Monopolies with Growth: Tencent

OVERVIEW

HOLDING PERIOD: 10+ Years.

EXPLAIN LIKE I'M FIVE: Tencent's ecosystem spans gaming, ecommerce, music, cloud, and artificial intelligence. They are one of the largest entertainment companies in the world and use their strong cash and data generation from their core operations to fund and inform their venture capital arm.

They own the widest reaching social media platform in the world in WeChat, which – along with their gaming distribution – provides them with prospective advertising dominance in the future. They are also leveraging these platforms for potentially transformational growth in finance and ecommerce. They have an outstanding Berkshire-esque portfolio of investee companies, and have transitioned excellently from a China-only, state-protected imitator to a globally scaled patient innovator.

WHY CAN IT 10X:

- Investments pay off.
- Tencent's metaverse/advertising platform becomes dominant globally.
- WeChat Pay captures finance/ecommerce revenue at scale.
- Cloud growth rate halves over next 6 years. Still generates entire 2020 sales.

CONSENSUS VIEW:

- Fear around regulation and state involvement, especially following Ant Financial restructuring.
- Underestimating WeChat's dominance and optionality. Over emphasizing lack of MAU growth.
- Mistaking Tencent for a social media and entertainment company alone. Missing the success so far in branching into industrial B2B.

THESIS:

- Higher than expected (consensus 15% pa) sales growth stemming from growth into offshore markets and alternative (B2B) verticals.
- Multiple expansion on changing sentiment around regulations.

CATALYSTS:

- Potential for private companies in investment portfolio to list publicly.
- Non-core businesses expanded on in financials causes multiple expansion.

RISKS:

- Increasing anti-monopoly regulation prohibits M&A and further monetisation of existing products.
- Bytedance's Duoyin/TikTok becomes the better social media product, taking eyeball time away from WeChat.

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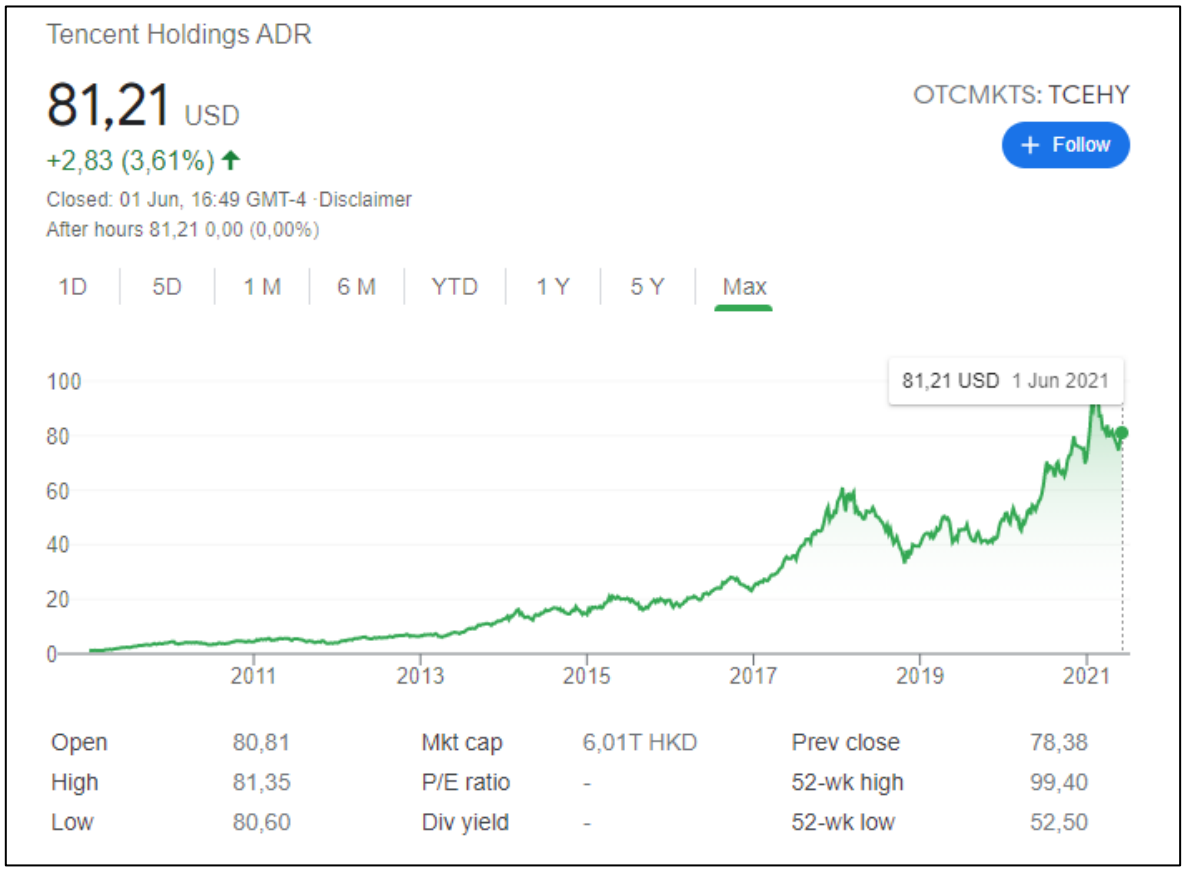
Eyeball Metrics

	Tencent	Hang Seng Index
Shareholder Returns		
90 Day	-13.1%	-0.7%
1 Year	44.3%	18.1%
3 Years	55.2%	-4.0%
5 Years	266.5%	39.6%
Valuation		
PE	27.4	11.5
PEG	1.4	-
PB	6.4	0.9
Average Analyst 3 Year CAGR Estimates (data)		
Sales Growth	15.3%	12.8%
Earnings Growth	14.8%	-
FCF Growth	15.6%	-

Share Price History



Eyeball Valuation Multiples

	USD'b	
Tencent M'cap	751.48	
Investment Portfolio	280	
M'cap ex Portfolio	471.48	
Revenue (2020)	73.7	
Revenue (2021)	92.1	*Assuming 25% growth yoy; 3Y Avg: 27%*
Total Forward P/S	8.16	
Core Forward P/S	5.12	
Net Margin	28%	*LTM: 33%; 3Y Avg: 28%*
FCF Margin	25%	*LTM 33%; 3Y Avg: 25%*
Total Forward P/E	29.1	
Total Forward P/FCF	32.6	
Core Forward P/E	18.3	
Core Forward P/FCF	20.5	

Eyeball Questions

1. **Can sales double in five years?** Yes – offshore expansion, B2B services, cloud, finance, and ecommerce.
2. **Ten-year outlook?** TenPay disrupts Chinese banking system, adoption of metaverse advertising globally, continued excellent investment portfolio.
3. **Competitive advantage?** Most scaled and all-encompassing platform (WeChat) and unrivalled media distribution network.
4. **Differentiated business culture?** Patient and quiet founding team, very customer-centric, hyper-competitive and agile work environment, with freedom to trial ideas.
5. **Societal contribution?** Basically, the infrastructure underpinning Chinese life.
6. **Worthwhile returns?** Platform economics are fat tail distributed.
7. **How is capital allocated?** Patiently, shifting from core consumer entertainment to industrial internet and strategic global investments.
8. **What is the market missing?** Cloud, B2B, AI and non-core businesses have a long growth runway concurrent with an inimitable data advantage from WeChat for investments.

Introduction

One investment fund I admire greatly is Baillie Gifford. Currently, their top holding is Tencent, at roughly 6% of their flagship portfolio. With Bridgewater punting Chinese equity, Munger buying Alibaba and many Western investors taking increasing notice of the company, now seem like an opportune time to write about the media-shy Tencent.

I believe this company is one of the most high-quality and resilient assets an investor could have in her portfolio. It carries swathes of optionality in its existing platform, and is developing into one of the most formidable global venture capital firms with holdings in over 350 companies, including: Uber, NIO, Nvidia, Sea Limited, Ubtech, Go-Jek, Snap, and Flipkart.

The company's mission is to "improve the quality of life through internet value-added services" and, more recently, to enhance the connectivity between the "consumer internet" and the "industrial internet".

Tencent sits at the nexus of several growth hubs currently: the Chinese consumer, the mobile/virtual world, and broader Asian B2B tech. While leading their markets, they still have large, growing, under-monetized and under-penetrated markets in mobile advertising, ecommerce, payments, media, and gaming. Theirs is a great business, with high margins, strong cash generation, recurrent revenue, and minimal capex requirements, plus they are founder-operator led with a strong executive team who've shown themselves to be focussed on sustainable, long-term value creation.

The WeChat network – cheekily called "the operating system of China" – spans work, home, retail, transport, and social life within the country. With over 1.2 billion people spending an average of 90 minutes on their app, Tencent is in the enviable position of being able to direct traffic across their infrastructure, towards their other offerings and various holdings.

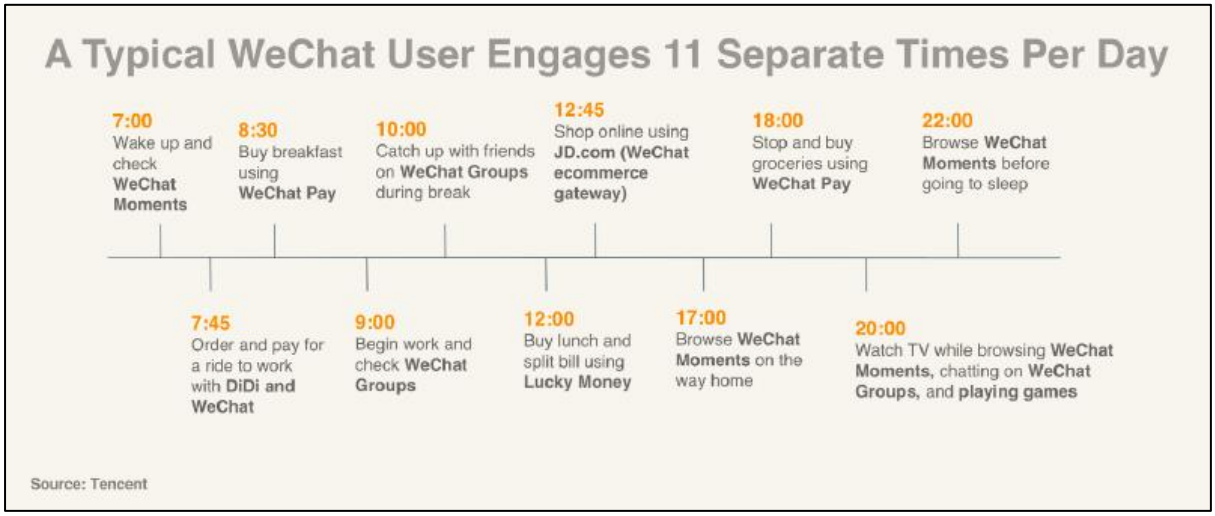


Figure 1: The average day of a WeChat user (Source: John Huber, Saber Capital Management)

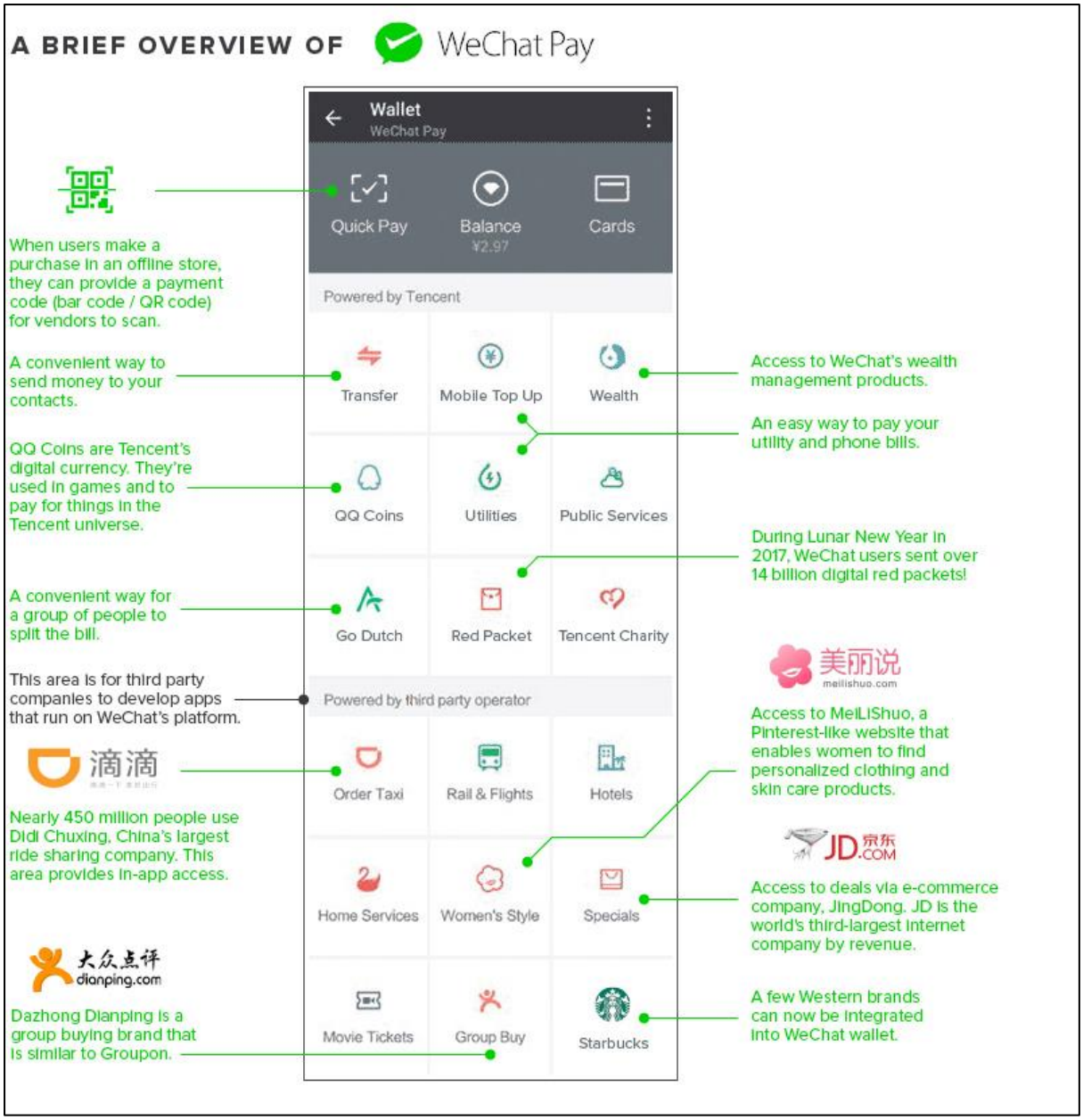


Figure 2: A brief overview of WeChat Pay (Visual Capitalist)

The real key to Tencent's investment thesis lies in their capital allocation. Per Chief Investment Officer, Martin Lau, as of last year, they'd invested in roughly 800 companies, of which 160 have grown from start-up to a market value of >$1 billion USD. This places them amongst Sequoia Capital and SoftBank as the most successful venture capitalists out there.

By leveraging WeChat data, domain expertise (most of their investments are in gaming, media, and ecommerce), and the cash generation from their core business, Tencent has put themselves in an ideal position to be one of the leading Asian investment houses, attracting both deal flow and talent.

Additionally, Tencent offers investors a margin-of-safety way of betting on the Metaverse. Currently an incredibly speculative space, the Metaverse is the term given to the idea that the next evolutionary phase of the Internet will be an "always-on, real-time world in which

an unlimited number of people can participate at the same time", spanning the physical and digital worlds. Think Ready Player One.

Each of these themes will be unpacked as we go on. Tencent's core business, their capital allocation prowess, and their future Metaverse prospects all layer into the investment case. Without further ado, let's dive into Tencent.

Tencent: A Deep Dive

Context: WeChat

Most are fairly familiar with entertainment-social-networking giant. At a market cap of roughly $738bn, Tencent is the world's 9th most valuable company and competes fiercely with #10, Alibaba, in Asian fintech, ecommerce, advertising, and venture capital.

For those unfamiliar, Figure 3 has a quick timeline with Figure 4 below it tracking revenue over time to some of their more key acquisition and product developments.

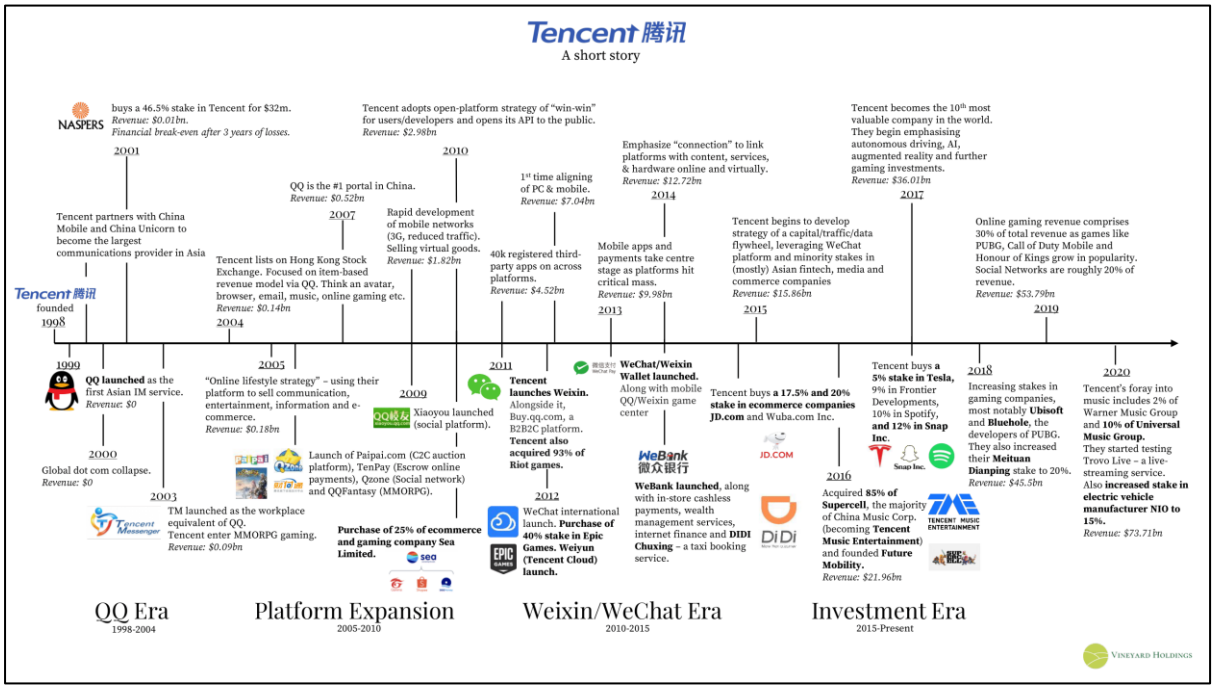


Figure 3: Tencent timeline, you'll need to zoom in for this (1998-2020, Vineyard Holdings).

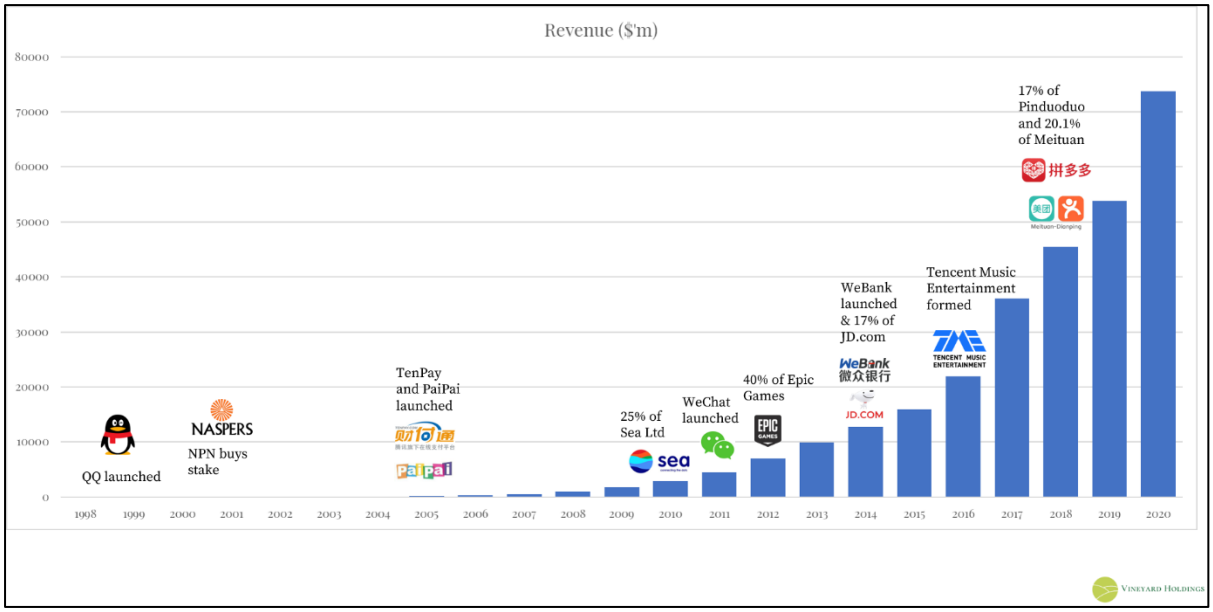


Figure 4: Tencent's historical revenue, major acquisitions, and product development (1998-2020, Vineyard Holdings)

In a nutshell, Tencent leveraged their dominance of social media and gaming (via first QQ and then WeChat) in creating a platform from which people can – among other things – shop online, pay for goods at physical stores, settle utility bills, split dinner tabs with friends, hail taxis, order food delivery, and book theatre tickets, hospital appointments and foreign holidays (Figure 5).

	Facebook (Core + Messenger)	Instagram	WhatsApp	WeChat	TikTok/Douyin
Messaging	✓	✓	✓	✓	✓
Advertising	✓	✓		✓	✓
E-Commerce	✓	✓		✓	
Digital Content	✓	✓		✓	✓
Finance			✓	✓	
Gaming	✓			✓	
Group Payments/ Purchases				✓	
Online-to-offline services				✓	
Utilities				✓	

Figure 5: WeChat vs Facebook, Instagram, WhatsApp and Tiktok (2021, Vineyard Holdings)

Texting has always been quite pricey in China, so unlike in the US – where large telecoms bundled texting with other phone services – WeChat was able to quickly fill the instant messaging gap and hit critical mass. Many Chinese adopters skipped immediately to

smartphones, leapfrogging personal computers entirely. This is why roughly 50% of all online purchases in China are made via mobile, as opposed to the 30% in the US.[1]

WeChat's exponential growth let them branch into other things like payments and ecommerce. It's become a well-known network-effect-type-flywheel where new merchants join the platform to access the hefty customer base, adding more selection and more reason for new members to join, all while WeChat takes a slice of each transaction. Since they prioritize user experience, the limited ad space carries a heavy premium. Further, links to Tencent's competitors often register as spam, depriving competition of traffic.

The fragmentation of the West's app ecosystem makes it challenging for any one app to build as robust a network as WeChat has in China. Because many apps now have large (if weaker) networks, gaining Western market share is difficult, even for WeChat. To contextualize WeChat with names most readers will know better, Figures 6, 7, and 8 have rough estimates of the leading social network platforms in the world. Broadly speaking, there's still a long runway for WeChat to monetize, however they are nearing their steady state within their China and will need to look outside for member growth.

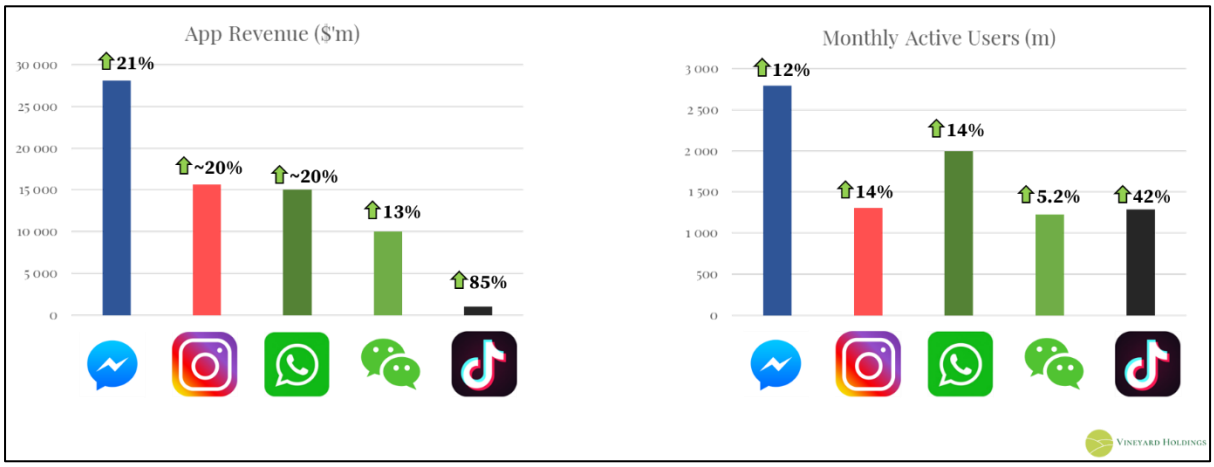


Figure 6: Social media companies' revenue and MAU (Source: company financials and BusinessofApps)

[1] For an in-depth read on WeChat's features, China analyst Matthew Brennan has a great write up here and Andreessen Horowitz' Connie Chan has another here.

