely cold temperatures below 94 degrees Celsius and requires a special freezer. [1] Moderna's vaccine has similar efficacy to Pfizer and can be stored for 30 days at a temperature similar to a refrigerator. [1]

But there are still some concerns. First, supply will remain an issue in the short term. Moderna said that by this year it may have prepared about 20 million doses of vaccine, and in cooperation with Lonza of Switzerland, it is expected to produce 500 million to 1 billion doses of vaccine next year. [2] As a clinical-stage biotechnology company, Moderna also lacks the complex supply chains of large pharmaceutical companies such as Pfizer and Johnson & Johnson. Moderna's vaccine will also be more expensive than its competitors because depending on the quantity ordered, the price of each vaccine may be between 25 and 37 US dollars, while the price of the Pfizer vaccine is about 19 US dollars per dose. [2]

The FDA's Vaccine and Related Biological Products Advisory Committee will meet on December 10th to discuss Pfizer's data and make recommendations. Pfizer is currently ahead of other competitors from a timeline perspective. However, Moderna may only be a few weeks or even days behind. Both companies can win the race even if they do not cross the finish line at the same time. Possible authorizations or approvals in other countries will further increase the stock price of vaccine developers. The European Medicines Agency has begun to review the candidates of the two companies. This means that their stock prices will benefit from vaccine authorization and will seize the opportunity in a market that is bound to become a huge market.

## Why Moderna is a better buy?

On Monday, November 23rd, Moderna stock rallied by over 10% after the company said that its Covid-19 vaccine – which is based on messenger RNA technology – was 94.5% effective based on preliminary data. Investors are optimistic about Moderna for multiple reasons. Firstly, the efficacy compares favorably with Pfizer's Covid vaccine, which initially reported efficacy of 90%. Although the number could change as more data comes in, it is nevertheless indicative of a highly effective vaccine. Secondly, Moderna's vaccine should be easier to distribute compared to Pfizer's, as it can likely be stored at refrigerator-like temperatures for 30 days, unlike Pfizer's vaccine which requires much colder temperatures of around -94 degrees Fahrenheit – limiting its use to more developed parts of the world. Overall, Moderna's vaccine could offer the best of both worlds – high effectiveness and

easier logistics, although it could be slightly more difficult to manufacture compared to Pfizer's. [2]

More importantly for Moderna investors, the vaccine's results also bode well for the rest of the company's pipeline, which is entirely based on mRNA technology which has never been used previously in commercial drugs. The strong efficacy and the speed at which the vaccine was developed should essentially reduce the perceived risk surrounding the rest of Moderna's pipeline of 21 vaccines and therapies for rare diseases.

While Pfizer's surprisingly strong initial Covid-19 vaccine efficacy readout likely marks the beginning of the end of the Covid-19 pandemic, it probably doesn't mean too much for Pfizer stock, given the limited potential profits and challenges with distribution. In fact, we think that the strong data from the vaccine – which is developed using messenger RNA (mRNA) technology could actually mean a lot more for Moderna whose entire drug pipeline is based on mRNA technology.

At the same time, Moderna has full ownership of the COVID-19 vaccine candidate gene mRNA-1273 and does not have to share any potential revenue or profits from vaccine sales. On the other hand, Pfizer needs to share its profits with its business partner, BioNTech. Of course, Arbutus Biopharma holds a patent for the Lipid Nanoparticle (LNP) technology used by Moderna in the past. However, Moderna publicly stated that mRNA-1273 does not use any technology covered by the Arbutus patent. [6]

Finally, Moderna is a tiny company (50B) in comparison with Pfizer (200B). An additional \$5 billion to \$10 billion each year would be nice for Pfizer, but it will not cause the stock price to skyrocket. On the other hand, this income is likely to start the party of Moderna's stock price. [6]

## What are the potential risks?

While mRNA-based vaccines were touted to be more potent and quicker to deploy compared to traditional vaccines, they have never been used commercially to date. Moderna does not have diverse product mix and relies heavily on successful coronavirus vaccine for near-term gains, while large pharmaceutical companies have a wide range of products. In addition, just because a company submits data to the FDA does not mean

the risk has disappeared. Failures can occur at any stage of vaccine development. This year, Moderna's stock price has risen by more than 540%, which is more volatile and perhaps overvalued. [2]

[1] <https://www.fool.com/investing/2020/11/25/better-coronavirus-stock-pfizer-or-moderna/>

[2] <https://www.trefis.com/stock/mrna/articles/503915/whats-happening-with-moderna-stock-2/2020-11-27>

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# Airbnb is Filing for IPO – Rationale and Implications

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## What are the potential risks?

Featuring the largest IPOs in the year such as Warner Music Group, Palantir and Snowflake, the home rental company Airbnb had their long-awaited IPO filings available to the public on November 16, 2020, with an aim to complete its IPO in December. The firm plans to list on the Nasdaq under the stock ticker “ABNB” and is seeking roughly \$3 billion in its IPO. This accounts for another one of the largest and most anticipated stock market listings of 2020, despite the fact that this year has already been a blockbuster year for IPOs [2].