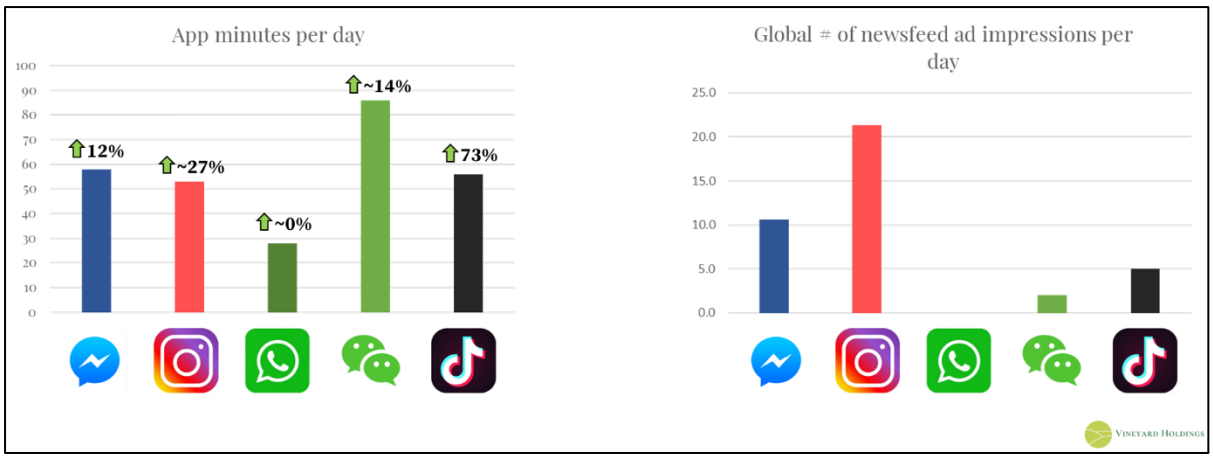


Figure 7: Social media companies' App minutes and number of newsfeed impressions per day (Source: company financials and BusinessofApps)

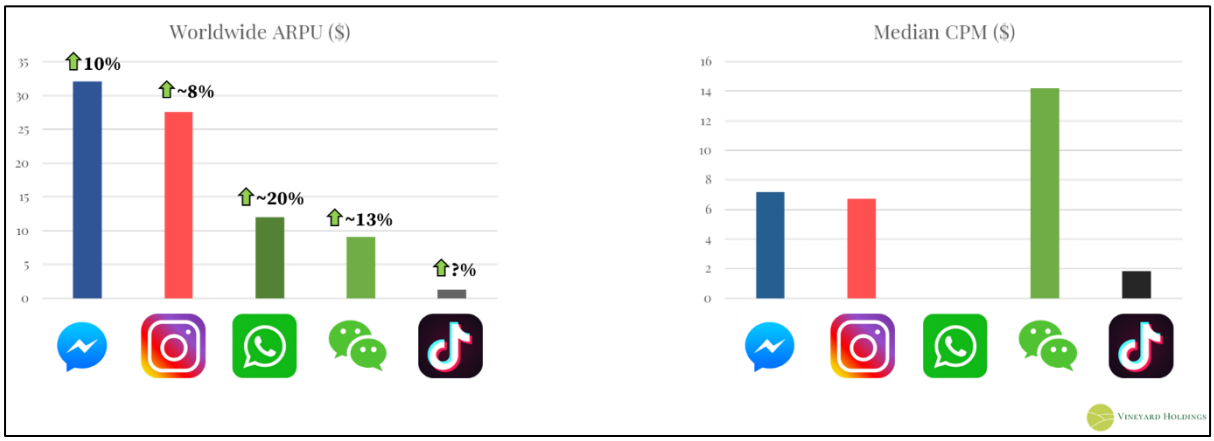


Figure 8: Social media companies' worldwide ARPU and median CPM ((Source: company financials and BusinessofApps)

Understanding WeChat's prevalence is key to understanding the core structure of Tencent. In all of their investor presentations, Figure 9 is the way they like to show this structure. They are the clear market leader in all their core verticals (barring cloud services), and many of their allied investees hold second and third positions.

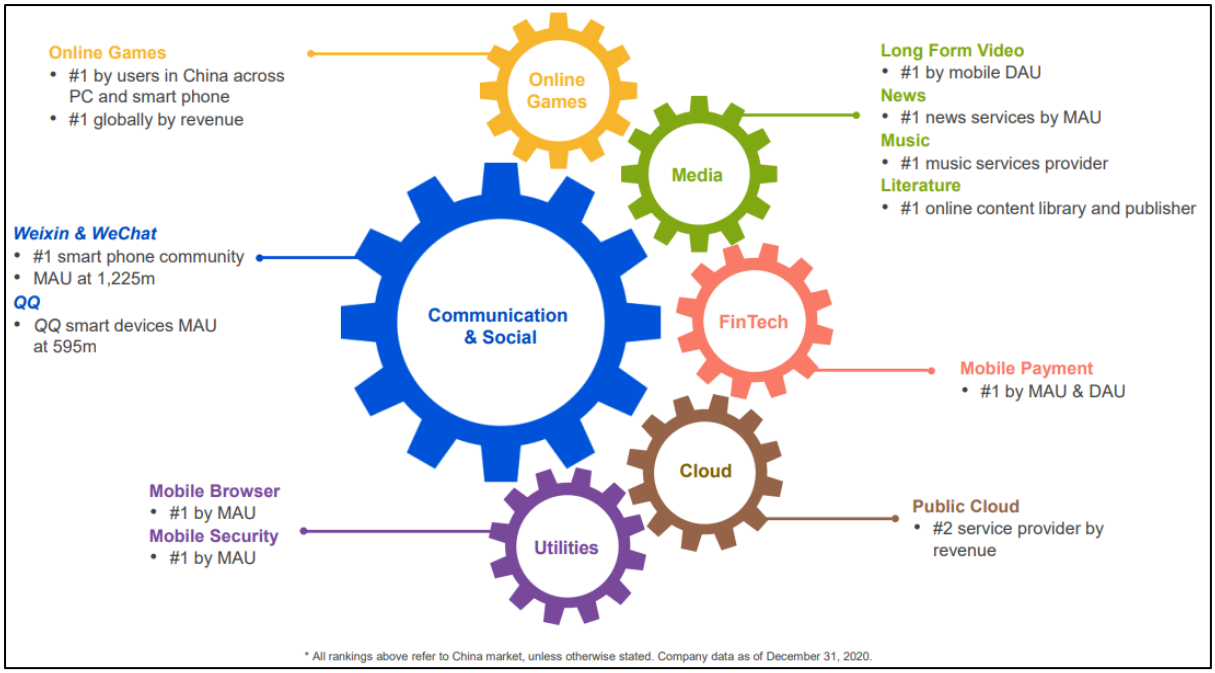


Figure 9: Tencent key services (Source: Q420 Earnings Presentation)

The true importance of WeChat lies in their dominance of the user journey from end-to-end. Chinese users can operate their day-to-day almost without leaving the WeChat app. Apple fight tooth and nail for their control over the App Store, notoriously disallowing Microsoft's Game Pass from acting as a Netflix-like portal for users to play games through. Yet, Apple has allowed WeChat – via their Mini-Programs – to become the de facto portal through which users do well... everything.[2]

Analyst Lillian Li calls this "owning the funnel". It is something all Chinese tech companies compete for. The commoditization of features and functions makes owning the end-user (and the way they are monetized) the "closest thing to a moat". Owning this funnel gives Tencent control over what products consumers see, and how those products are compared, converted into sales, and fulfilled.

In all of these, the use of algorithm-driven personalisation both increases buy-rates and increases the distance from competitors as WeChat gathers individual user data. Additionally, having built the platform infrastructure (both online and in terms of delivery logistics) gives Tencent the ability to control trust – a rare commodity amongst the Chinese consumers.

To quote from China Playbook's excellent translation of Meituan-Dianping co-founder, Wang Huiwen's masterclass on strategy for internet businesses:

> *"When your app offers more services, the average customer acquisition cost (CAC) per service goes down, and CAC is the most important cost for Internet businesses... More services lead[s] to higher usage frequency. Higher usage frequency results in higher retention, which in turn leads to higher lifetime*

[2] In an interesting stat, when asked if they would leave WeChat or get a different phone should Apple ban WeChat, 95% of Chinese respondents said they would get a different phone.

value (LTV)… The higher LTV means that acceptable user acquisition cost has also increased."

This flywheel is explained in Figure 10 below:

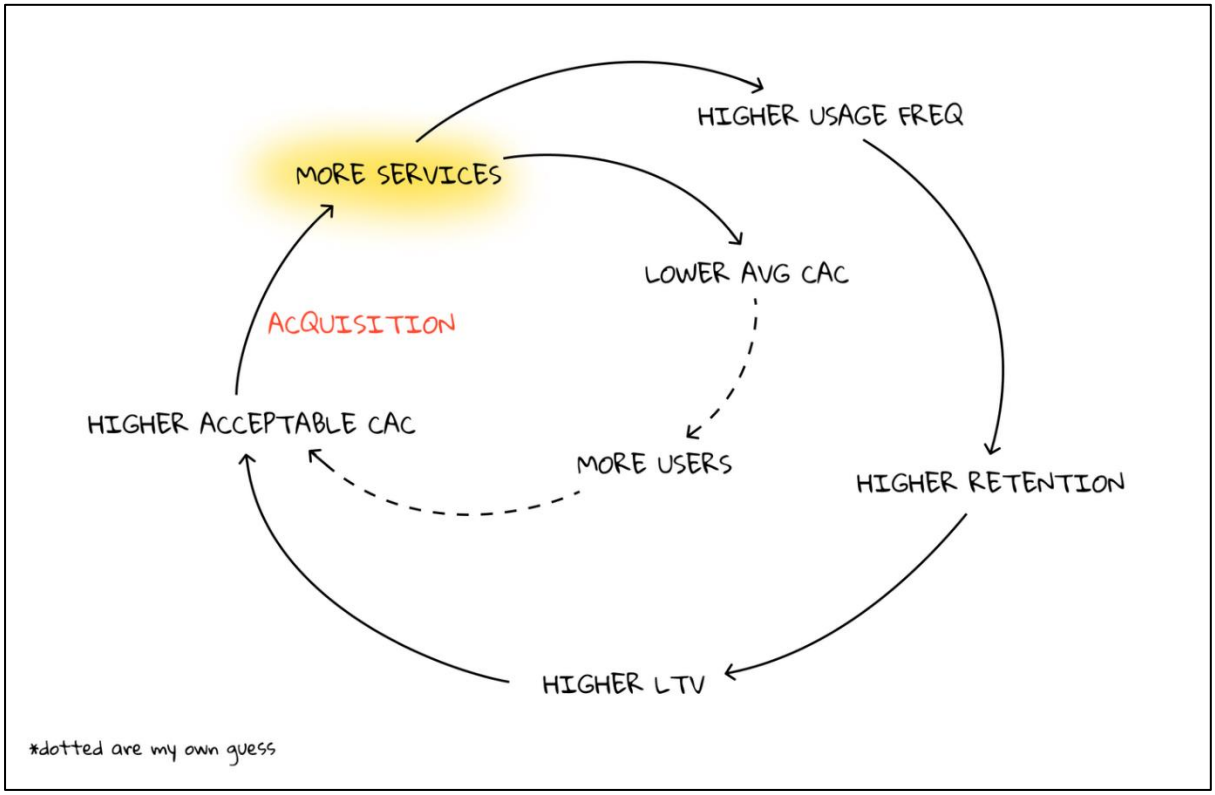


Figure 10: Meituan's Platform Strategy (2020, China Playbook Substack).

Consequently, strategy in the internet age becomes increasingly about acquiring users at costs that are justified only when looking through the eyes of an ecosystem. For instance, bike sharing makes very little money, but for Meituan the acquisition of Mobike is about acquiring their customers and stacking use cases for their app.

Historically, firms would optimize for cost-leadership (Costco) or segmented differentiation (BMW vs Volkswagen). Today – through the hyper-personalisation and big data provided by the internet – customers become renewable, data-rich assets themselves. Network effects shift cost-leadership to experience-leadership, as each additional user makes the experience of WeChat worth a little more.

I mentioned above that Apple "allowed" WeChat to create an OS through their Mini-Programs. So, what are these? Well, most are mini-apps inside of WeChat which can be developed faster than downloadable apps and are accessible without users having to download or install them. It's through these apps that consumers do most non-chat things. [3]

[3] Azoya has an excellent report on Mini-Programs here.

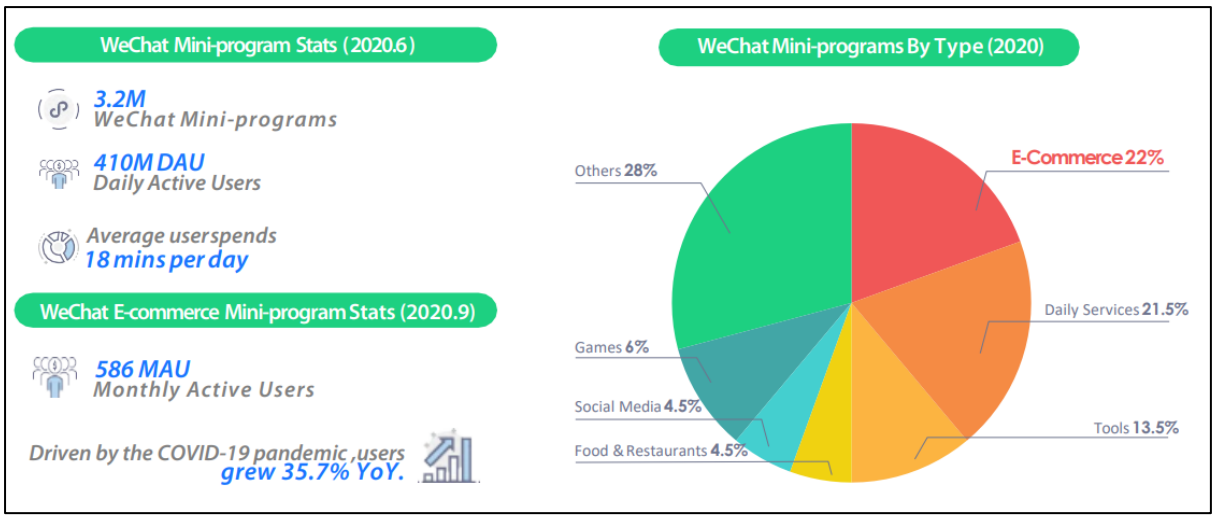


Figure 11: Types of WeChat Mini-Programs (2020, Azoya)

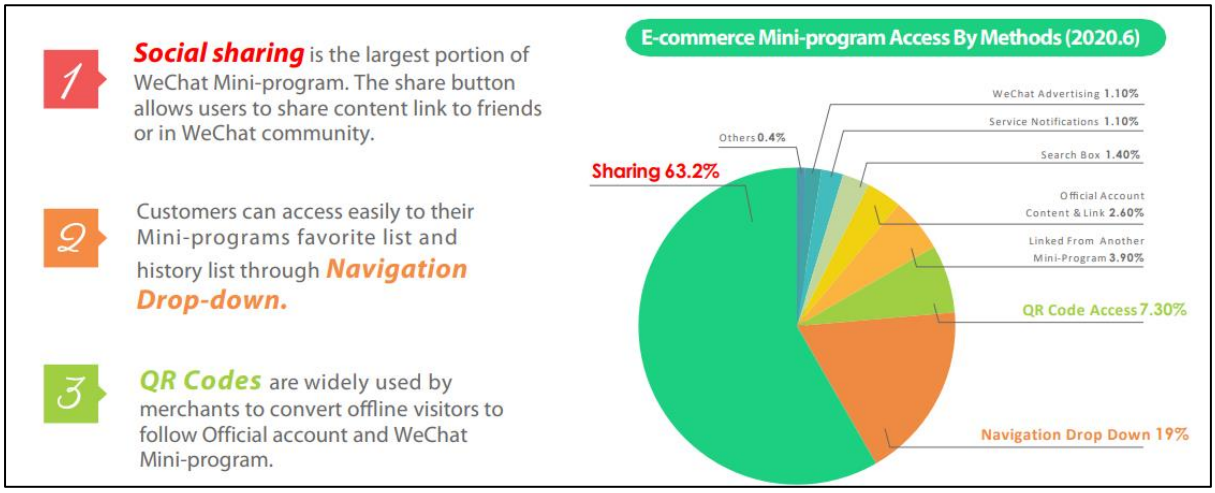


Figure 12: How Users Access WeChat Mini-Programs (2020, Azoya)

Note how large social sharing is? Most of these apps are driven through people sending them to one-another. To prove this, Mini-Program usage has grown between 35% (e-commerce) to 71% (videos) over 2020, as more people looked online for entertainment and necessities. As for demographics, roughly 71% of users are female, and 60% are under 30 years old. Both of these populations are rising in spending power broadly.

From a supply-side, Mini-Programs are cheaper than developing individual apps, are highly customizable, and are designed with easy sharing in mind. Because of this, they have become a near-necessity for Chinese merchants. Perhaps even more importantly, WeChat Mini-Programs leads the way for merchants to engage in new ways with their customers (Figure 13).

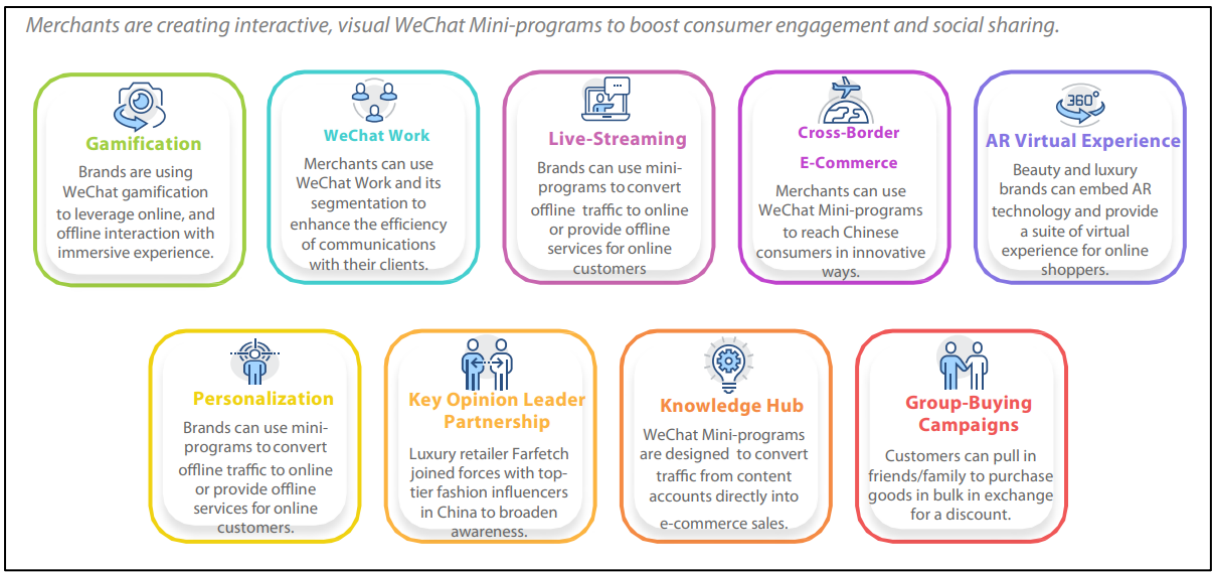


Figure 13: WeChat e-Commerce-Friendly Mini-Programs (2020, Azoya).

In a nutshell, these new online channels lock merchants and customers into the WeChat platform. They lower customer acquisition costs for merchants and improve the experience for customers. Livestreaming and group buying are changing the B2C dynamic. Interestingly, of all the superapps, WeChat is the present world leader for whatever could become the Metaverse: customers can play games, send gifts, personalize products, transact inside shops, and pay via WeChat Pay, without ever moving from their WeChat app.

Contextually, app usage has ballooned as people stayed at home during the pandemic. We'll have to see how long this usage level lasts, but it's doubtless caused new habits to be formed in the interim. App Annie has a data-rich report on the state of mobile in 2021. Here are a couple highlights from it:

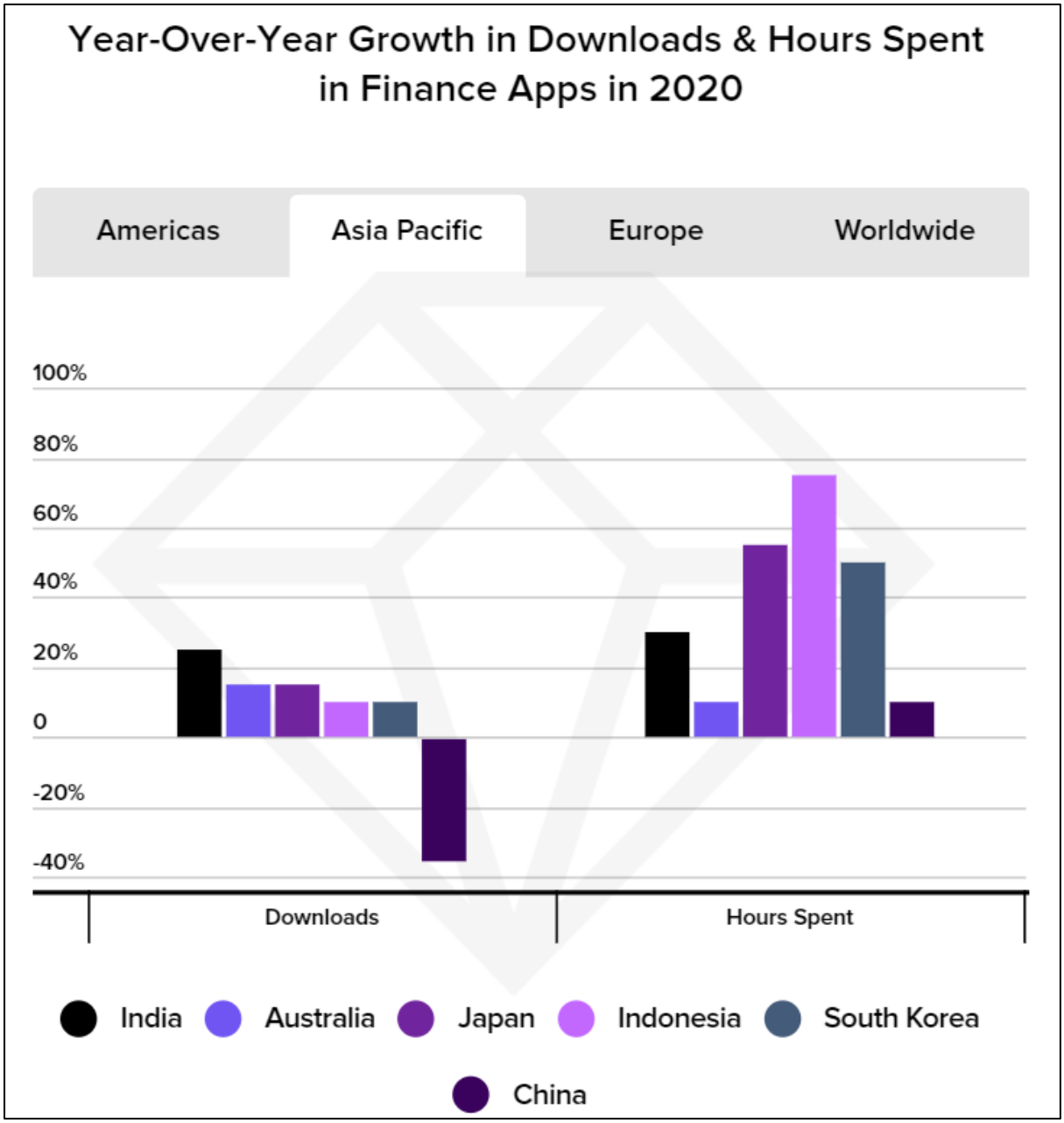


Figure 14: Growth in financial app downloads (2020, App Annie)

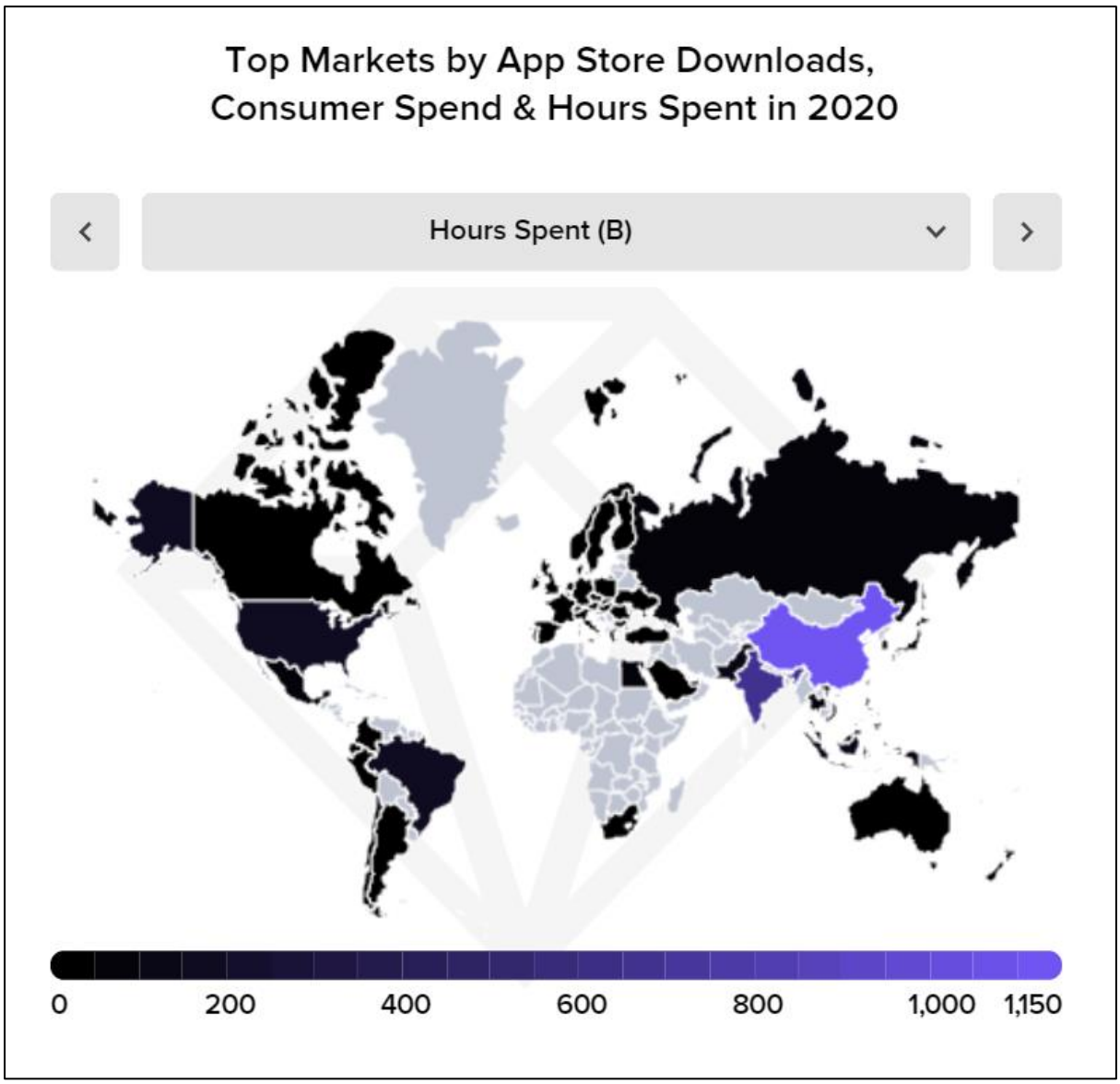


Figure 15: Top Markets by Hours Spent (2020, App Annie)

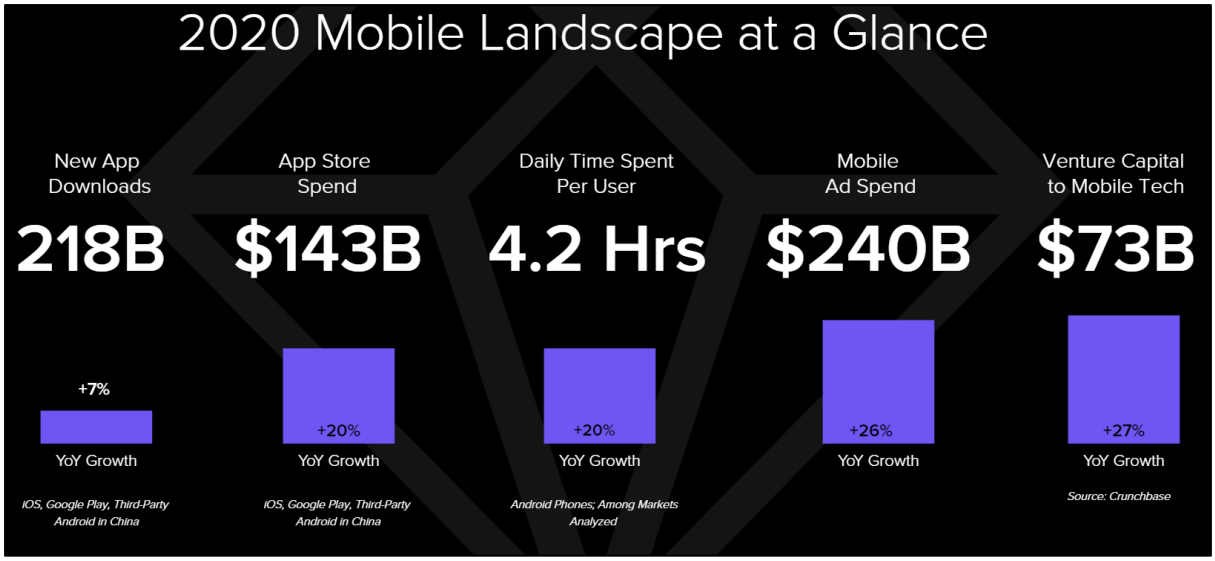


Figure 16: Year-on-year growth in the global mobile landscape (2020, App Annie)

Within one of the largest mobile markets in the world, WeChat is really the only true level 3/super-aggregator. A bit of a lengthy quote from Ben Thompson:

> *"Level 3 Aggregators do not own their supply and incur no supplier acquisition costs (either in terms of attracting suppliers or on-boarding them) … Social networks are also Level 3 Aggregators: initial supply is provided by users (who are both users and suppliers); over time, as more and more attention is given to the social networks, professional content creators add their content to the social network for free…*
>
> *Level 3 aggregators are predicated on massive numbers of users, which means they are usually advertising-based (which means they are free to users). An interesting exception is the aforementioned App Stores: in this case the limited market size (relatively speaking) is made up by the significantly increased revenue-per-customer available to app developers with suitable business models (primarily consumable in-app purchases) …*
>
> *Super-Aggregators operate multi-sided markets with at least three sides — users, suppliers, and advertisers — and have zero marginal costs on all of them."*

36.2% of all time spent on apps in China are spent on Tencent apps, and 11% of all online advertising revenue is spent on Tencent adverts. This suggests not only does Tencent have the market dominance on both the advertiser and the consumer sides, but that there is also decent room for monetisation.

Finally, the team at Macro Ops has a great review of social media through the Uses & Gratifications (U&G) framework here. The idea here is basically that media scores on entertainment, informativeness and irritation. High scores on the first two attributes and low on the third result in higher media usage and user satisfaction. Using this, Alhabash and Ma (2017) found that:

a) There is an inverse relationship between a user's network size and the intensity to use a social media platform.

b) The depth of connection between friends is a better indicator of time spent on the platform.

Think about it. You use Facebook to keep tabs on people, Instagram to self-promote, Twitter for information and Snapchat or WhatsApp for your close friends. Essentially, the Macro Ops article concludes that Snapchat is going to keep taking market share from Facebook on the basis that it is built with better social connections in mind and is more fun to use. If that thesis holds, then WeChat is set to eat all other lunches. They just need to figure out how to actually grow outside of China.

Context: Beyond WeChat

Beyond WeChat, Tencent is a veritable powerhouse in all of their other industries too, leading all bar cloud infrastructure. However, they face a behemoth of a general competitor in Alibaba, an investment competitor in Softbank, an emerging wave of entertainment competitors such as Bilibili, NetEase and Bytedance, and increasing antimonopoly regulation.

Dividing up their operations into Core and Investments will help to conceptualise the different competition Tencent is facing. I'll touch on the Investments (and eCommerce) later (*The Battle Between Alibaba and Tencent),* and the Core here.

Figure 9 above highlighted gaming, media, fintech, cloud and utilities as core to Tencent's broader structure. They are, and I'll unpack them below. There's also been some buzz around their "expansion to manufacturing", so I'll touch on that too.

Gaming

Gaming has a rich history in Asia. Some of the first ever online role-playing games (MMORPGs) were developed and released in South Korea. These games – which mostly occur in an open world, where players can develop their characters and communities over time – proved to be wildly popular with Korean and later broader Asian audiences in the early '90s. They remain so today.

Per Graham Rhodes of Longriver Investments, contrary to the West, the Asian consumers often developed far more brand loyalty to computer games than they did to general consumables. This is partially because of the nature of these games. In the West, early games were majority bought complete on a CD for a plug-and-play experience. In Asia, these MMORPGs were free-to-play and pay-to-win. Users would customize their characters with paid for items (much like Fortnite today).

Because of this, these games don't have an end. People spend a decade of their lives building up their online character and community, creating an incredibly sticky audience. Furthermore, since these games were so widely played in the early 2000s, the stigma around gaming is far less in the East than in the West.

Figures 17 and 18 below shows a summary of Tencent's gaming position. In a nutshell, gaming competition in China (and globally) is heating up. Big competitors like Bytedance, Alibaba and NetEase are investing heavily in gaming. All have released well-received games over the past year. Smaller studios are also growing in threat as – while most games will go by the wayside – a single game's virality can transform a studio's potential. To match this,

Tencent have been investing heavily into gaming as well – taking more stakes in a greater number of companies, and at earlier stages than usual.

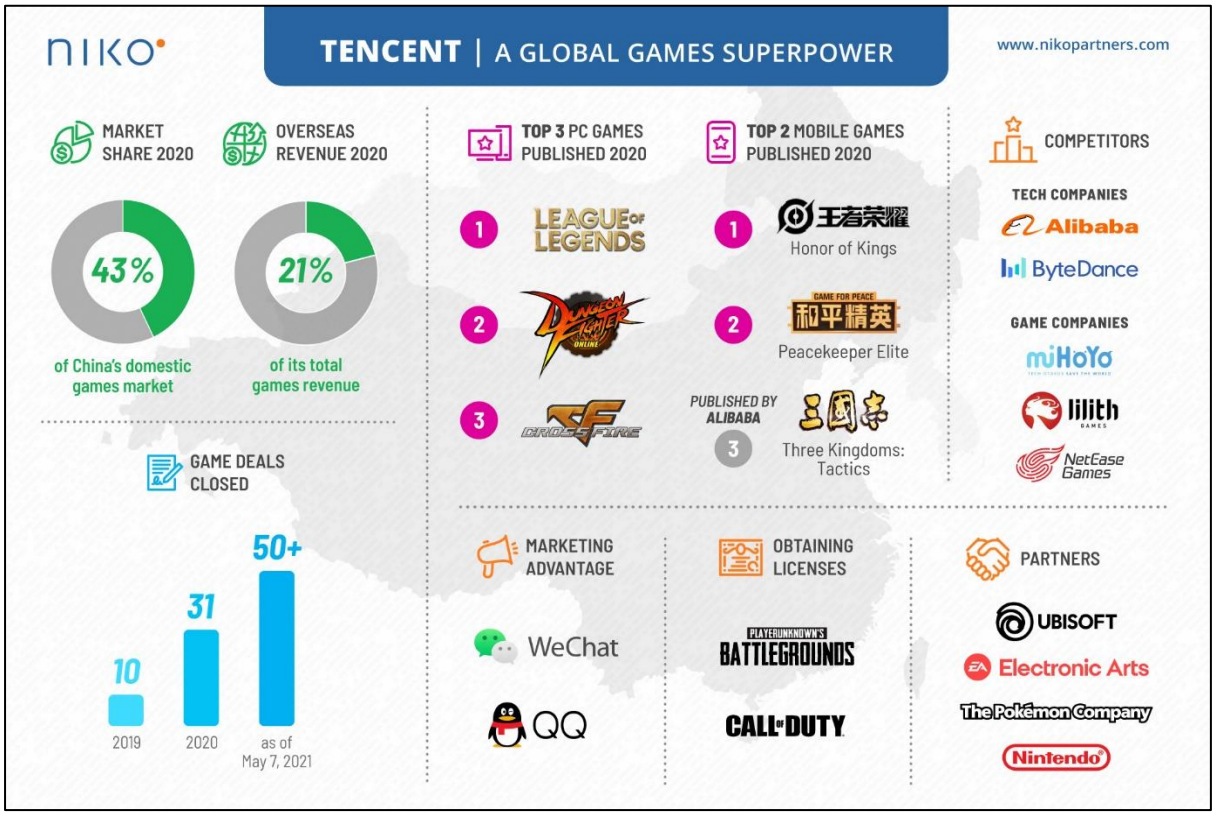


Figure 17: Tencent's gaming position globally (2021, NIKO Partners)

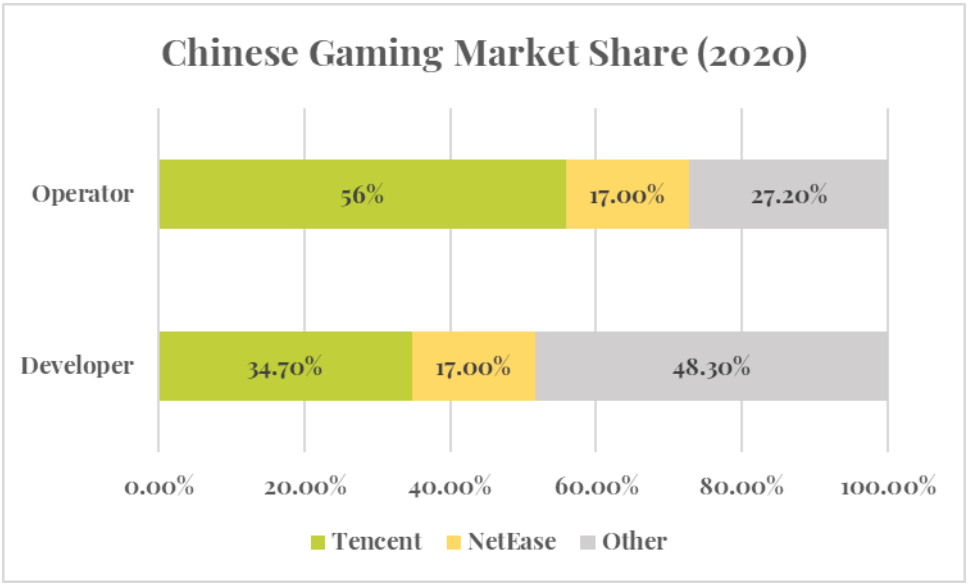


Figure 18: Chinese Gaming Market share by revenue (3Q20, Gamma Data)

In addition to an impressive IP base, Tencent has very strong development, operations, and publishing capabilities. Their cloud infrastructure and the ownership of distribution, marketing and payment channels also give them a hefty moat in the gaming space. They

are major shareholders in livestreaming platforms (Huya and Douyu) and have key investments and good relationships with eight of the world's top ten gaming companies.

In terms of strategy, they (either in-house or within their investees) typically develop new IP, operate the game on PC and extend it to mobile thereafter. The internal studio tends to follow the new trends and genres, relying on distribution to achieve success rather than necessarily innovative game play. As games can layer on social experiences, they create deeper network effects and open up new monetisation (usually through paid character customisation)

One other avenue Tencent is growing in is their publish-and-take-a-cut-of-revenues approach. They work with local and global developers who want to distribute in China, occasionally taking an equity stake in the developing company. Even with Tencent taking a cut of revenues, developers often see higher profits overall due to Tencent's hyper effective operations, marketing, and distribution.

Recently however, Genshin Impact (GI) – a AAA, free-to-play mobile game – launched, hitting roughly $400 million revenue in two months (on a budget of ~$100 million) and winning Best Game 2020 awards from both Apple and Google. It's a beautifully designed game, and the studio has really done something exceptional with it technically. But the biggest shift in the narrative caused by GI is that studios no longer need Tencent to pull off such a large budget game.

Circumventing the Tencent ecosystem, GI-creators miHoYo marketed via a range of other channels (Twitch, YouTube, Reddit, Discord, etc). They also set the first well-received example of a truly open-world, console-like experience on mobile.[4] The implications of miHoYo's game are – in summary – that mobile-first gaming is huge and can compete with console in quality; that the Chinese studio competition is fierce and impending for East and West developers alike; and that the free-to-play model is likely the future.

Gaming, as a business, has fantastic flywheel effects (Figure 19). It nevertheless is a tricky business to get right. On the one hand, franchise games have excellent economics: devoted customers, low capex requirements, regular and recurrent income, and hefty pricing power. On the other hand, reinvesting earnings is tough as many successful studios struggle to produce more than one massive hit.[5]

[4] Master the Meta go far more in depth in their article here. The game does face unique challenges in its mechanics and user-incentives.
[5] An excellent read on the newly developing revenue models of gaming companies: Substack author SuperJoost has a good article here.

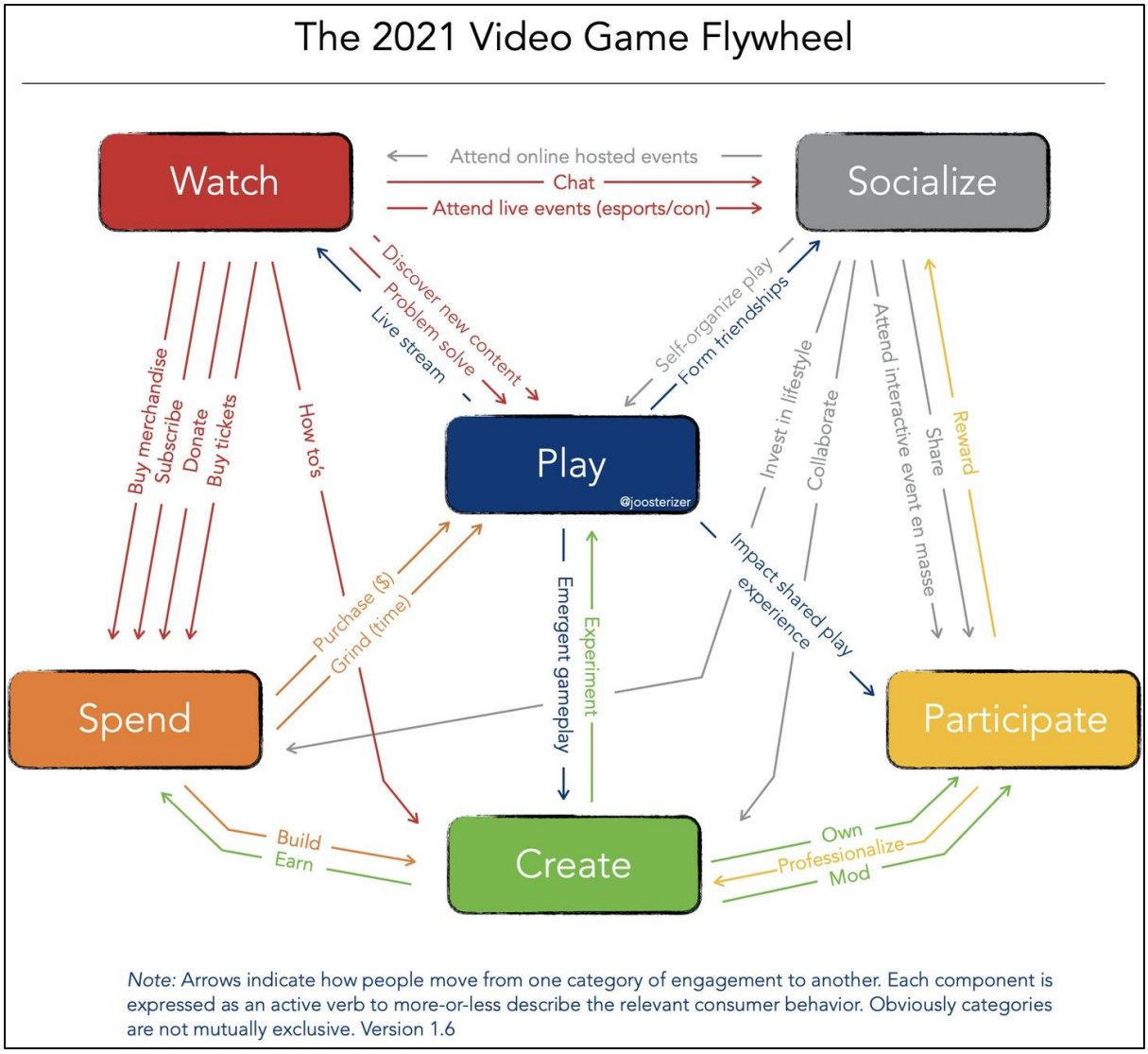


Figure 19: Video Game Flywheel (2021, SuperJoost Substack)

So how does this impact Tencent? Well, structurally, it gives them some advantages. Tencent is effectively in a duopoly with local competitor NetEase, and because of CCP regulations, foreigners need to partner with either one to enter the ~1bn consumer Chinese market. Tencent and NetEase are able to pick the provably best games and take up to 70% of revenues for distribution help. To put this in context, the Apple App store takes only 30%.[6]

Because most of Tencent's games are MMORPGs, with a very long product cycle, they are able to earn higher returns on upfront marketing costs, which are also minimal given their owning of WeChat (which also serves as data capture for user feedback).

Notably, Tencent has made excellent investments into studios in the past. They are the largest shareholders in Activision Blizzard, Riot Games, Bluehole, Supercell and – most importantly – Epic Games. Epic owns and licenses Unreal Engine, the software platform which, alongside competitor Unity, underpins the development of nearly every major game

[6] For an understanding of NetEase, I strongly recommend Graham Rhodes' article. I will not go too deeply into them for this article – it will be long enough already.

worldwide. Tencent's 40% stake in Epic gives it access to competitors pipeline games before their release.

In July 2019, Tencent won a lawsuit giving them game copyrights in third-party live broadcast. This gave them major control over the game broadcast market. Currently, this "Twitch-for-Asia" market is dominated by Douyu and Huya (in which Tencent is the largest shareholder), who together have a 53% share of the market. Kuaishou has 18.5% and Bilibili has 17.1%, both are partially owned by Tencent too.

Looking forward, in a continuously evolving world, Tencent will need to strengthen its ecosystem over time. Merging Huya and Douyu, partnering with companies like Nintendo, maintaining the dominance of WeGame and WeChat, acquiring companies like Leyou, and investing in companies like VSPN will all be useful moves.

Similarly, Tencent will need to expand internationally. This has never been easy for big Chinese tech but is made easier by reciprocal partnerships and Tencent's investment strategy. Furthermore, it is unlikely that any of the FANG companies will too easily encroach on the West's gaming sector.

With Microsoft, Sony, Tencent and arguably Apple being the largest players in the space, for Facebook, Google, Amazon, or Netflix to compete, they will have to commit considerably more than they currently have. Most successful titles depend on positive network effects and have made multi-player game play central to their appeal. Platform exclusivity does not make sense in that context. More so, with the exception of outright acquiring one of the major publishers, Big Tech will have a really hard time and likely no interest in establishing themselves as content creators.

In the push for global, Tencent's approach seems to be multi-pronged[7]:

1. Increase M&A, particularly of non-controlling stakes, in overseas developers (like Riot Games and Supercell).
2. Publish internally developed and licensed games overseas (Honour of Kings).
3. License internally developed games to key partners with distribution (Sea Limited).
4. License other developers' IP to develop new games for global market (Call of Duty Mobile, PUBG Mobile)

Beyond these, eSports is a huge growth opportunity for Tencent. It is difficult to overstate the dominance that Tencent has in this arena too. Zhao and Lin[8] have an in-depth study of the eSports industry in China, how Tencent fits in (read, dominates), and how the government might look to regulate it. In a nutshell, their take is that the state are happy to, via Tencent, set "parameters of discourse" but allow people to determine what those parameters mean precisely. Their analogy – that Chinese eSports exists in a techno-nationalist "umbrella" – puts the state as the "umbrella cloth" covering the entire ecosystem, and Tencent's role as the "umbrella stand". The whole thing rests on Tencent's platforms, investments, and infrastructure (livestreaming, distribution, marketing etc.). Zhao and Lin go out of their way to explain how nuanced the ecosystem is, but also hammer

[7] Thanks to NIKO Partners 2020 Report on Tencent's gaming strategy for this insight.
[8] Yupei Zhao & Zhongxuan Lin (2020): Umbrella platform of Tencent eSports industry in China, Journal of Cultural Economy, DOI: 10.1080/17530350.2020.1788625

home that there is “nearly impossible for eSports professionals to opt out of participating in Tencent eSports”.