The prospectus comes as Airbnb hopes to capitalize on its surging home rentals amid the pandemic [8]. According to analysts, the company has the potential to reach a valuation of more than \$30 billion in the IPO, which is significantly greater than the \$18 billion valuation back in April. In the most recent release S-1/A filing, the initial IPO price range offered by Airbnb is between \$44 and \$50 per share [13]. According to Airbnb, it will have shares outstanding from 596,399,007 to 601,399,007, which gives the company a valuation range from \$26.2 billion to \$30.1 billion [13].

Back in April, Airbnb was hit hard by the cancellations on home rentals. The bookings had fallen by almost 90% and the company raised \$1 billion in emergency funding, followed by another \$1 billion in debt [4]. On May 5th, the CEO Chesky announced that the company had laid off a quarter of its workforce. In addition, the company’s earnings performance does not seem to be in investors’ favor. In Q2 2020, the company reported a loss of \$400 million, and even with a comeback starting from June, Q3 earnings were still down by 19% YoY (Figure 1). The bleak aaa

first-half of 2020 with a massive layoff, the decline in the YoY earnings, plus the overall concerns about the poor performance of the travel industry, all imply that it may not be the best time to go public. So why is Airbnb going public now?

	<b>Q3 2019</b>	<b>Q3 2020</b>
<b>Profit</b>	\$227 million	\$219 million
<b>Revenue</b>	\$1.65 billion	\$1.34 billion

*Figure 1: Year-over-year Comparison of AirBNB's Earnings*

The combination of early investors' desire to cash out, the high interest rates from the previous emergency funding, as well as the election's results have added to an urgency for Airbnb to go public.

- **The Pressures from Employees and Investors** — ever since the company was founded 12 years ago, the employees and investors have been waiting for the opportunities to sell the Airbnb shares they hold to make a profit. The company's poor performance in early 2020 and the uncertainty of the current market contribute to the investors' anxiety. With the hope of not destroying trust with early investors and employees, Airbnb may now feel pressured to stick to their plan and go public.
- **The Demand for Refinancing Due to High Interest** — the \$1 billion emergency funding received in April from Silver Lake and Sixth Street Partners came with an interest charge of 11% [5]. The company intends to use the money that will be raised from IPO to pay off their debt, and to reduce the burden of high interest rates.
- **The Release of the Election Results** — there were some concerns over the volatility that could come from the U.S. election, so Airbnb has initially delayed its IPO and released the filing only after the final election results came in.

# Non-Traditional Direct Listing or Traditional IPO?

Before the industry got impacted by the pandemic, the company had considered going public through a non-traditional direct listing since they had stable cash flows and billions in cash on hand [6]. However, as the pandemic devastated the travel industry, the funding from early investors and employees would no longer be enough for Airbnb to grow its business. Although billionaire investor William Ackman has offered Airbnb a reverse merger option for its IPO with his blank-check company back in September [5], due to changes in market conditions, Airbnb decided to go public through a traditional way to raise new money for the business.

## Implications of the IPO for the Investors

As the market uncertainty caused by COVID-19 remains, it might be too soon to conclude a simple investment recommendation on Airbnb's stock. However, it is important for investors to understand Airbnb's business operation, growth potential, as well as factors that could make or break this IPO.

- **The Strong Comeback amid Pandemic**

- The revenue in Q2 2020 dropped 72% YoY, while the business picked up in Q3, in which the company was able to report a profit of \$219 million [9]. The CEO has initiated a redesign of Airbnb's app and website so the company could focus on promoting their local stays during the pandemic [9].
- The strategy worked out nicely as people tried to avoid travelling by air and plunged into local communities. Customers also recognized staying in stand-alone properties as safer than using public facilities in hotels. Airbnb's quick recovery signifies that the company has a phenomenal adaptability to the changes and the crisis, which could translate into Airbnb's future growth potentials.

- **The Innovative Competitive Edge**

- The business idea of Airbnb involves a revolutionary concept which gives it a sharp advantage over its competitors. Compared with other long-term apartment or house rentals, Airbnb offers customers greater flexibility.

- In comparison to many budget hotels, Airbnb provides more affordable prices. It also has higher brand recognition - given its massive number of listings across the globe. Airbnb has over 7M listings worldwide, which is more than the combined 4.3M listings of Hyatt Hotels, Marriott International, Hilton Worldwide, InterContinental Hotels Group, and Wyndham Hotel Group [10]. This also explains why Airbnb has a clear advantage over its competitors such as Booking.com, whose listings are primarily hotels [11].
- Airbnb also has its dominance in local rental housing compared to its vacation rental competitors such as Vrbo or Flip Key [11]. It tailors the experience for its guests by offering “local handcrafted experiences” and tour guiding services.