Media

Outside of gaming and WeChat, Tencent is one of the most important media companies in the world. Alibaba notwithstanding, this is also where they face their toughest competition from Bytedance. Since consumer attention is zero-sum, all forms of entertainment compete with each other in some sense.

In online TV, Tencent (394 million monthly active users) competes with Alibaba’s Youku (394 million) and Baidu’s iQiyi (348 million). Youku’s financials are not released, but while iQiyi showed no growth from 2019 to 2020, Tencent video grew 22.3%. Currently, Tencent Video’s revenue is three times that of iQiyi. Previously, both Alibaba and Tencent were negotiating for an iQiyi acquisition but pulled out in November 2020. It seems likely that iQiyi will see a declining user base over the coming couple years, further bolstering Tencent’s market share.

In short form videos, Bytedance owns the market with Douyin/TikTok, but Kuaishou is a close second. This is an incredibly important battleground. Over at Quest Mobile, they reckon 20% of the time spent by Chinese internet users is on “short video apps”. Figure 20 below shows the rough market division. Douyin and Kuaishou (in which Tencent has a 20% stake) are the clear market leader.[9]

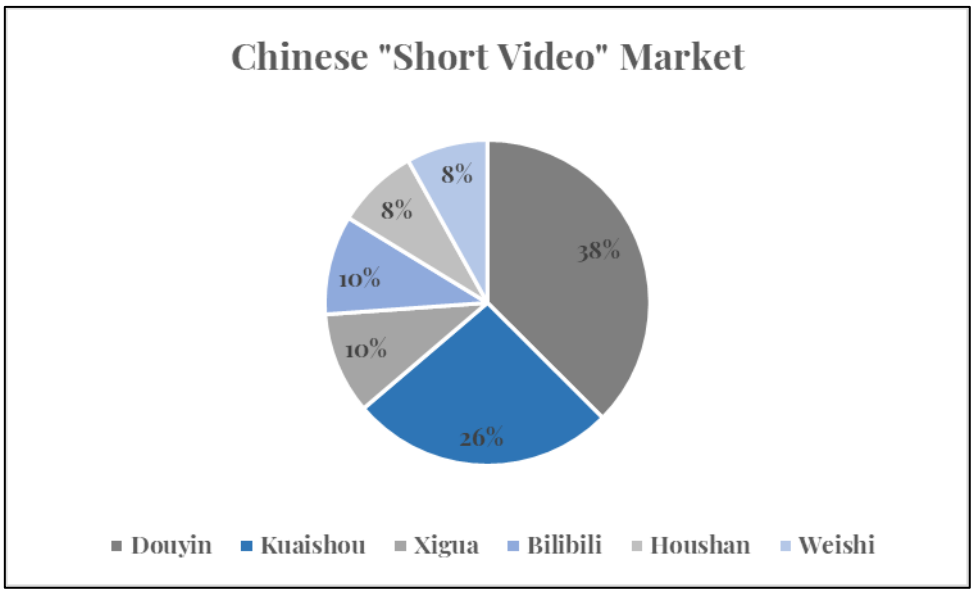


Figure 20: The Chinese short video market. Tencent has a stake in blue coloured companies (2020, Questmobile)

Per Statista, only 18% of the Douyin users have more than ¥1000 spending power, with the majority having below ¥200, and the average user is being late teens, early 20s. This age group is one of the toughest to break into and will likely increase in ARPU as they age.

For this reason, both Douyin and Kuaishou are moving heavily into livestream, longer form video and eCommerce. Kuaishou has 300 million daily active users, of which 170 million

[9] I recommend daxue consultnig’s article on the Chinese short video market for more information about the individual companies and their value propositions.

watch livestream and 100 users engage in livestream e-commerce each day. (Which makes Kuaishou China's fourth-largest e-commerce platform in terms of DAUs). Unlike Douyin, Kuaishou targeted rural audiences predominantly. While these users are heavily engaged, they are not as monetizable, and the content is usually lower quality. It is unlikely that Kuaishou is too competitive with Tencent, moreover the high ownership stake means Tencent is more likely to benefit from Kuaishou than be worried by their growth.

Bilibili (of which Tencent is a 5% owner), is another competitor in the entertainment space. They probably have the broadest content base, covering everything from anime fandoms to beauty and technology. 80% of their audience is between ages 16-25, highly engaged and spend a lot of time on Bilibili. While Tencent will benefit marginally from Bilibili's success, attention is still zero-sum. As a competitor with quality, niche and monetizable content and a highly engaged user base, Bilibili poses a strategic threat to Tencent.

Tencent also own WeiShi – it is their Professionally Generated Content (PGC) short form video app. Per their 1Q21 earnings call, they have recently merged WeiShi with Tencent Video. There is a lot of emphasis on integrating across their products and improving algorithmic recommendation.

Music is another Tencent dominated industry. At a market cap of $30 bn, Tencent Music Entertainment (TME) is the largest music platform in China. They are a consolidation between QQ music (who target white-collar professionals and students), KuGou (blue collar, 35-year-olds) and Kuwo (Married, middle-aged, with kids).

TME's competitive edge – much like Spotify's – arose after they'd spent considerable sums buying music licenses and copyright laws began to clamp down on competitors. Within the music industry, NetEase Music is the only real competition (Figure 21). Even so, their core market is pretty saturated, and they are now looking for growth in livestreaming, online karaoke, podcasting, and offline performances.

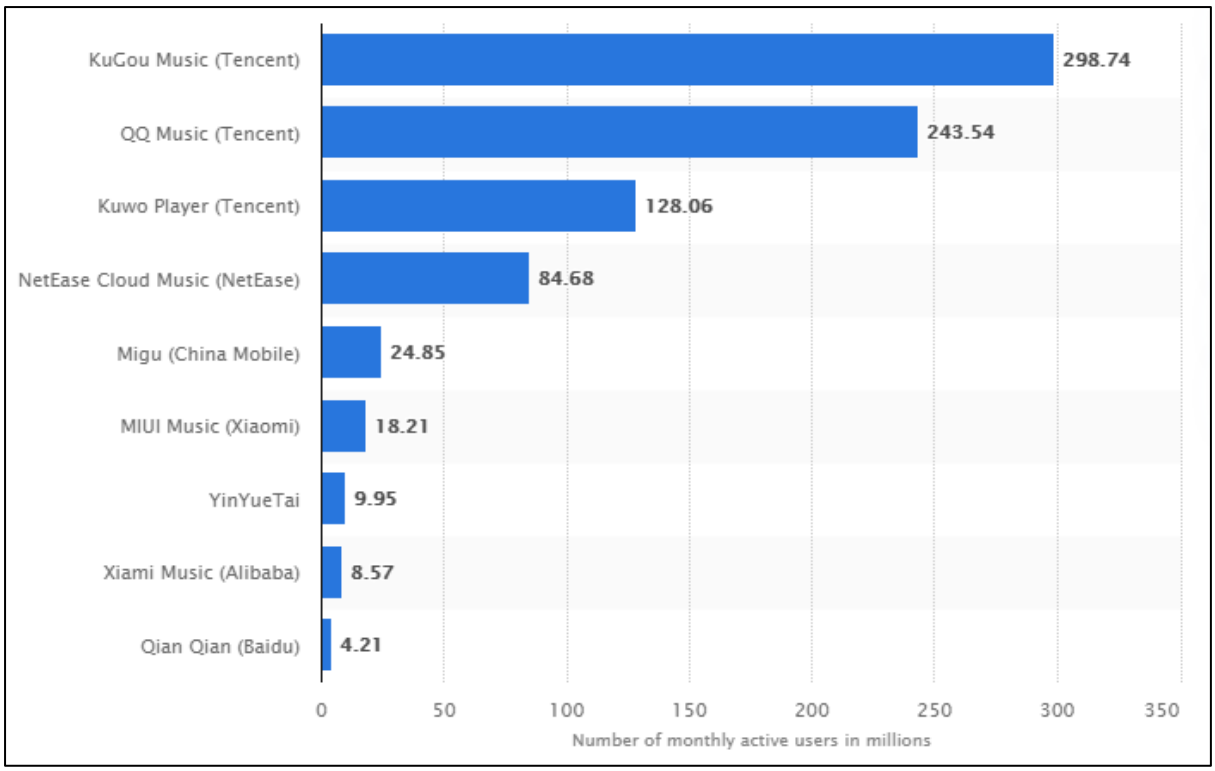


Figure 21: Number of MAUs of leading music streaming apps in China (2020, Statista)

They have lots of room to grow their paid subscribers (currently 9% of users, compared to Spotify's 45%), have developed an advertising wing growing 100%+ year on year with smaller ARPU than peers, and expect podcasting users to double by 2021 end. All the while, their core business is growing ~40% per annum and trades around 10x EV/Sales.[10]

Fintech

Chinese fintech has been one of the fastest evolving industries over the last 50 years. From the People's Bank of China's separation from the Ministry of Finance in 1978, to the COVID-induced, rapid-scale microlending to SME's, the financial industry in China is one of the most dynamic and evolving in the world. Given its relative youth and digital focus, regulation is complex (as seen by the mandated pivot in Ant Financial).

Foundationally, Chinese finance is app-driven, having leapfrogged card usage with the onset of cheap mobile devices and poor previous infrastructure. Much of this app usage was encouraged by the CCP's clampdown on corruption under Xi Jinping. To give you some idea of the scale of Chinese fintech, have a look at Alipay compared to PayPal (Figure 22).

[10] For more info, Kerrisdale Capital recently released a buy report on Tencent Music Entertainment (TME) following the Archegos forced selling.

	蚂蚁集团 ANT GROUP	PayPal
Headquarters / Geographic Coverage	• Headquartered in Hangzhou, Zhejiang, China • 200+ Countries and Regions with Online Payment Services	• Headquartered in San Francisco, CA • 46% of active accounts are outside the US • Recently deployed QR code technology in 28 markets globally
Users	• +1 Billion Alipay App Annual Active Users • 711 Million Alipay App Monthly Active Users • 729 Million Alipay App Digital Finance Annual Active Users	• 320 Million Active Accounts (excludes merchant accounts) [1]
Merchants	• +80 Million Alipay App Monthly Active Merchants	• +26 Million Merchant Active Accounts [1]
Payments TPV	• 2019: $16.1 trillion, +22% YoY • LTM as of June 2020: $17.1 trillion	• 2019: $711.9 billion, +23% YoY • LTM as of June 2020: 790.4 billion
Total Revenue	• 2019: $17.5 billion, +41% YoY • LTM as of June 2020: $20.4 billion	• 2019: $17.8 billion, +15% YoY • LTM as of June 2020: $19.2 billion
Payments / Transaction Revenue	• 2019: $7.5 billion, +17% YoY • LTM as of June 2020: $8.0 billion	• 2019: $16.1 billion, +17% • LTM as of June 2020: $17.7 billion
Revenue by Geography	• 2019 Revenue – China: $16.5 billion • 2019 Revenue – Other: $1.0 billion	• 2019 Revenue – United States: $9.4 billion • 2019 Revenue – United Kingdom: $1.9 billion • 2019 Revenue – Other Countries: $6.5 billion
Gross Profit / Margin	• 2019: $8.7 billion / 50% GM • LTM as of June 2020: $11.3 billion / 56% GM	• 2019: $8.0 billion / 45% GM • LTM as of June 2020: $8.6 billion / 45% GM
Net Income / Margin	• 2019: $2.6 billion / 15% NI Margin • LTM as of June 2020: $5.5 billion / 27% NI Margin	• 2019: $2.5 billion / 14% NI Margin • LTM as of June 2020: $2.6 billion / 13% NI Margin

Source: Company prospectus, Company Websites, PayPal Q2-20 Earnings Presentation, Earnings Release and Earnings Transcript, CapIQ
1) An Active Account is an account registered directly with PayPal or a platform access partner that has completed a transaction on its Payments Platform or through its Honey Platform, not including gateway-exclusive transactions, within the past 12 months.

Financials converted to USD as of 08/26/2020; Conversion rate equals ~0.145 USD

Figure 22: Ant Group vs PayPal (2020, company financials, source unknown)

One obvious thing is the difference between Revenue/Payments TPV for both companies. Where Ant Group does $17.1tn in TPV, and $20.4bn in Revenues, PayPal does $790.4bn and $19.2bn, respectively. These business models are fundamentally different and speak to the regulatory oversight of the CCP. Fintechs in China are there – in the eyes of the government – to serve the Chinese people. Hence, they have less room to monetize than their Western counterparts. This principle carries over into WeChat advertising relative to Facebook's, Alibaba's GMV relative to Amazon's, and more.

The World Economic Forum (WEF) divides China's fintech development into three broad stages:

a) top-down implementation by regulators and financial institutions (1984-2003, "computerisation", stage 1),
b) bottom-up, tech driven (2004-2014, "internetisation", stage 2),
c) and the complex interactions between traditional financial institutions, big tech, smaller fintech disruptors, and regulators (2015-present, "intelligentisation", current stage).

Alibaba's Alipay was really the main player in driving the shift from stage 1 to stage 2 and is still the dominant financial platform in China today (Figure 23).[11] Currently, it's how the

[11] If readers are interested in WeChat's contribution from a financial perspective, two interesting angles to look at are the distributions of QQ Coin – a pioneering virtual currency used to "purchase" QQ related items – and WeChat red envelope which capitalized on the historic Chinese trend of

incumbents approach themes like big data, blockchain, AI, security tech, IoT, and cloud computing which will determine their continued success. On aggregate, these themes are expected to grow around 15% per annum within the Chinese financial services, and while many of them read like buzzword-filled hype trains, these themes are really the drivers shifting the value-add of the industry over the next decade (discussed below in *The "Internet Part 2"*).

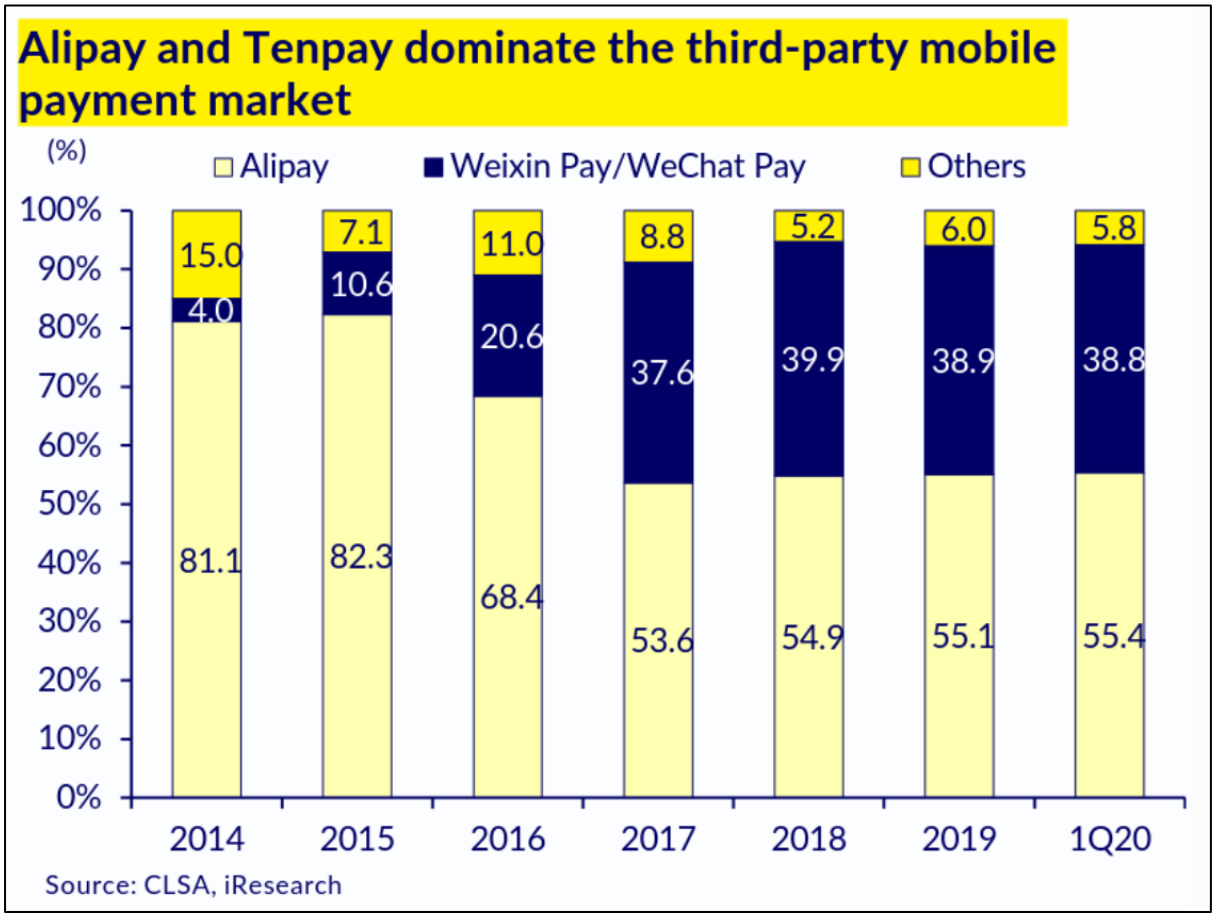


Figure 23: Alipay and Tenpay's market share (2020, Longriver)

To quote from the WEF report:

> *"In the old world of financial services, centred on capital, funds used to be the most critical resource capital. In the new finance, data is the most important asset and at the centre of the new financial system. Services and processes such as credit, payments, and risk control cannot flow without data".*

Both Alibaba and Tencent are investing aggressively in these thematic industries. Given their size and complexity, it is impossible to say who has the advantage here. Both Tencent and Alibaba have incredibly holistic views of the consumer through their myriad offerings and products. This data allows them to track consumer lending, offering variable loan rates and product prices to different buyers.

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leaving red envelopes of money as gifts by offering a virtual "red envelope" with credit which is deposited into the recipient's WeChat Pay account.

The regulators exist largely to protect smaller competitors, retail consumers, and investors, while also enabling an innovative environment. A tough example of this is the case of Peer-2-Peer lending which blossomed in early 2007. P2P firms had an innovative approach in letting customers lend to each other, but – given their lack of data collection – they were poor risk managers. There were many of these small fintech P2P platforms which sprung up, posing a challenge for regulators to engage with. Ultimately, most of these firms ended up bankrupt and P2P was banned at the end of 2020. This was a lose-lose for everyone involved. Since then, regulators have become quicker to intervene and keep tight fingers on the fintech pulse in China.

There is an excellent whitepaper on the fintech businesses within Alibaba and Tencent by Zhang-Zhang, Rohlfer and Rajasekera (2020) here. They summarize the ecosystem as follows:

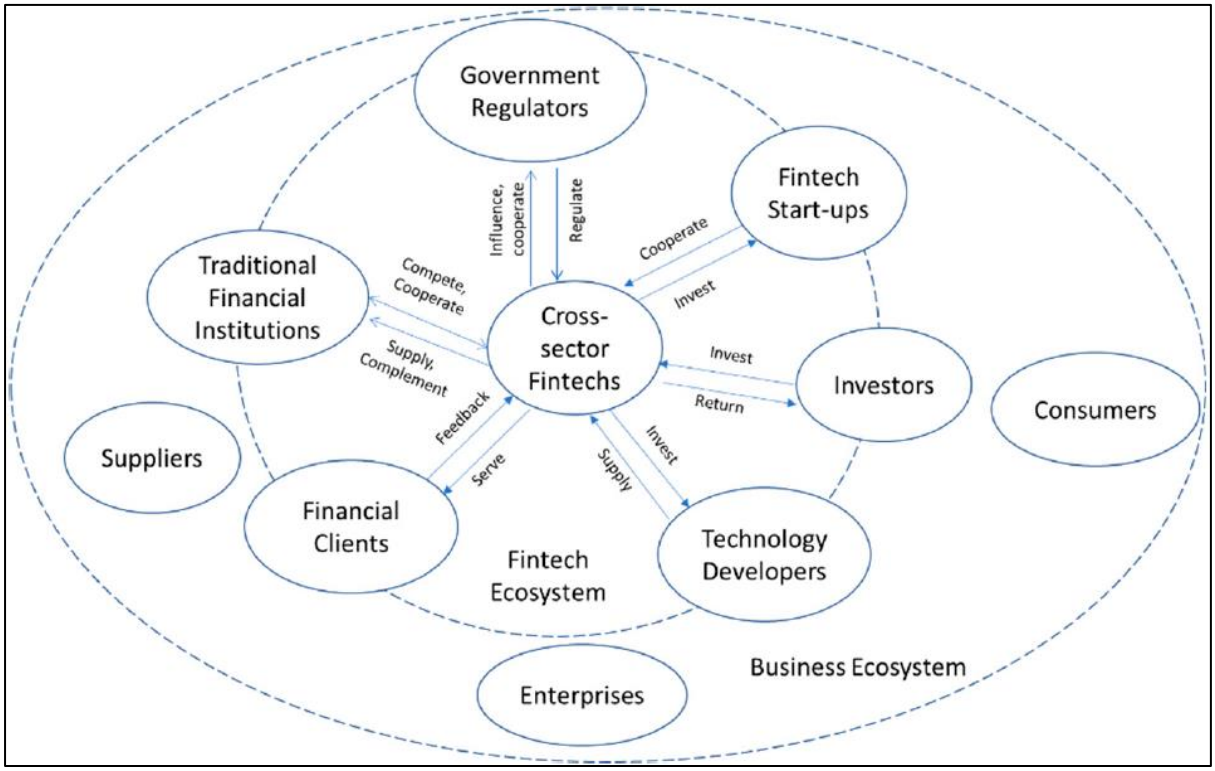

Figure 24: Cross-sector Fintech in China (2020, Zhang-Zhang, Rohlfer, Raasekera).

Where each node maps to:

Cross-sector Fintech Eosystem Mapping		
Eco-Systematic Relation	**Alibaba**	**Tencent**
Business Ecosystem	Alibaba founded as an e-Commerce platform (1999) Environmental protection initiatives announced (2010, environment responsibility) Agriculture finance business implemented (2014, interconnection with a sustainable business ecosystem)	Online avatar product QQ Show launched (2003, entertainment provider) Qzone launched for social networking service (2005, networking service provider) Tencent Charity Foundation established (2007, social responsibility) WeChat launched as social media platform (2011)
Financial Investors	Yu'E Bao launched ith Tianhong Wealth Management, even if with RMB1 (2013, micro investor) Investing in One97 Communications, an Indian Fintech startup that operates PayTM (2015)	Naspers purchased 46.5% of Tencent (2001, investment reception as Fintech Startup) Tencent led investing in WaterDrop, a healthcare crowdfunding platform (2016)
Fintech Startups	AliPay launched as online payment platform (2004) Mobile payment service launched (2009)	TenPay launched as online payment system (2005) WeChat Pay launched (2013)
Traditional Financial Institutions	Aliloan launched in partnership with ICBC and CCB to help SMEs with limited assets or credit history based on transaction histories and credibility rating at Alibaba (2007, cooperate) Joint project with the Bank of China for quick payment with a credit card (2010, supply)	LiCaiTong (Wealth Management Platform) launched (2014, compete) WeBank cofounded (2015, complement) Tencent Credit launched (2017, supply) MOU with Asian Digital Bank Corporation to develop cloud-based financial services (2020, cooperate)
Financial Clients	AliPay's "Onilne Inquiry System" for online customer service (2005) Alibaba Microfinance Company established (2010)	Wexin Red Packet launched (2014, serve SME clients) WeBank's Particulate Loan gave credit to over 10 million people with transaction amounts over7 billion RMB in 10 months after launching (2015)
Government Regulators	Ant Financial established to take over Fintech business of Alibaba due to the regulation restriction (2014) Green Digital Finance Alliance, an international alliance with UNEP (2017, cooperate) Ant Financial changed to Ant Technology due to regulation sensitivity to financial (2020)	Tencent limited the functionality and usage volume of Q Bi (Virtual currency) after governmental regulation (2007) e-Receipts Solution launched with Zi Tax Innovation Lab, cofounded with Shenzhen Tax Bureau (2018, cooperate)
Technology Developers	Sesame Credit established as the first Chinese credit agency (2015, Big Data application) International remittance service (2018, blockchain technology) Dragonfly as a facial recognition payment device (2018, electronic POS technology development)	Tencent Cloud services launched (2013) ProGuard system for malicious accounts detection in online promotion with virtual currency (2015) MiniPrograms launched for E-Commerce advertising (2017, Super Apps technology)

Figure 25: Cross-sector fintech ecosystem mapping (2020, Zhang-Zhang et al.)

Some examples of the various business models within the ecosystem include:

Fintech Business Models of Alibaba and Tencent		
Fintech Busines	**Alibaba**	**Tencent**
Electronic Payment	Alipay launched as an online payment platform (2004) Joint project with the Bank of China for quick payment with a credit card (2010) International remittance service empowered by blockchain technology (2018)	TenPay launched as an online payment system (2005)
Mobile Payment	Mobile payment service launched (2009)	WeChat Pay launched (2013)
Electronic Point-of-sale (POS)	Dragonfly as a facial recognition payment device (2018)	Frog Pro, POS machine allowing shoppers to make transactions by scanning faces at checkout (2019)
Digital Currency	N/A	Tencent QQ Coins (Q Bi) launched (2002, Virtual Currency)
Wealth Management; Micro Investing; Personal; Finance Management	Yu'E Bao launched with Tianhong Wealth Management, even if with RMB1 (2013)	LiCaiTong (Wealth Management Platform) launched (2014)
E-Banking; Online Lending; Micro Finance	Alibaba Microfinance Company established (2010) MYBank received license from the China Banking Regulatory Commission (2014) MYbank established with a focus on SME financing (2015)	WeBank cofounded (2014) MOU with Asian Digital Bank Corporation to develop cloud-based financial services (2020, e-Banking)
Credit Rating	Aliloan in partnership with ICBC and CCB * to help SMEs with limited assets or credit history based on transaction histories and credibility rating at Alibaba (2007) Sesame Credit established as the first Chinese credit agency (2015)	Tencent Credit launched (2017)
InsurTech	Co-invested in Zhong An Insurance, the first Chinese online-only insurer (2013) Alihealth Internet insurance cofounded (2016)	WeSure cofounded as an insurance platform (2016) Tencent led investing in WaterDrop, a healthcare crowdfunding platform (2016, Crowdfunding)
RegTech	Uncovering insurance fraud conspiracy with NetWork Learning	ProGuard system for malicious accounts detection in online promotion with virtual currency (2015) e-Receipts Solution launched with Zi Tax Innovation Lab, cofounded with Shenzhen Tax Bureau (2018)

Figure 26: Examples of Tencent/Alibaba's various fintech initiatives (2020, Zhang-Zhang et al.)

So, how do these two giants compare in facts and figures? Well, Ant Financial is a little easier to see, as they publish their numbers. Tencent is a lot tougher, not only because of their investments in subsidiaries, but also because their WeChat Pay is not published separately. Nevertheless, here is a rough estimate from TechCrunch:

Alibaba's Ant Group vs Tencent's WeChat Pay		
	Alibaba	**Tencent**
Monthly Active Users	711 million (AliPay, 2020)	800 million
Revenue	$17 bn (2019)	$12 bn (2019E)
Paments (China, 2020)	55%	39%
Microlending	$308 bn (credit balance, June 2020)	$540 bn (total issued, 2015-2019)
Assets Under Management	$600 bn (2020)	$131 bn (2019)
Insurance	$7.6 bn (premium/contributions, June 2020)	$42.4 million (payout, H1)

Figure 27: Alibaba's Ant Group vs Tencent's WeChat Pay (2020, TechCrunch)

Cloud

China's cloud adoption is still in the *very* early stages. I highly recommend readers have a look at Lillian Li's analysis of the Chinese cloud market here. I'll summarize below as best I can:

Cloud adoption in China (let alone the rest of Greater Asia), is still in the bottom left of its S-curve. It is conservatively predicted to grow around 28% annually to 2023, with historical growth rates shown in Figure 29.

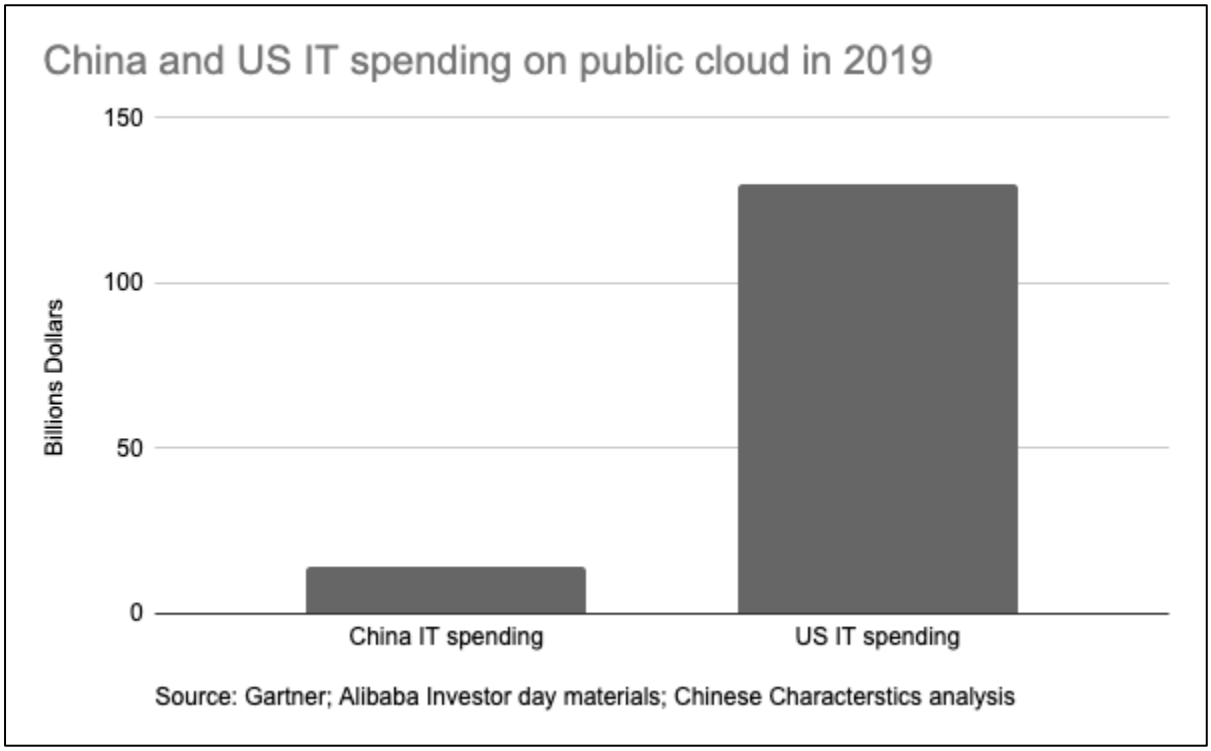

Figure 28: Chinese/US spending on public cloud (2019, Chinese Characteristics)

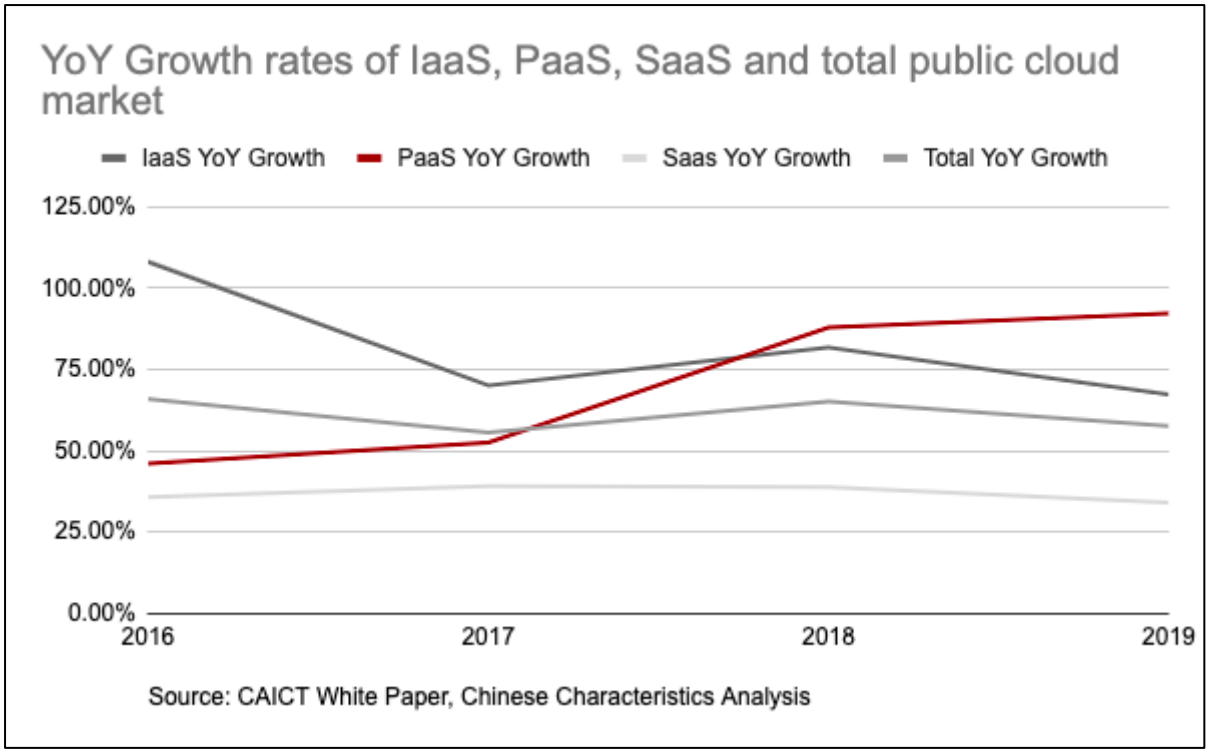

Figure 29: Growth rates for Chinese PaaS, IaaS and SaaS (2019, Chinese Characteristics)

The hurdles facing cloud (and broader SaaS adoption) largely fall into three categories: distrust of cloud due to historical leaked data scandals, a mentality that used to cheap labour and software piracy subsidising costs, and yet-unmet expectations around customisation of cloud offerings. Per McKinsey, combining these hurdles with the upfront costs and unclear upside, many companies find there to be an insufficient ROI to invest the necessaries.

Chinese companies have a hard time seeing the business case for moving their services online. Per Tencent President Martin Lau, there is very little "organizational inertia" pushing people in that direction. But the trends are there: A younger workforce, COVID-19, big tech's push to cloud, a 5G roll-out, geopolitical sovereignty, and the CCP-mandated 5-Year-Plan (all discussed under *the "Internet Part 2"*).

In the second part of her Chinese cloud series, Li notes the adoption process in China differing markedly from the one in the US (Figure 30). Firms are adopting cloud, on an irregular base of data structuring, mostly for the end goal of automation and AI workflow. Relative to the US, Chinese firms have somewhat of a last-mover advantage here. The cloud stacks they are adopting are usually more bespoke and include newer tech like edge computing and distributed cloud.

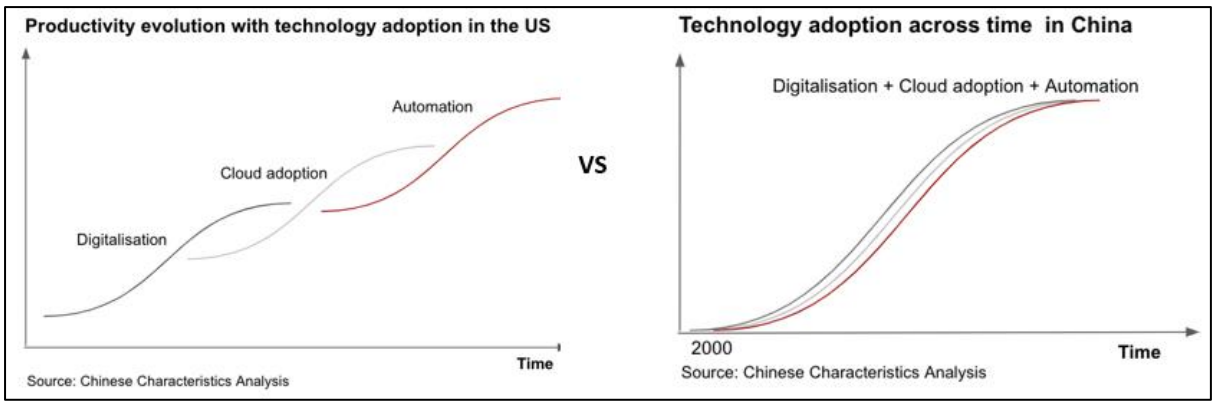

Figure 30: Cloud adoption in the US and China (2021, Chinese Characteristics)

This is where things get quite nuanced. Cloud adoption is arguably one of the next iterations in humanities store-of-knowledge "directional arrow" (thanks Josh Wolfe for the phrase). However, it's possible Chinese adoption looks very different to what we've seen elsewhere in the world. Where AWS is a pretty commoditized stack which developers plug in to, AliCloud (the consensus cloud leader in China) earns ~55% of their cloud revenue from value added services (45% is IaaS). Bespoke solutions carry higher ARPU for the tech giants, but also opens room for fully verticalized start-ups who can compete in the niches.

So where does Tencent fit into this? Roughly speaking, Alibaba has 40% market share in China, and Tencent and Huawei vie for second with both hovering around the 16% mark. Tencent doesn't disclose their cloud growth beyond lumping it with the rest of "FinTech and Business Services" which grew ~26% year-on-year through 2020. Qualitatively, EqualOcean's comparison below highlights some of the differences between AliCloud and Tencent Cloud (Figure 31).

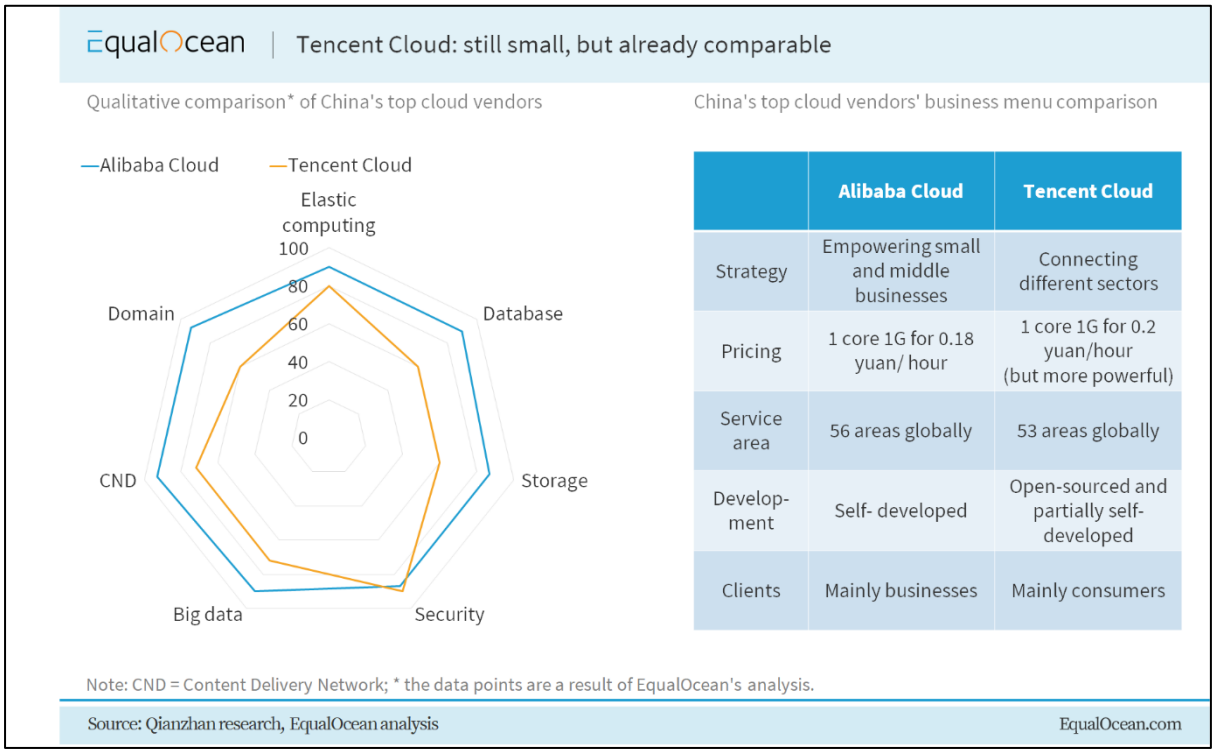

Figure 31: AliCloud vs Tencent Cloud (2020, EqualOcean).

So, summing it all up, here are a couple nice graphs outlining Tencent's income and asset base:

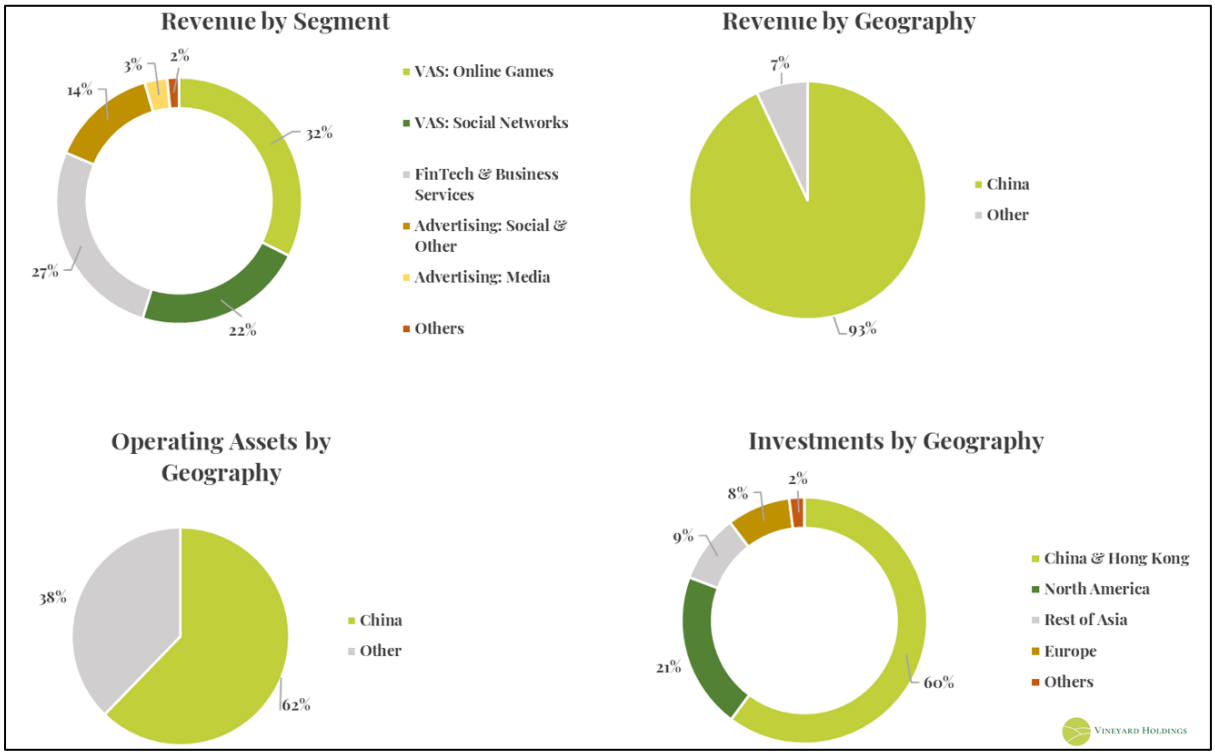

Figure 32: Breakdown of Tencent's asset and revenue base (2020, company financials, Vineyard Holdings)

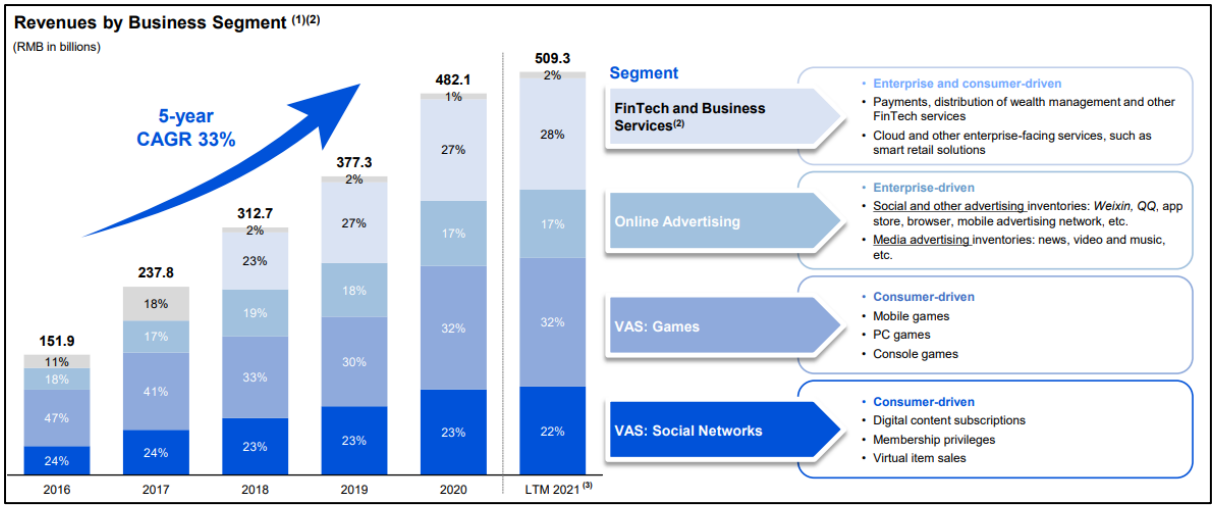

Figure 33: Tencent's Revenues by Business Segment over time (1Q21 Corporate Overview)

	2020 RMB'm	2019 RMB'm	Change (%)
Revenue by Geography			
China	448 165	360 562	24%
Other	33 899	16 727	103%
Revenue by Segment			
Value-Added Services	264 212	199 991	32%
VAS: Online Games	156 101	114 710	36%
VAS: Social Networks	108 111	85 281	27%
Online Advertising	82 271	68 377	20%
Advertising: Social & Other	67 979	52 897	29%
Advertising: Media	14 292	15 480	-8%
FinTech & Business Services	128 086	101 355	26%
Others	7 495	7 566	-1%
Operating Assets by Geography			
China	400 062	345 721	16%
Other	242 477	168 714	44%
Investments by Geography			
China & Hong Kong	415 685	289 491	44%
North America	141 876	76 488	85%
Rest of Asia	61 894	40 139	54%
Europe	57 750	29 707	94%
Others	13 681	3 726	267%

Figure 34: Tencent's 2020 financials (Company financials)

Manufacturing

I mentioned that I'd touch on Tencent's foray into manufacturing. This is the source of some debate. In 2017, author We Xiaobo predicted that over the coming decade, 80% of SMEs in traditional manufacturing will go bankrupt because:

a) They won't adopt modern manufacturing processes (think robotic arms/IoT), or
b) They haven't implemented service-agreements bringing recurrent revenue for maintenance of the equipment post-sale.

What does this have to do with Tencent? To quote Jeffrey Ding:

> *"Tencent is working at multiple entry points in the manufacturing chain, including marketing, data collection and monitoring of equipment, industrial vision in production lines, and ecosystem partners in independent software vendors."*

Unlike in Germany and Japan where Industry 4.0 adoption was initiated by top *manufacturing* companies, in China it is largely the big tech companies pushing their services onto manufacturers. Tencent's core capability is traffic facilitation and connecting things. The reach into manufacturing (via cloud and services) is an extension of this – the aim to connect manufacturers to end-consumers.

Linglong Tire is a case study here. Linglong is the second largest tire manufacturer in China and are at the very bottom of their value chain. Their products are layered with margin by middlemen wholesalers and retailers before being distributed to households. By combining WeChat and WeChat Work (like Slack), Tencent gathered data from Linglong, their primary and secondary dealers, front-end stores, and customers. This data gives Linglong insight into who bought their tires, and where, why, and how they bought them. The result: more accurate advertising and terminal store diversity, as well as live data on consumer trends which shape production. But the proof is in the pudding: Linglong's sales rose, during a pandemic, against the market trend where competitors were lagging.

Tencent gains control over the entire distribution platform by connecting the upstream supplier with the downstream consumer. The manufacturers win here as there is now motive to adopt this "new cloud tech": it *directly* leads to increased sales. For Tencent, one of the business cases for this push is the vast amounts of unique data untapped in industrials and manufacturing. Many of these companies have little data expertise, while Tencent is among the world leaders in data compression and calculation.

The more Tencent expands into manufacturing, the more resilient their platform becomes, and the better they get at integrating with and serving manufacturers. Since AI requires more data to improve, using unique data sets in Linglong's tire case study (such as pictures of steel wires within the tires) improves Tencent's AI industrial vision offering. They can use this learning to improve their industrial vision offering to other companies. These algorithms get increasingly complex as they grow, creating a customer-generated moat for Tencent. Right now, the next steps for Tencent are to grow more use-cases like Linglong to show manufacturers tangible ROI for cloud and platform investment.

Where Tencent differs from the other internet giants in their industrial IoT play, is – per Zhu Ning, founder of Youzan – that they co-build with partners to offer the commercialisation capability. Tencent provides the raw materials (the front-end, cloud and AI platforms), and the service provider/software vendor lays the bricks (commercialisation). Together they work to build a "house" for businesses to live in. Tencent recognise this, and push for vendors to make use of WeChat Work by giving them tools to build Mini-Programs.[12]

Alright, now that we have a feel for Tencent's various offerings, let's have a look at the context in which they operate.