## **Noticeable Risk Factors for Investing in the IPO**

Although Airbnb seems to have a better navigation amid COVID than its peers, the risks factors cannot be ignored while making investment decisions.

- **Possible Greater Decline in Sales** – According to Airbnb’s SEC filings [8], another wave of Covid-19 in the fourth quarter this year could bring more uncertainties to its IPO, in which larger declines in booking and increases in cancellations are possible. The latest data shows that around the time where the IPO was filed, the demand for rentals had already started showing a weakened trend [8]. As the number of infection cases in the U.S. ramped up to 13 million, more risks could be imposed on Airbnb’s sales performance.

- **Regulatory and Legal Risks**

- Similar to many other sharing economy startups, Airbnb also faces a number of regulatory restrictions and legal challenges [8]. Depending on the jurisdictions that Airbnb’s services are operating under, the operation capacity and services offered are subject to local legislations and regulations. Some cities are considering banning short-term rentals since they argue that Airbnb negatively impacted residents’ quality of life [7]. In Miami city alone, there are over 1000 complaints of illegal rentals being investigated. Among the \$2.4 million in fines have been issued, only \$183,000 has been collected [12].

- Besides, short-term rentals are not available in some areas during the pandemic since local communities may have required a minimum number of days for the stay. As the SEC filings suggest, the “variety of complex, evolving, and sometimes inconsistent and ambiguous laws and regulations” may adversely affect Airbnb’s operations [8].
- **The Inconsistency in Its Operating Income** – Airbnb has little to no consistency in its operating income for recent years (Figure 2). There has been a decreasing trend since 2017, with 2018 being the only year where the operating income was positive. The lack of consistency implies some issues with the company’s actual capabilities of turning a profit.

Airbnb Inc (ABNB US) - Adjusted				
In Millions of USD except Per Share	FY 2017	FY 2018	FY 2019	Last 12M
<b>12 Months Ending</b>	12/31/2017	12/31/2018	12/31/2019	09/30/2020
<b>Revenue</b>	2,561.70	3,652.00	4,805.20	3,625.70
<b>Gross Profit</b>	1,914.00	2,788.00	3,608.90	2,665.80
<b>Operating Income (Loss)</b>	-81.4	18.7	-501.5	-680.9
Accounting Standard	US GAAP			
<b>EBITDA</b>	-2	101.1	-305.3	
<b>EBITDA Margin (T12M)</b>	-0.08	2.77	-6.35	
<b>EBITA</b>	-44.9	40.7	-373.3	
<b>EBIT</b>	-81.4	18.7	-501.5	-680.9
<b>Gross Margin</b>	74.72	76.34	75.1	73.52
<b>Operating Margin</b>	-3.18	0.51	-10.44	-18.78
<b>Profit Margin</b>	-2.73	-0.46	-14.03	-25.93
<b>Dividends per Share</b>	0	0	0	0
<b>Total Cash Common Dividends</b>	0	0	0	0
<b>Depreciation Expense</b>	42.9	60.4	68	
<b>Rental Expense</b>	34.9	52.6	92.8	

Figure 2. Airbnb Inc – Adjusted Key Stats (Source: Bloomberg)

- **The High Leverage** – The company has already been dealing with debt issues before the pandemic. In April, the company secured another \$1 billion loan on top of a \$1 billion bond [5]. The heavy debt indicates that the company will be obligated to first pay their current debt holders once they get refinancing from the IPO. Therefore, the money raised from the IPO may not turn into a profit very quickly.

# **Undervalued or Overvalued?**

Compared to Uber's IPO Price – In its stock market debut, Uber's per share price was at \$45 for its IPO, which is very close to what Airbnb is aiming for [14]. However, in terms of profitability, Airbnb's combined losses are only a fraction of Uber's loss in 2018 [9]. Besides, even though both businesses are adopting the concept of shared economy, Airbnb has a more stable business model. Unlike Uber, Airbnb reinforces its customer loyalty by penalizing the owners or guests who cancel the booking, which significantly increases the switching cost for its customers [14]. As far as this is concerned, compared to Uber's IPO, Airbnb's price range of \$44 – \$50 seems to be reasonable and could even be undervalued.

## **Discussion on Comparison with Credit Card Companies**

According to Professor Galloway from NYU, the valuation of Airbnb could be compared with credit card companies since they are comparative to Airbnb in terms of their global demand, supply and brand equity [10]. Regarding this, given the projected revenues of \$5-6 billion for Airbnb in 2021, the 20x multiples could yield a \$100 - \$120 billion valuation. However, the credit card companies' services and operations are far away from those of Airbnb. Comparing with credit card companies would not be feasible, however, Prof. Galloway's approach on looking for asset-light high-margin business offers a useful perspective when thinking of Airbnb's comparables.

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