[12] China's supply-side digitisation is often overhyped as people look at the impressive consumer end and make jumps mentally between the two. ChinAI has a good translation of research put out by Alibaba et al. Note how a lot of sectors are still very early in their digitisation process.

Context: The Chinese Tech Ecosystem

Understanding Tencent means understanding five key dynamics:

1. Interplay between the state and the market
2. The broader Chinese and Asian tech ecosystem
3. The battle between Alibaba and Tencent
4. The "Internet Part 2"
5. The bottleneck of semiconductors

While each dynamic requires a deep dive on its own, I'll summarize as best I can here.

The interplay between the state and the market.

A caveat to this whole section is that I am not a Chinese political science scholar. What is below is simply my attempt to learn from others.

It is easy to fall into the once-and-destined-to-be-again-great-power narrative of Chinese history. That said, there are a couple things which much of the West seem to miss about China.[13]

From the outset, its key to see how China is not – like many Western countries – a commonwealth. The country in which roughly 20% of the world population lives, is understandably divided into myriad ethnicities and sub-groups (Figure 35). This will be important to understand later, when dividing up the tech market into its many overlapping segments, across affluence, urbanisation, and priorities.

For centuries, China was the "Middle Kingdom", surrounded by smaller, unsophisticated vassal states. While outside, the threat of barbarian invasion loomed, within the country there were repeated collapses into civil war. In *On China,* Henry Kissinger argues that this combination (a powerful empire, outside threats, and inside division) has led to Chinese culture emphasizing subtlety and long-term thinking (ala national game Go*/Wei Qi)* over short-term military aggression (ala Chess*)*.

[13] *I understand I have juxtaposed the West with China here. A hemisphere with a country is not exactly a fair comparison, especially when both the rest of Asia and the subcategories of "West" are all so different. Pardon me.*

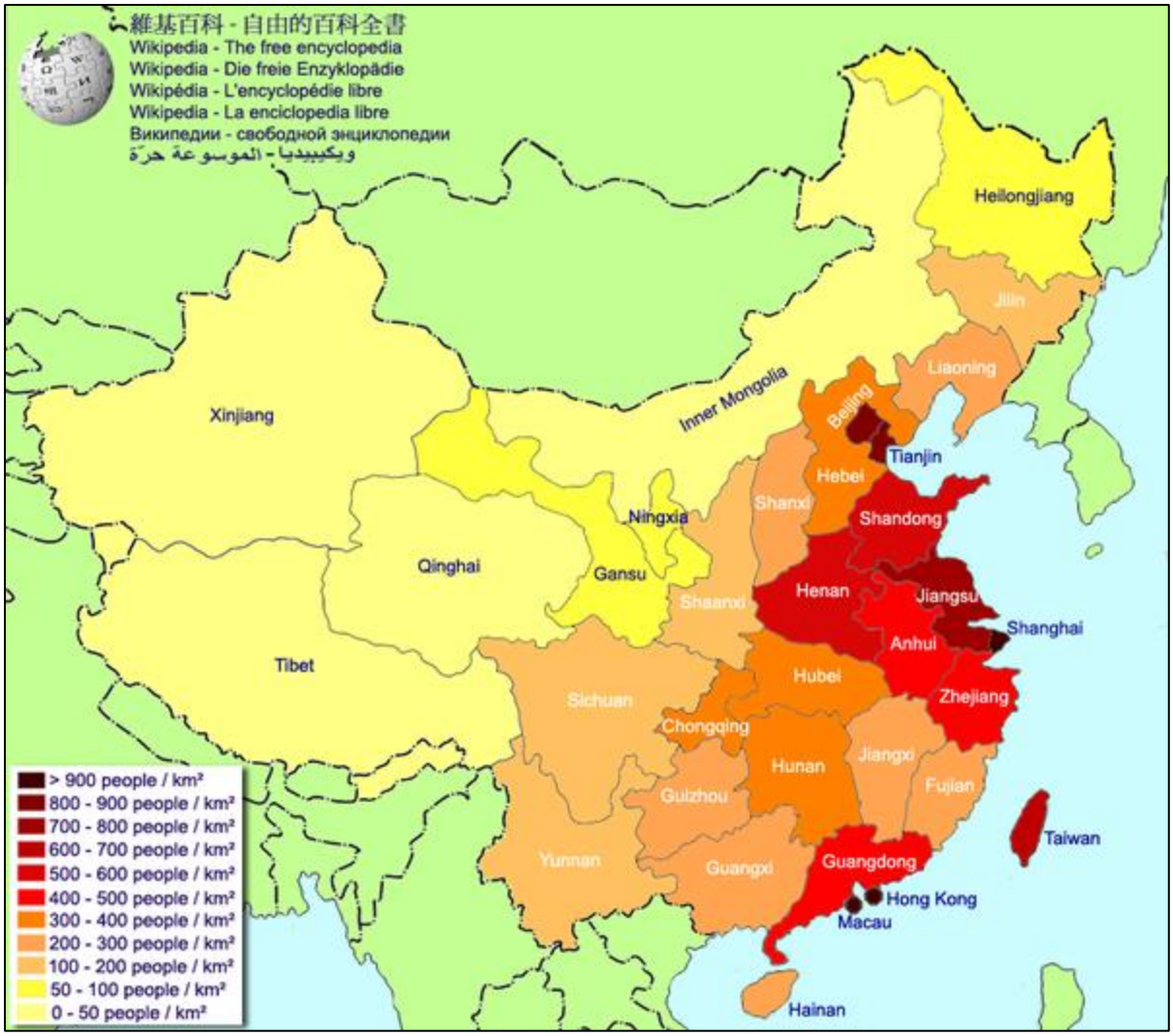

Figure 35: The geographic and ethnic demographics of broader China (Wikipedia)

Whether Kissinger's view is accurate or not is borderline immaterial here. The importance is that the Chinese Communist Party (CCP) see it as accurate, and they view the West's imposition of Western ideology as frustrating. Their bi-decadal national plans (5YPs) are an example of this kind of long termism. In essence, the state holds they

a) have a monopoly on the country's direction, and
b) plan to determine that direction for the benefit of the most, for many generations hereafter.

Western-style democracy, with its 4-year voting cycle and prioritisation of the individual, is seen as de-prioritizing the collective and unable to sustain future posterity.

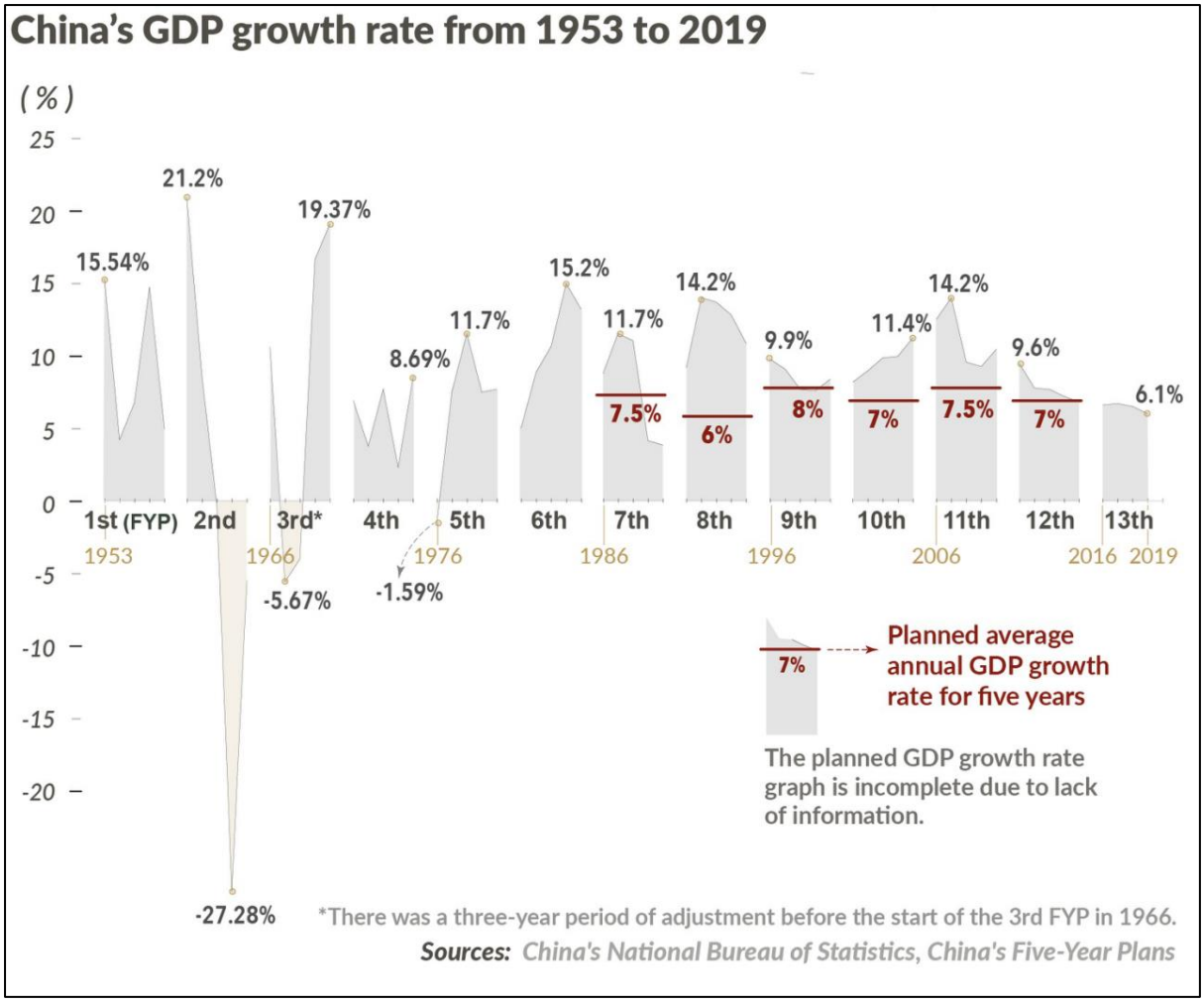

Figure 36: China's 5 Year Plans show up in their growth rates across the years (The Fintech Blueprint)

Following Mao's failed Great Leap Forward, China continued its shift from an agrarian civilisation to an industrial one. Reforms were put in place to shift state-owned enterprises (SOEs) into joint-stock ones in which state entities were shareholders. By the late '90's the CCP had embraced delegation of authority to private owners, SOE managers and small statal bodies.

Chinese companies were told to focus on profits, to close if unprofitable, to merge with smaller players, and to generally embrace "free market" principles. Today, it's tough to say which firms are privately owned enterprises (POEs) and which ones are SOEs. At an estimate, roughly a third of the market is private-only, a third is state-only, and a third is a blend of both. The government is happy to subsidise private and public alike, so long as they fit in with the CCP's long-term plans.

Likewise, private corporates are equally woven into the fabric of governance. The large-scale success of companies like Tencent and Alibaba have made them into key dependencies for the state. Alibaba's Sesame Credit initiative (essentially a FICO score + a customer loyalty program) is an example of this. Importantly:

a) One's credit score is not the result of "being a good citizen". It is calculated on activity within Alibaba's platforms, and

b) There is no evidence that Alibaba is helping to build the national social credit system. They were actually denied the licence to create an official credit rating company.

It is in this context that the CCP interacts with the market. They are not bothered with "the small", but "grasp the large". As long as business moves in the direction set by the state, they are quite happy to let business do its thing.

Remember the internal conflict the Empire had to manage during its earlier centuries? This is – per Kissinger – one of the motivations for the ruthless stomping out of CCP opposition in China today. From Tiananmen Square and Xi's anti-corruption campaigns to the failed Ant Financial IPO, the regulatory authorities have not tolerated any dissidence to their monopoly on the country's direction.[14]

This combination of centralized planning and decentralized execution is tough to execute. Firstly, the CCP has ~91 million members (~302m if you include their labour wing). At between 6 and 20% of the Chinese population, this can hardly be considered a monolithic identity. While top-down planning is something that most people default to when dealing with large, complex systems, imposing a 5YP on such a system is notoriously hard.

In tech speak, these plans are basically China's OKRs (Objectives and Key Results). They are used to create alignment and engagement around measurable goals but is not prescriptive in specific policies (Chinese Characteristics has a great substack on them here).

Right. Now that you have the theory, here's the practice:

In reality, since the 1978 "free market" reforms, contrary to popular belief China has not actually become an Orwellian state watching your every move[15]. Lillian Li, quoting Lieberthal (2004), calls this "fragmented authoritarianism".

[14] There has been dissidence, most notably in Hong Kong's recent pro-democracy referendum landslide win.

[15] Thanks to the excellent Samo Burja for the links: a lived experience in *Orwellian* Xinjiang; an update on China's supposedly ubiquitous credit system; and a contestation that just because China has cameras to capture data, doesn't mean they can use it properly. Buria and Wolf Tivy have an excellent paper discussing the merits of non-liberal-democratic governance here.

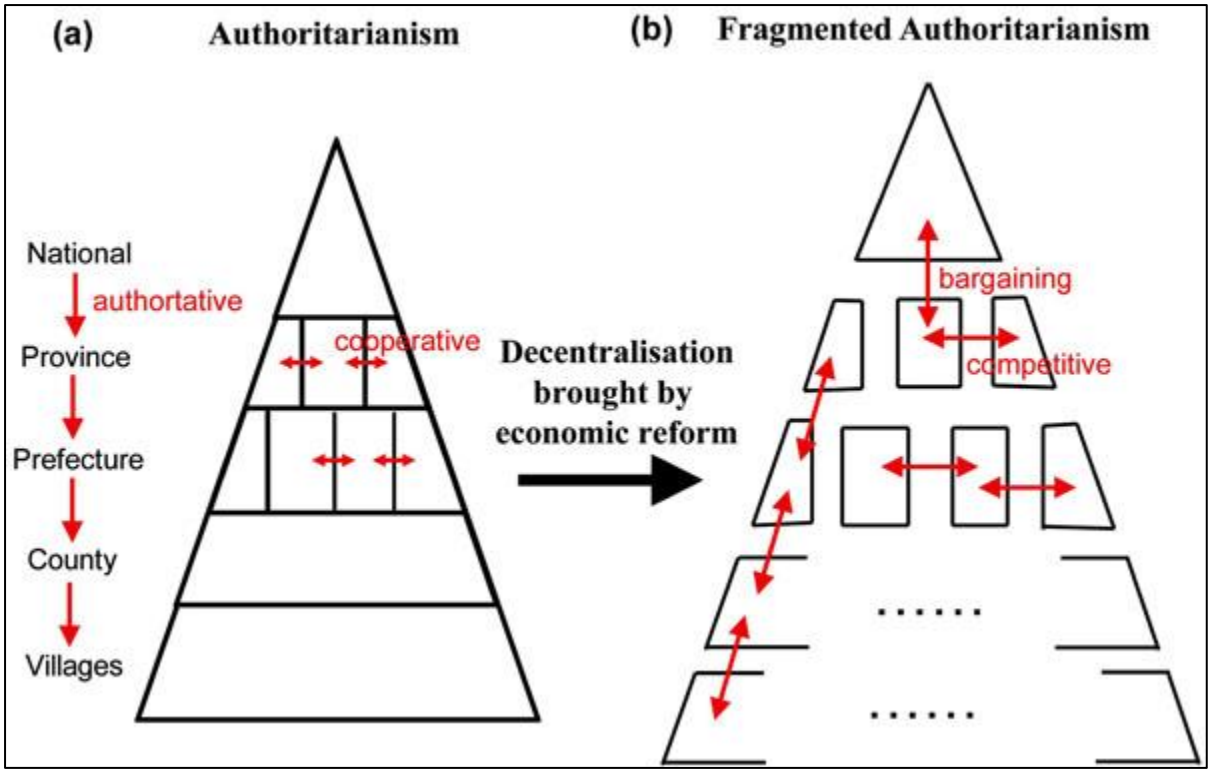

Figure 37: China's "fragmented authoritarianism" (Lillian Li and Lieberthal)

In a nutshell, the entire country is run like one big corporate. The competing factions within the CCP (between provinces/committees/bureaus) all bargain, wheedle and generally politick like the rest of us. It's a siloed system, passing legislature is not a simple "click here", and any unified push is going to have to sift down through layers of bureaucracy.

The flipside of this structure though, is the apparent stability of a dynastic system. To quote political theorist Samo Buria:

> *"... our usual models do not sufficiently account for the difficulty and importance of succession. We model power and power succession unrealistically, if at all. Hand-picked successors and political dynasties are overlooked as viable solutions or regarded as a sign of corruption. Thus, we usually miss or shrug at Botswana's success, and likewise miss some of the key sources of functionality in our own governments.*
>
> *The world, including its functional governments, is a lot more dynastic than we like to admit, and dynasties work a lot better at securing institutional continuity and good government than we like to think."*

This is the approach of the CCP. Leaders are groomed, sometimes from late teens, to climb the ladder within the party. Looking through their resumes, these are well-educated technocrats from China's elite families, much like the way a CEO might climb the ranks from engineer to executive.

These top families within China own or exert control over most all companies and strategic assets. The executive leadership of most companies are tightly interwoven with the CCP.

Importantly, this is not a trend "to-come". This is how business has been run for the last decade.

The fundamental difference between "socialism with Chinese characteristics" and Western-style democratic capitalism lies in the origins of their worldviews: Confucianism, Daoism, Buddhism and Judeo-Christianity (hang in there, we are nearly done with the history lesson).

China's dominant social hierarchies are obviously now state-capitalist businesses and no longer the timeless, rural family. Western (US) law is obviously hallowed in the Constitution and not the Bible anymore. However, in both cases, understanding the origin will help.

Western readers may be familiar with the *imago Dei,* a theological term arising in Judaism and Puritan Christianity. This idea (that all individuals were made in God's image) – along with the Greek school of philosophy which underpins its modern interpretation – helped early legislators form the emergence of today's notion of human dignity.[16] At risk of butchering theological nuance, there is a root of individual sanctity. The US is quick to claim the Puritan work ethic and modern industrialism as evidence of cultural exceptionalism, making them uniquely good at innovating.

Confucianism and Daoism both grew up in China around the middle of the first millennium BC, converging during the early centuries AD with Buddhism. Where Western liberalism prioritizes the individual, Confucianism prioritises the family. Confucian ideals seek posterity rather than instant gratification and work more for their family than themselves. Here, instead of being a guardian of property law, the state is seen as the moral guide of the market to enable holistic harmony.[17] For this reason, the popular social buy-in to the CCP's methods is typically underrated by the West: Social harmony is above individual expression.

Much of Daoism, Confucianism and later Buddhism has merged within the broader Chinese worldview, but arguably the biggest contribution of Daoism has been the idea of holism: That the human is a microcosm within a macrocosm of many systems, all of which are tightly interwoven. In Chapter 9 of his book *Daoism and Anarchism,* political scientist John Rapp argues that is Daoism's "anarchistic" influence that encouraged debate by the intellectuals within the CCP under Deng Xiaoping. Importantly, this is not the individual anarchism of the West, it is more like a "system-first" *laissez faire* approach.

This places the individual even further down the importance chain. Not only is family more important, but without the interwoven systems neither the individual nor the family would be at all. This emphasis on harmony underpins much of the Go/*Wei Qi* thinking earlier, with polite manoeuvring over confrontation.

On the foundation of the above two worldviews, Indian Buddhism (during the Han Dynasty) and Western modernity (during the Enlightenment) began to enter the common Chinese

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[16] Waldren (2009), *Human Rights In Judaeo-Christian Thought.*
[17] Poznanski (2017) *Confucian economics: how is Chinese thinking different?;* Jochim (1992) *Confucius and Capitalism: Views of Confucianism in Works on Confucian Ethics and Economic Development.*

philosophy. Over the course of several centuries, both followed the pattern of conflict-debate-integrate as they joined the *zeitgeist*. To quote Yijie Tang (2014):

> *"… the development of the Chinese Buddhist sects did not head in the direction of forcing China's social life to adapt spiritually to the requirements of Indian culture, but on the contrary, Buddhism headed in the direction of sinicization. … Buddhism proposed that it was possible to realize the ideal of becoming Buddha in everyday life, saying "no matter whether you are fetching water or cutting firewood, all that is the wondrous way." Therefore, just taking that one step further meant that one could become a saint or a sage if only one "served one's father filially and served one's sovereign faithfully." This meant that China's traditional culture could take the place of Buddhism."*[18]

Jumping forward millennia or so, following the Opium Wars in the mid-18th century, many of the Chinese gentry began to question their government's strength in the face of Western dominance. In questioning why, many would attribute the Western dominance to superior science and an industrial bent. So began the trend of Enlightenment in China, a trend which – per Tang – is still ongoing.

In 1922, Bertrand Russel wrote *The Problem of China*, contrasting the West with China. Where "The typical Westerner wishes to be the cause of as many changes as possible in his environment; the typical Chinaman wishes to enjoy as much and as delicately as possible." Russel basically said that the idea of "progress" would not fit well with a society that thought in terms of balance (*yin* and *yang*) and tended to look back in time (through ancestor worship).

True to form, by the mid-19th century the Enlightenment's modernism had had two centuries to mature in the West. Many Chinese onlookers saw all types of flaws and weaknesses they did not want, from international antagonism, to greed and inequality. This distaste of certain Western values came at the same time as the revival of Chinese culture.

Just as Russell critiqued the West for "fetishizing progress", he pointed out the tendency towards avarice, callousness, and cowardice within the Chinese. He claimed that were China to supplant her "spiritual and cultural core" with "progress" she would suffer heavily under these tendencies.

What actually played out was a version of this: Mao declared war on Chinese tradition in the name of modernity, the Great Leap Forward killed millions. Deng Xiaoping embraced the market economy "with Chinese characteristics" sparking what becomes modern China. Jiang Zemin succeeds Deng, followed by Hu Jintao, both of whom grow China into an industrial powerhouse, but who allow corruption to seep into the leadership. Xi Jinping takes over in 2012 and undertakes a massive, long-term anti-corruption campaign, consolidating domestic power and launching the One Belt, One Road Initiative, bringing China increasingly into centre-stage as the dominant opposition to the US.

So, sitting here today, how does the state interact with the market? As a powerful bureaucratic collection of sub-committees, who are unified by their monopoly on direction, who are culturally (if not ideologically) influenced by Confucian and Daoist collectivist

[18] Chapter 20 of Yijie Tang (2014) *Confucianism, Buddhism, Daoism, Christianity, and Chinese Culture*.

beliefs, and who are increasingly embracing a technocentric holism. These belief systems are implemented through:

a) Top-down Five-Year Plans, which act as OKRs for statal bodies and key corporates.
b) Top families, who dynastically own the majority of key assets in the country and are interwoven with the CCP.

Anyways, back to Tencent.

The broader Chinese and Asian tech ecosystem

The local Chinese tech ecosystem is already pretty saturated within the urban areas, with roughly 80% of the urban population (56% of the rural) using the web frequently. So, while rural expansion provides some growth opportunities, these are less than from offshore expansion. At this point, Tencent's market gain will probably be another competitor's loss, unless Tencent manages to expand into the less penetrated verticals (like Food delivery, Remote working and EdTech; Figure 39).

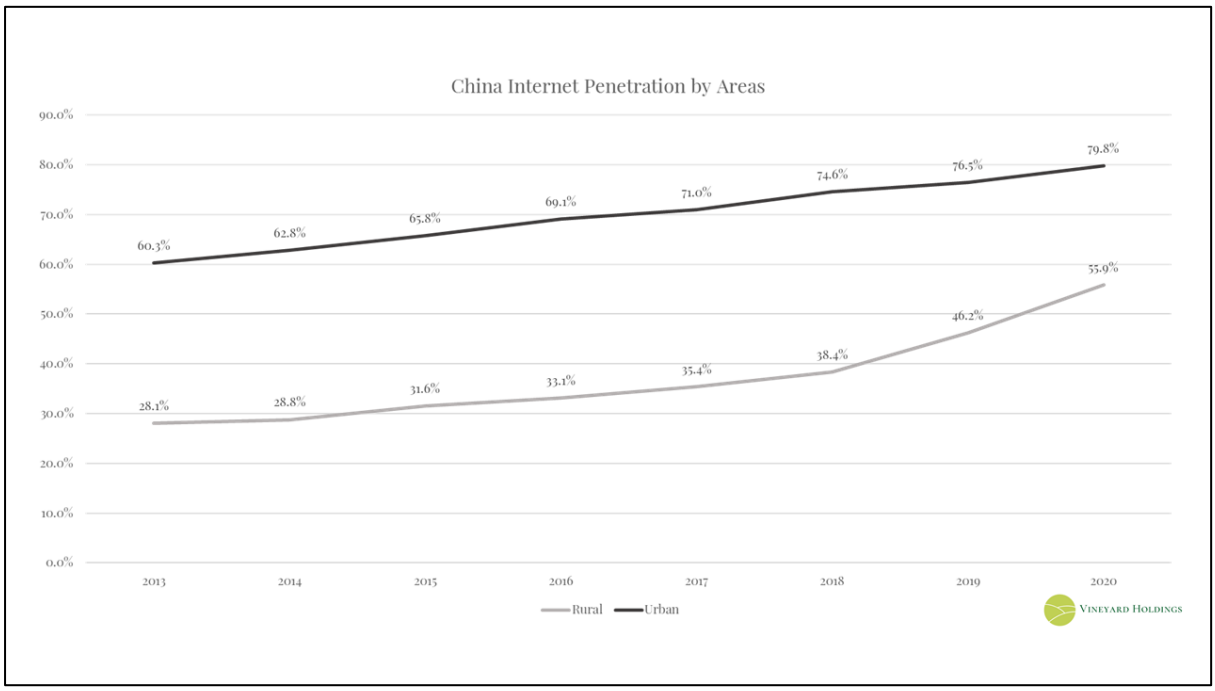

Figure 38: Chinese Internet Penetration by Area (2021, CNNIC, ChinaInternetWatch)

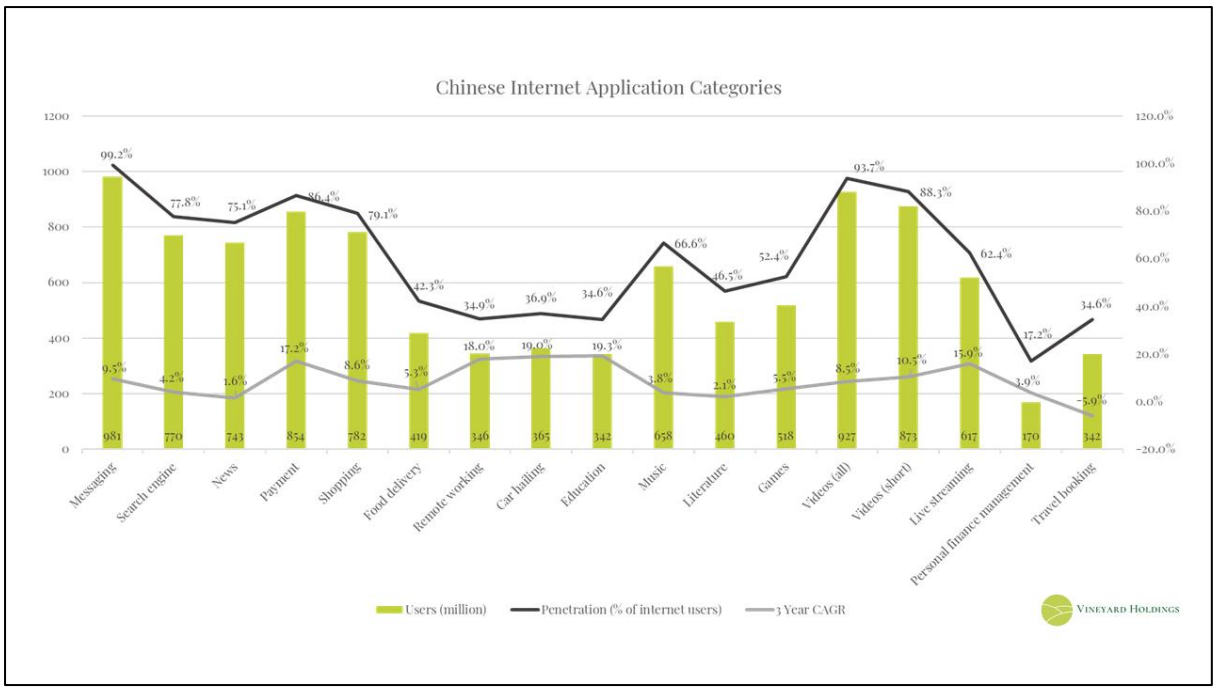

Figure 39: Chinese Internet Application Categories (2021, CNNIC, ChinaInternetWatch)

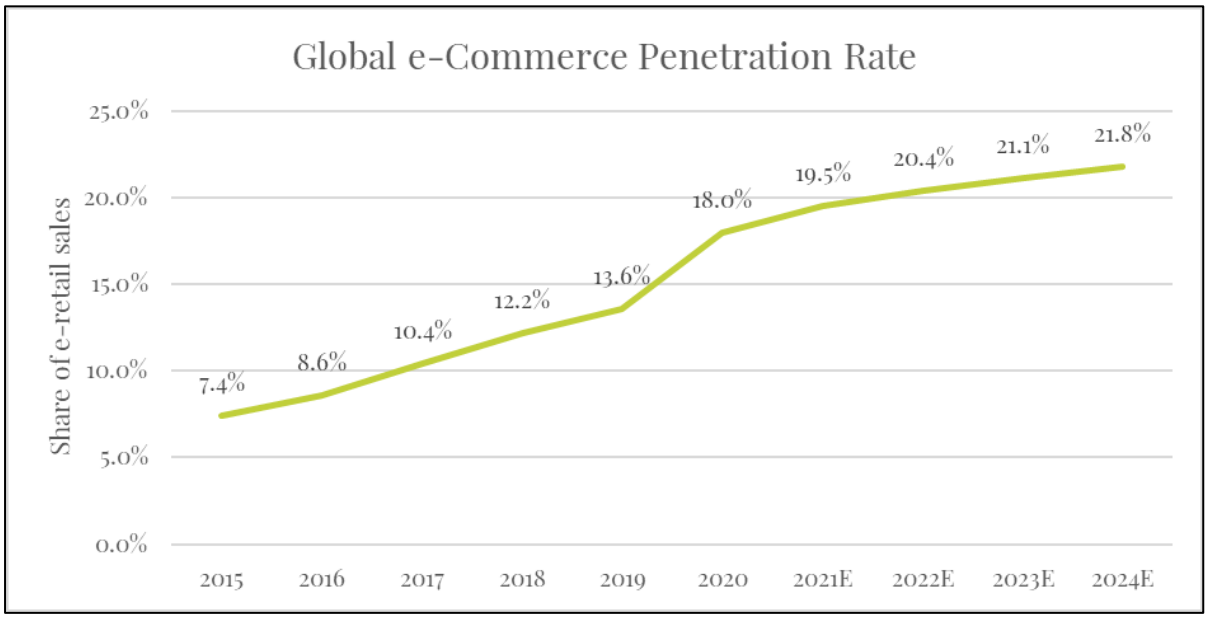

Figure 40: Global eComerce Penetration Rate for comparison (2015-2024E, Statista)

However, market penetration is not the only important consideration. Amount spent per user still has a long way to run, and COVID-19 has only accelerated this trend. Per a recent Morgan Stanley report, Chinese consumer spending is set to double over the next decade, reaching the amount he US consumers spend currently (roughly an 8% compound annual growth rate).

McKinsey has a report on the Chinese consumer in which they show:

a) Digitization is increasing faster in China than in the rest of the world (Figure 41).
b) China has a long tail of underperformers. The top decile of companies capture about 90% of the total profit (compared to 70% worldwide), and

c) The government is mandating increased domestic investment and spending support.

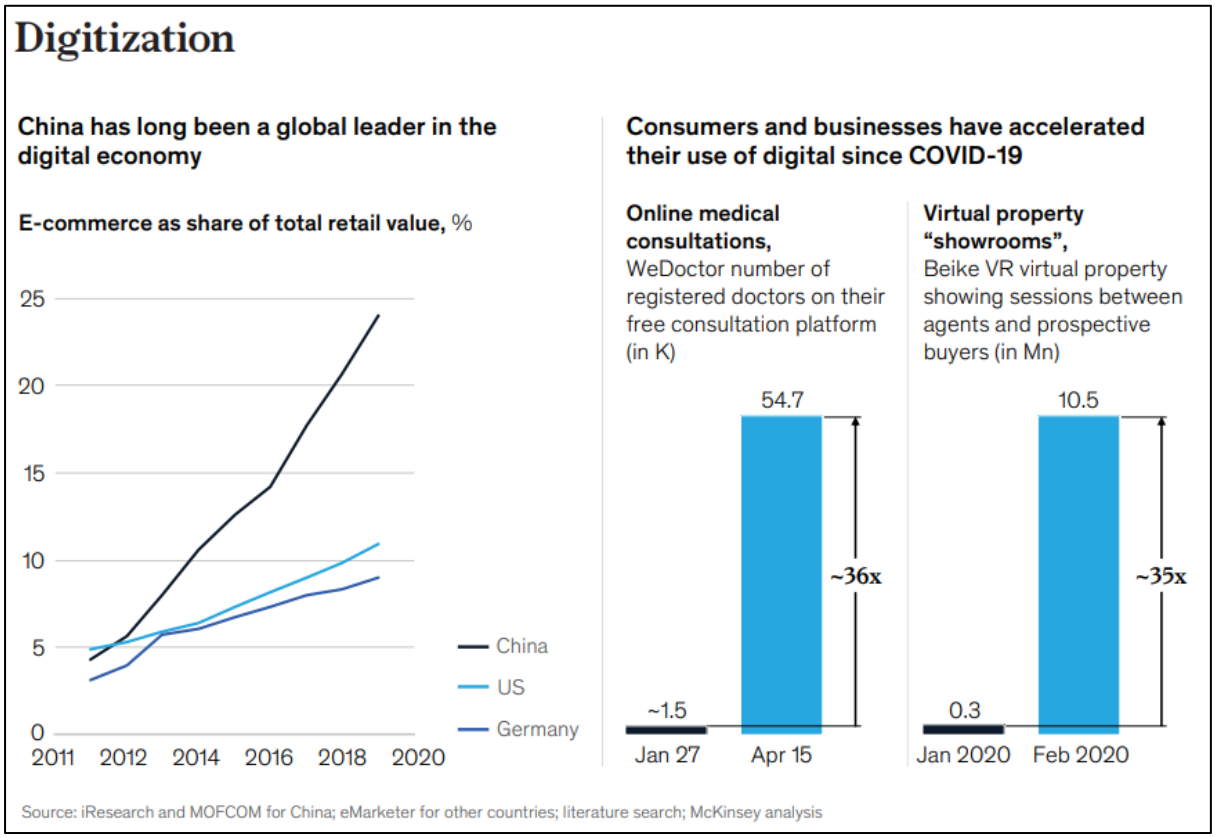

Figure 41: Digitalisation in China has long been world-leading, but COVID has accelerated even this (2021, McKinsey)

This recognition of increasing Chinese spending power has not gone unnoticed, with capital flowing into the country at rapid rates. Bridgewater Associates' Ray Dalio has even published a book *The Changing World Order*, adding his voice to the chorus of China's ascension as the next world superpower (Figure 42).[19]

[19] I wrote in *The Rise of Macroeconomic Populism* about the cycle of debt-funded spend, early boom, inflationary bust and infrastructure debt crises. Some scholars have suggested China is following a similar pattern and is facing an inevitable debt crisis. This is a systemic risk that investors should be aware of, but not one I give much credence. For further reading, Wright and Rosen have a good report on Chinese Financial Risk for the CSIS here.

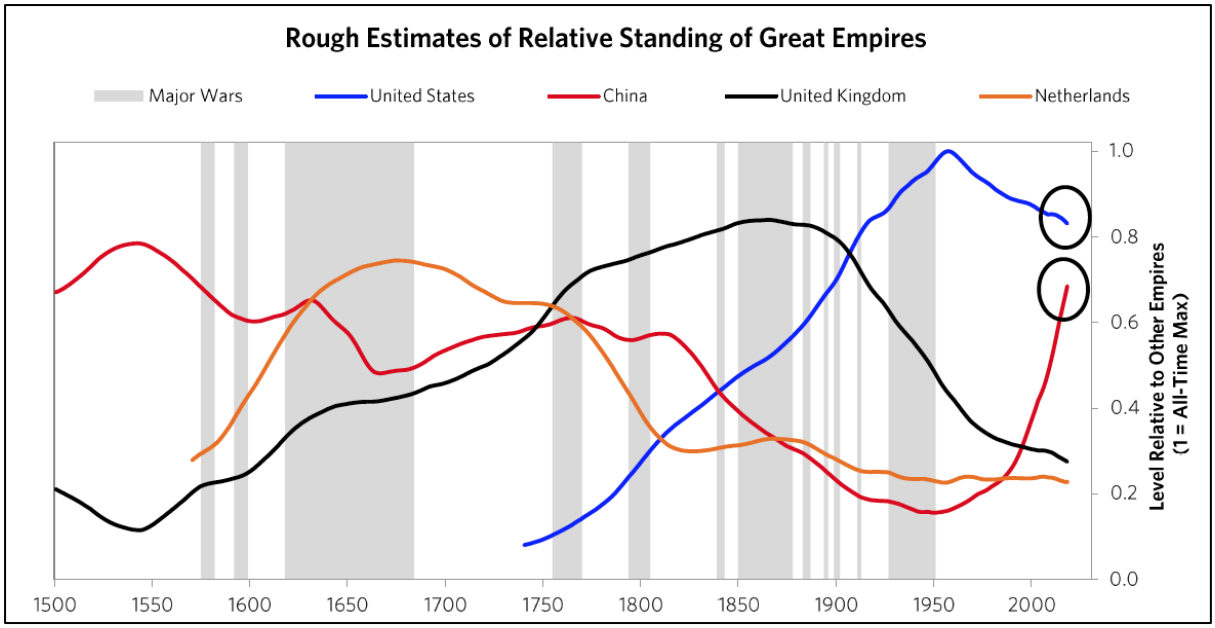

Figure 42: China's national power filters directly into their consumer spend (2020, Bridgewater Associates)

Broadly speaking, China does not lack for capital. The state is happy to subsidize prospects, the VC/PE market is mature and cash flush, the big tech companies see M&A as a core strategic goal, and the rest of the world seems happy to bid up prices for Chinese growth narratives.[20] Government subsidies usually exist to serve the ends in Figure 43 below. Meanwhile, the number of private VC firms in China has grown from 10 in 1995 to 5 000 in 2015, making mainland China one of the most cash flush ecosystems in the world today.

[20] I highly recommend reading Kairos Future's 2018 analysis on the Chinese Start Up Landscape.

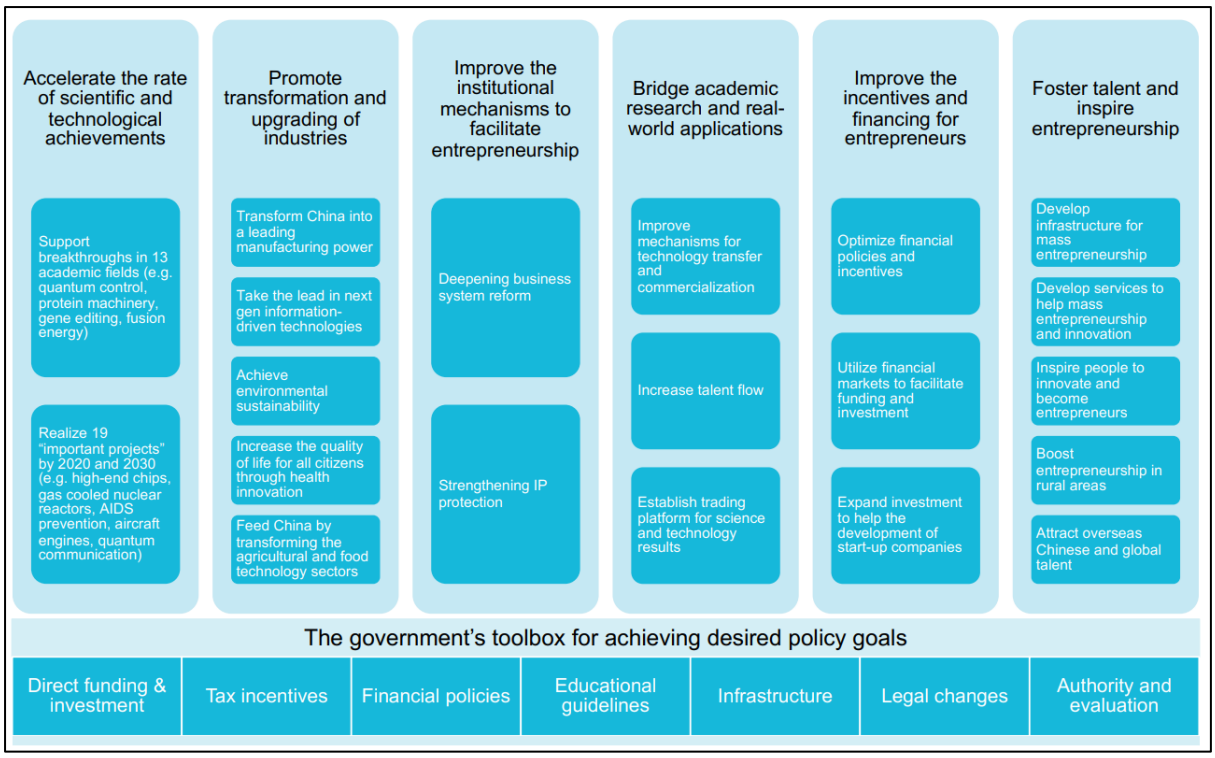

Figure 43: Kairos Future's 2018 analysis of the state's role in the Chinese start-up ecosystem (2018, source).

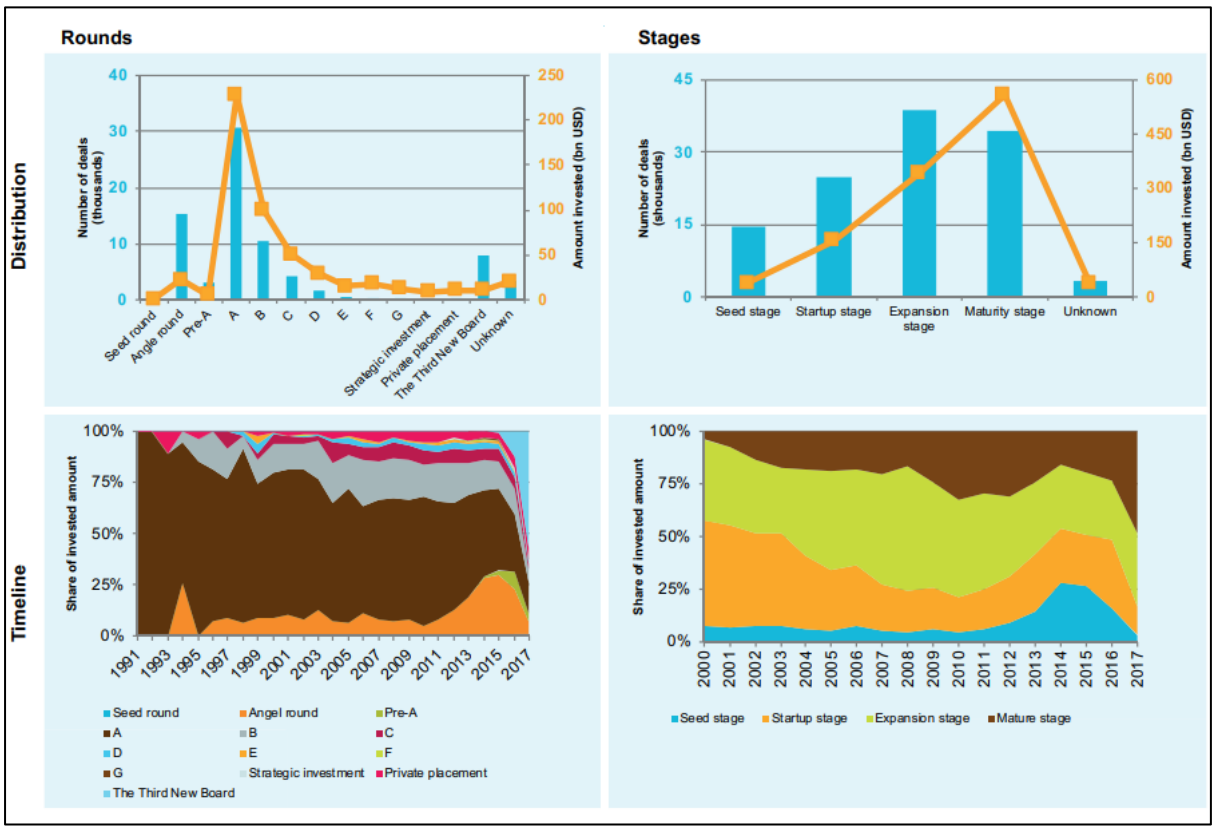

Figure 44: Kairos Future's 2018 analysis of the venture capitalists' role in the Chinese start-up ecosystem (2018, source).

Understanding the macro trends within China provides context to their specific companies. So, dropping down a level, what is the ecosystem of Chinese companies like? Well, Figure 45 is a more complicated overview, Figure 46 is a simplified version.

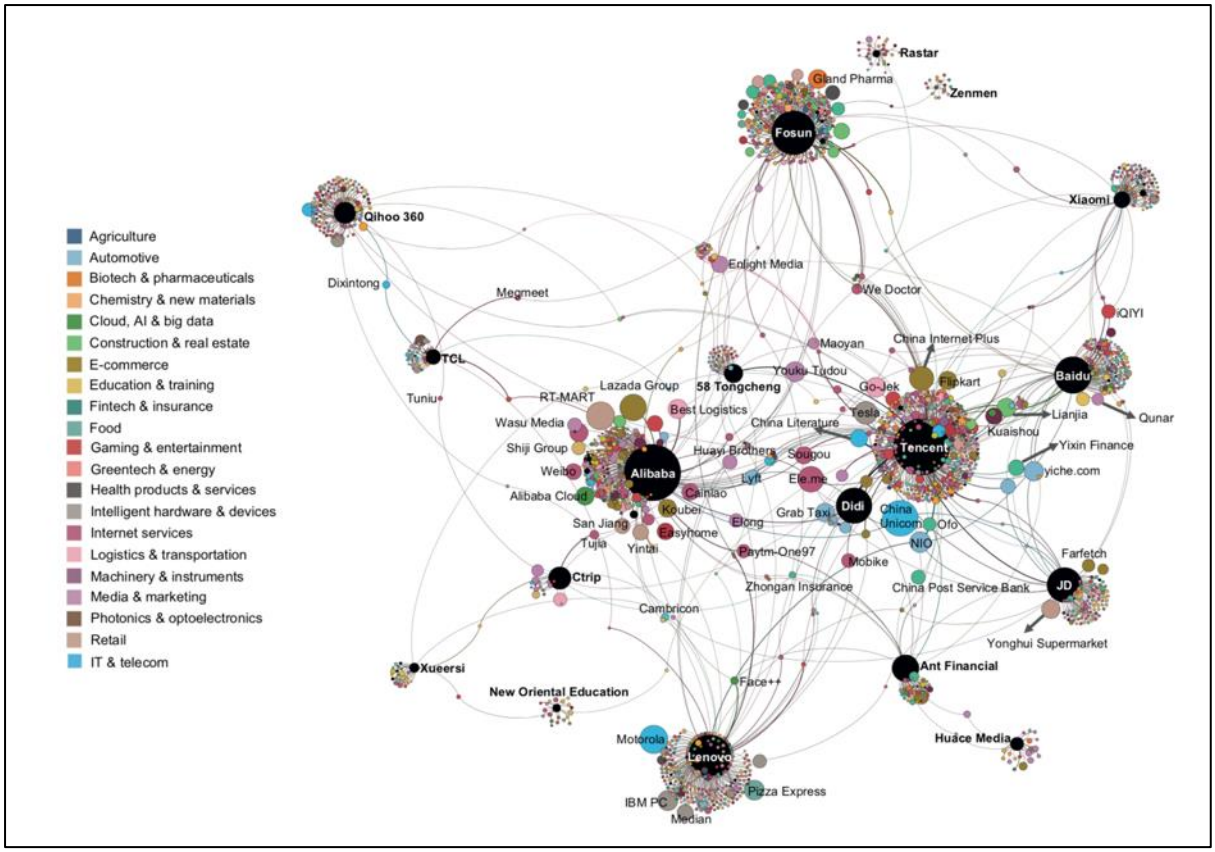

Figure 45: The interwoven state of the Chinese tech/start-up ecosystem (2019, [Thomas Laarson](#))

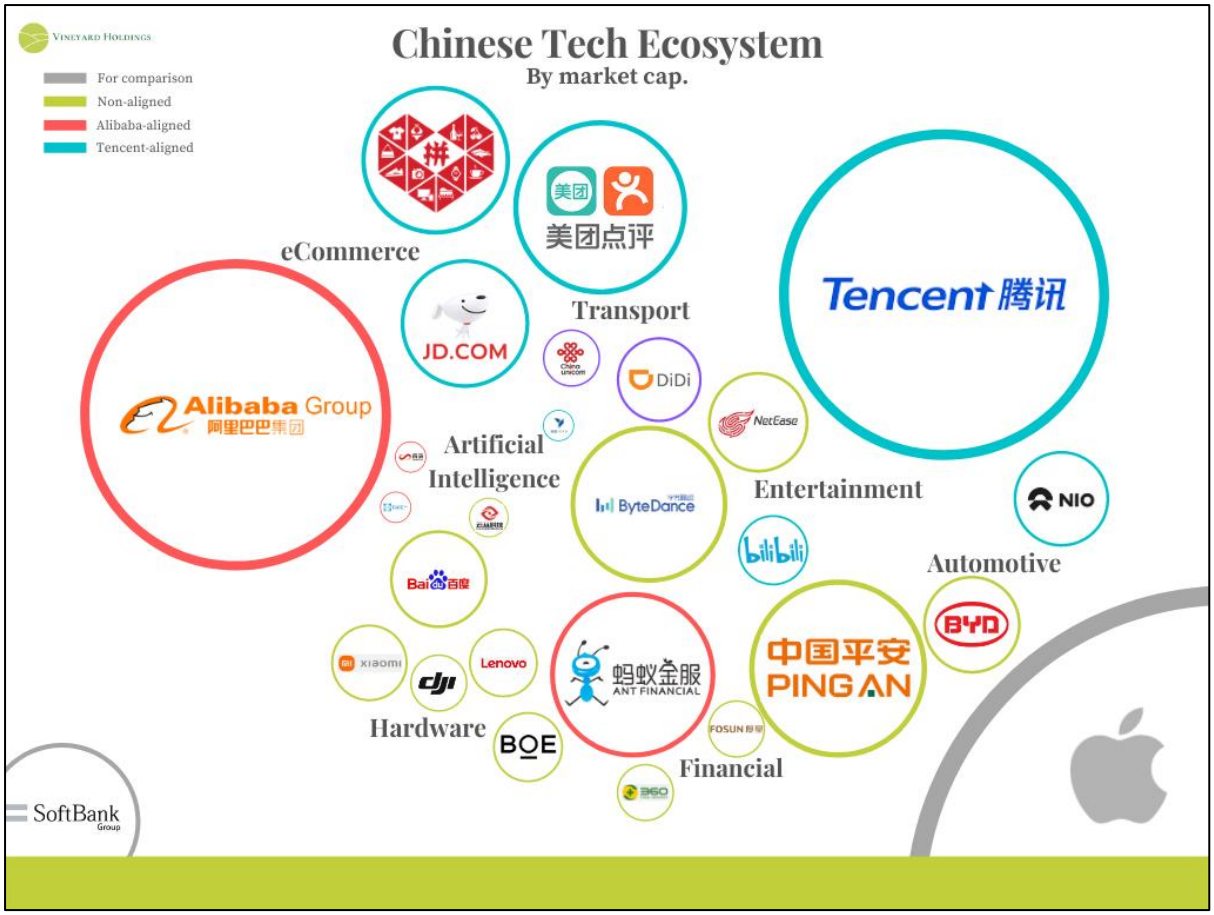

Figure 46: Simplified Chinese tech ecosystem by market cap (2020, Vineyard Holdings).

In a nutshell, Alibaba and Tencent dominate the discussion here, with Bytedance, Meituan (food delivery) and DiDi (ride-hailing) as the next generation up-and-comers. JD.com and Pinduoduo (both eCommerce) are also rapid-growth competitors to Alibaba. Baidu (search and AI) has lagged previous competitors Alibaba and Tencent as they have struggled to expand into other avenues.

Huawei, Xiaomi, and Lenovo (compute hardware), BYD and NIO (both electric vehicles) and DJI (drones) provide some of the leading-edge hardware for the country. The cellphone makers in particular receive substantial government subsidies and are cheered as national champions.

Meanwhile, China's surveillance boom and top-down focus has brought the AI companies SenseTime, Yitu, Face++ and Cloudwalk to the fore. The enormous amount of data captured by state-surveillance has given these companies plenty of data runway, and state-funding has matched that with capital. Now scaled, these four are increasingly expanding into other countries and verticals.

Companies like Ping An (insurance), SoftBank (investment fund, owning 26% of Alibaba) and Fosun (conglomerate) compete with all of the above in many verticals, but most especially in offering capital to potential investments.

Over the last decade, China's tech giants have been pushing abroad increasingly. Tencent and Alibaba have made strategic investments into complementary businesses (such as

Tencent's purchase of 25% of Sea Limited and Alibaba's acquisition of PayTM and Lazada). Alibaba has also piloted its City Brain smart city system in Kuala Lampur (Malaysia's capital). In rarer cases, some companies have launched products offshore directly. In the case of Bytedance and TikTok, this product has become the world's surging new social media app.

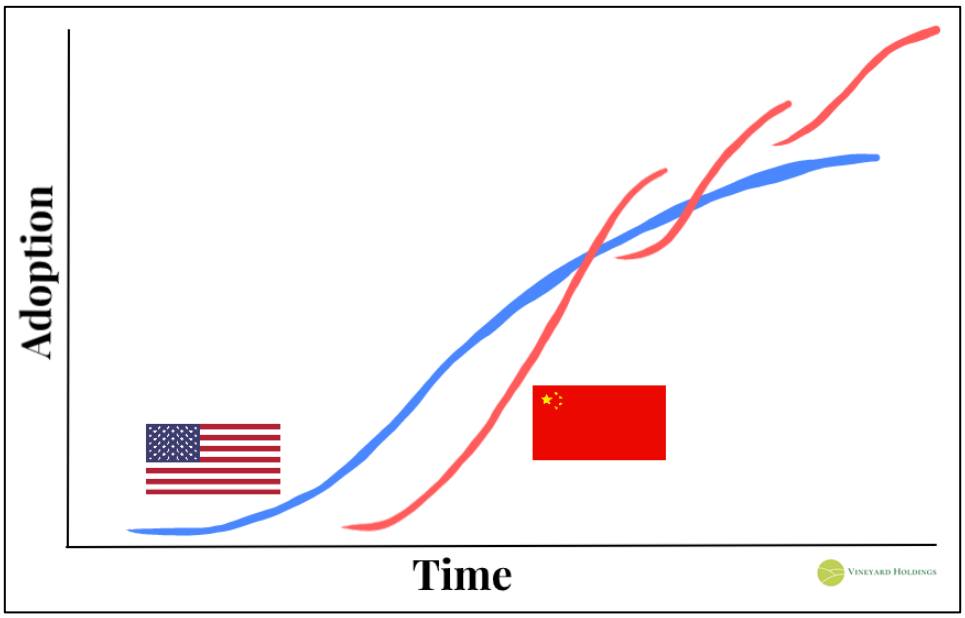

Figure 47: US tech adoption is usually slower both in adoption and iteration (Vineyard Holdings)

China lacks the legacy systems of the US (e.g., credit cards to mobile payment), has a very scaled consumer market (e.g., extreme urban density helps on-demand service adoption) and explicit government support. Because of this, while the US leads in tech development, China – because of their structural factors – adopt the tech at a faster rate, allowing them to iterate on a larger and more receptive market (Figure 47).

A great example of this has been digital payments (discussed under *Fintech* above): PayPal pioneered the field, but the huge demand for digital e-commerce and the lack of legacy banks in China have made their payment volume 22x the size of PayPal in 2018! Tencent's WePay and Alibaba's Alipay have an oligopoly on this market (Figure 48) and have already been iterating. In 2018, Alipay's savings feature held $233 billion – surpassing JP Morgan's.

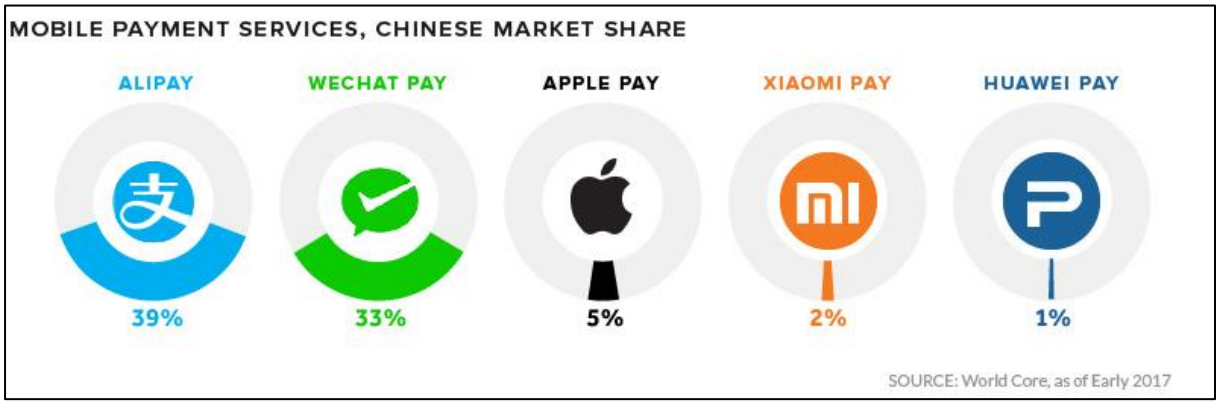

Figure 48: Mobile payment services in China (2017, Visual Capitalist)

In addition to this, because of the lower base the emerging markets are starting off of, they can learn from the West's trial and error. Alibaba now owns ~62% of PayTM, India's largest mobile wallet. PayTM is now able to learn from Alipay and their 218 million users now complete more transactions than Indian credit and debit cards combined. Since the competition here is with cash, not cards, the Indian user has become a sophisticated mobile payer.

Some governments (Chinese/Indian) have leant on their country's mobile infrastructure to stamp out corruption. In 2016, India cancelled ~86% of their cash in circulation, forcing people into both mobile payments and the tax net. With this amount of national dependency, the Chinese tech giants are able to use their super apps as gateways to other product sales without ever touching Western aggregators like Google.

The Figure 49 beside is from a 2018 NSCAI Report on the Chinese tech market. With more than 20 apps with 150+ million users, 15 of which are owned by either Tencent or Alibaba, the Chinese consumer does not lack for entertainment.

Figure 49: China's top 20 apps per hours per day (2018, NSCAI Report)

Remember the whole Go/*Wei Qi* thing earlier? This is also how Tencent and Alibaba invest. Unlike Andreessen Horowitz investing passively in a start-up, and unlike Microsoft acquiring Nuance outright, the big two are more likely to make strategic investments to lock in an alliance. These investments, usually between 20-40% stakes, let the investee keep their autonomy, but gives the investor both operational influence and a stake in the investee's future. An example of this would be Tencent buying a 20% stake in JD.com, then cycling traffic to JD via WeChat, causing JD to do more business and the value of Tencent's stake to increase.

Much of Asia runs on this interlocking capital system. For instance, Figure 50 shows a rudimentary cover of part of the massive Asian food-delivery ecosystem. Food delivery is a great example of the way in which mergers and acquisitions (M&A) occur within Asia.

Because of the myriad differences between places (cultural, political, economic), it often makes more sense for an aggregator to tie up with the smaller local players than to try grow into the region organically. Tech platforms like WeChat have enabled this kind of buy-a-stake-in-and-grow-your-ecosystem-with approach to M&A. These smaller players have effective infrastructure monopolies, but benefit from the demand, traffic, and data that the aggregators bring.

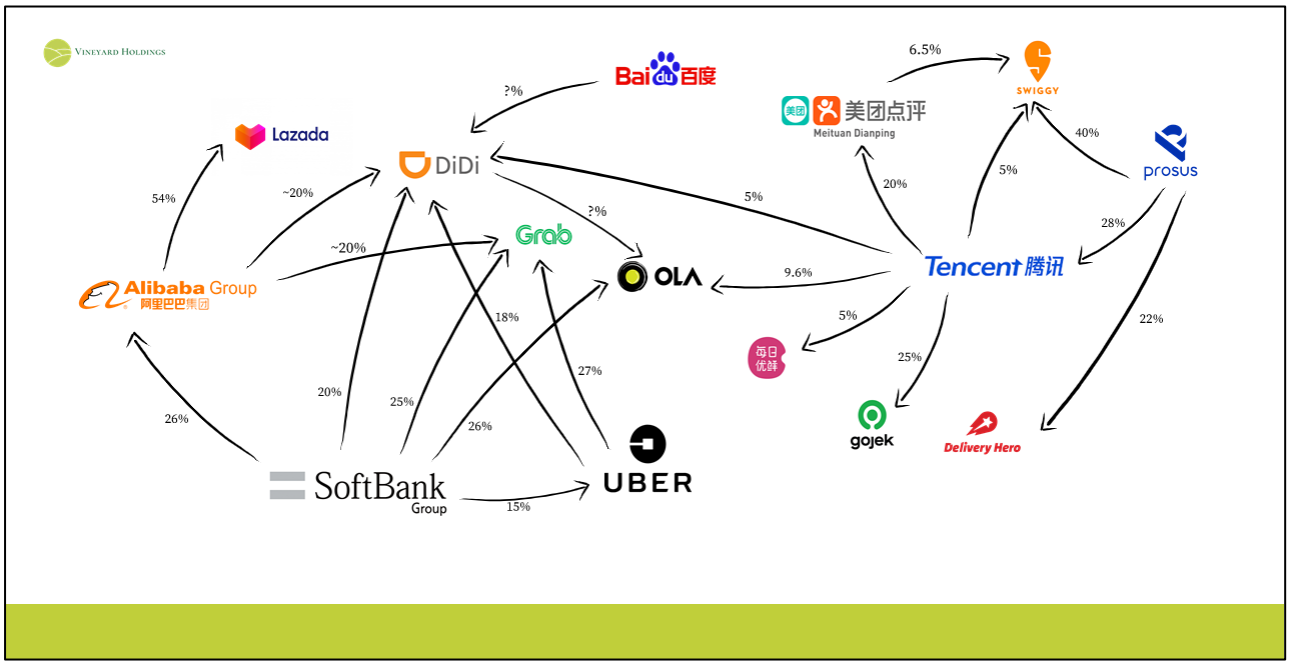

Figure 50: Simplified Asian food-delivery ecosystem (2020, Vineyard Holdings)

Food delivery is a good example of the idealized corporate approach. Instead of competing, firms prefer to make deals granting regional (country-wide) monopolies and either aggregate profit through their capital web (Softbank) or continue to buy up the little guys (Meituan).

The reason for this offshore expansion is partly because the Chinese market is saturated and competition between the leaders is intense, but also partly because of the systemic regulatory risk involved with just being in China.

Antitrust in China is emerging in a different direction to the US, which is more focused on preventing monopolistic pricing. The CCP recognize the success of market-allocation but see it as a tool to serve society. In the early stages of development, where growth was *extensive*, policies were all about moving people from the rural areas to the city. From farming to factories. But around 2011 the supply of labour began to dwindle, and wages rose. To counter this, policies shifted towards *intrinsic* growth: productivity improvement via R&D, moving up the value chain etc. Here the tech sector was a primary driver for digitizing the economy.

Companies like Alibaba (and later JD.com and Pinduoduo) were pioneers of "cutting out the middleman" and trimming the fat in the system. This meant they could both charge the consumer less and increase the margins farmers and tier one suppliers received. However,

the tech giants now have reached a point where they are the incumbents, and the CCP is evaluating how best to balance continued innovation with making sure the value in the ecosystem is *created* and not just *captured* by the major platforms.[21] Where the CCP will take antitrust in China is still unknown, at the moment most firms have been told "govern yourselves".

In recent years, Bytedance has been confronted by the CCP for having inappropriate content on their platforms with the government even pulling their apps from the stores temporarily. Similarly, Tencent has to navigate governmental concern around the societal impact of their games and excessive screen time their apps cause.

Most recently, the tech giants have come under monopolistic scrutiny. Bytedance's IPO has been suspended. Meituan has been hit with an anti-trust probe. Alibaba was fined $2.8 billion and had to make it easier for merchants to do business on rival platforms by reducing their own switching costs. Tencent and Baidu have both also been fined nominally for not involving the authorities enough on previous investment deals. Most importantly perhaps, the government has mandated that Alibaba now open its Taobao Deals (a major ecommerce portal) on WeChat's Mini Programs. While this means many users will now use WePay when buying on Taobao, it also means Taobao now has access to more users, and that the government is happy to limit Tencent's platform exclusivity. It's tough to say who benefits more from this, but I lean towards it being net positive for WeChat, neutral for Alibaba, and probably neutral-to-bad for JD.com and Pinduoduo, both of whom have benefitted from WeChat exclusivity in the past.

Occasionally, regulation benefits these companies (like forcing non-Chinese firms to partner with local entities to access the Chinese market). Increasingly however, the government has been playing hardball, mandating that Tencent gets sign-off for certain content, monetization plans, investment deals etc. In a nutshell, regulation is and always will be a risk under the CCP. However, state fragmentation, the integration of the business owners and public leaders, and the general incentive to attract capital flows into the country all combine to offset this risk more than many in the West seem to realize.

Why would China want to lead the world in internet regulation? Regulation is not something for which global leadership brings all that many benefits. That overboard regulation stifles innovation is one of the key lessons from the GDPR and other regulatory failures. Since their recent 5-Year Plan includes a heavy tech focus, innovation is obviously important to the CCP. So, instead of straightjacketing their tech giants, the CCP needs to leverage them to keep Chinese consumer spend on the mainland, boosting GDP growth.

Like all politicians, it is important the CCP is seen to look after the little guy (*in casu,* the merchants who use big tech's platforms). But since excess regulation would make the country less investable, the anti-trust laws are unlikely to upend the status quo. The big tend to stay big, scale advantages are still a thing, and network effects still lock folks in.

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[21] This is one of the reasons why Tencent is only able to take a ~0.6% cut on transactions (where P2P are free), while American Express can charge anywhere around ~3% per similar transaction. A good discussion on this is around 23 minutes into this interview with Matthew Brennan.

Also, the way the laws are implemented are key. For example, while mobile gaming regulation had a big temporary impact on Tencent/NetEase in 2018 SME tax policy changes ended up having less impact on Alibaba in 2019.

So, having covered the macro, the ecosystem, the capital flows, and the regulation at a high level, let's have a closer look at the battle between Alibaba and Tencent:

The Battle between Alibaba and Tencent

Much has been written on the Alibaba/Tencent dynamic.[22] While they also compete with Meituan, Bytedance, Softbank, and many others, it is primarily these two who challenge each other for investments and in the core areas described above (in *Context: Beyond WeChat*).

Their main battlegrounds are in mobile payments, cloud, and enterprise platforms (Alibaba's DingTalk competes with WeChat Work). Secondary skirmishes occur mainly through their investment subsidiaries. This is what we'll discuss here.

To set the tone, a refresher: each company is trying to own the consumer funnel. Acquisitions (or in house development) are key for this, as they let the company branch out of their own domain (for Tencent, it's traffic, for Alibaba, it's conversion and for Bytedance, it's traffic too). Lillian Li said it best:

> *"Generally, it is easier to move down the funnel than up since traffic players already control the users' attention. Users move from low intent browsing to high intent buying rather than the other way round. This is also why Alibaba's acquisitions tend to struggle. Aside from the difficulties of integration, Alibaba is more often than not trying to obtain traffic from its acquisitions, whereas Tencent is giving traffic to their partners. The differing dynamic is stark."*

eCommerce

Packy McCormick – who wrote an excellent Tencent article last year – also set up a sheet tracking Tencent's investment portfolio. Squizzing through that, you'll see how many of Alibaba's competitors Tencent is invested in. Namely, JD.com, Pinduoduo, Sea Limited, and Meituan Dianping.

Now, Sea Limited competes with Alibaba's Lazada over in Southeast Asia, so let's set that aside for a second. You can roughly divide mainland China's ecommerce up like so:

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[22] I suggest reading Fortune's *Alibaba vs Tencent: The Battle for Supremacy in China*, and *Alibaba vs Tencent: Taking the Fight to South East Asia*

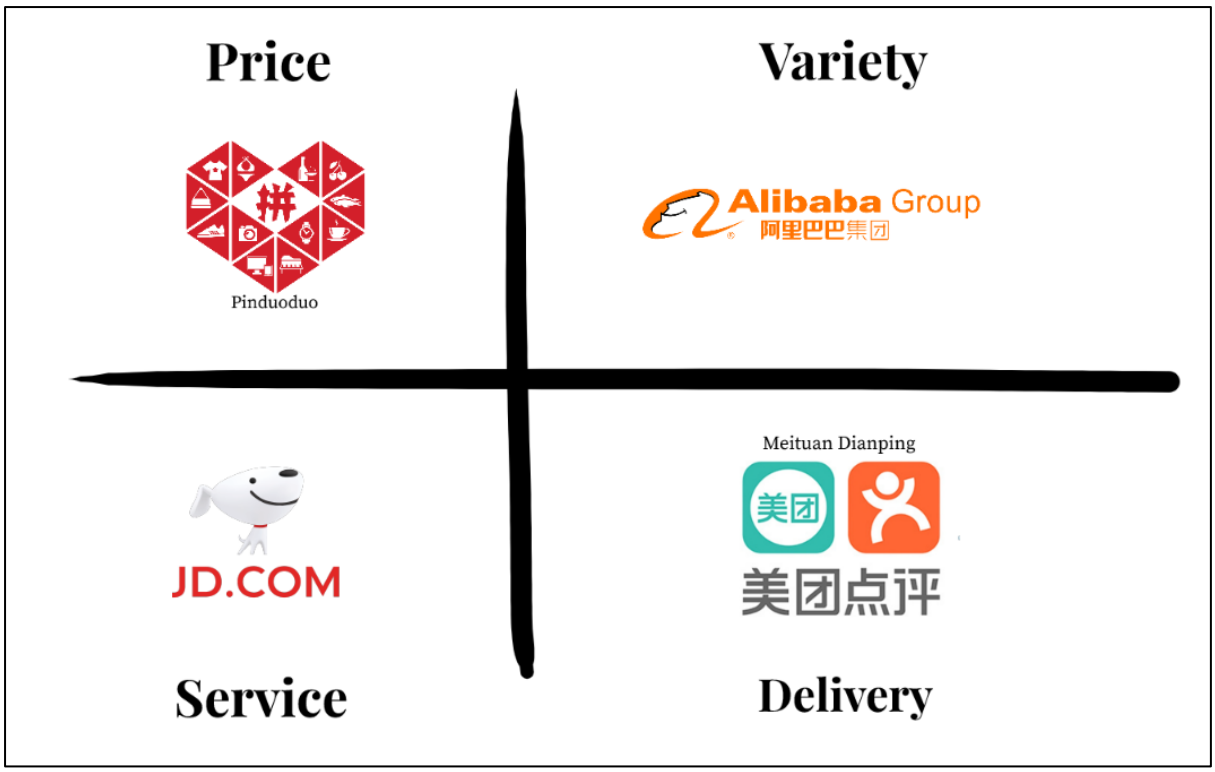

Figure 51: Chinese e-commerce differentiations (2021, a Vineyard Holdings impression of Graham Rhodes' description).

Historically, Alibaba held sway over consumer trust, but this has increasingly become a commodity amongst Chinese e-commerce players. JD.com, Pinduoduo and Meituan Dianping (in which Tencent has stakes of 18.1%, 16.9%, and 20.1% respectively) have all benefitted from the platform Tencent build, and the consumer familiarity with e-commerce that Alibaba bred.

JD.com take market share from Alibaba on the high-end, differentiating themselves through excellent customer service. Pinduoduo, who began as a fresh-produce platform, scooped up the low-end and rural customers. Meituan meanwhile, challenges Alibaba across the board, capitalising on their distribution platform for speedy delivery. This leaves Alibaba in the middle of an innovator's dilemma – they will struggle to regain the lower market, while PDD and JD squeeze them from both ends.[23]

Many Chinese remember the sketchy product barrage of the early 2000s. Chinese brands have come to rely on influencers, friends sharing, and recommendations as social proof that their product is legit. In the West, we use Google to search for a product before being directed to a website and buying it from there. In China, Baidu used to fulfil the same aggregator role, but has long been on the decline. Most searching happens on apps (mostly WeChat), where information is not aggregated or easily searchable. Since most content comes via content feeds, social commerce has arisen from this internet age "word-of-

[23] Pinduoduo has surpassed Alibaba as China's e-commerce company with the largest user-base at 788.4 million active users according to its latest quarterly earnings report. In 2020 Gross Merchandise Value (GMV), Alibaba did roughly $1.2 trillion, JD $~398 billion, Pinduoduo $~255 billion, WeChat Mini Programs $~248 billion, Kuaishou ~$58 billion and Douyin $~26 billion.

mouth". Chinese brands work hard to develop this trust – putting WeChat and other apps squarely into the "mission critical" category for e-commerce.

One of the more important trends in the space is community group buying. This is where people (usually living in apartment blocks together) pool funds to buy quantity at a discount. These are mostly groceries for lower-tier and rural communities. McKinsey reckons the retail grocery market in China is worth ~$800bn dollars, with a young 10% penetration rate. It makes sense that, like livestreaming, group buying is a hot take for the eCommerce giants.

Problems for grocery delivery have been around for a long time. Before onboarding, consumers have brick and mortar stores around them, customer acquisition (CAC) is expensive, and customers are happy to shop around. Then you have to deal with perishable constraints, cold supply chain, distribution turnaround and expensive last-mile delivery, all while trying to keep the product quality. Costing-wise, this doesn't really make sense for many companies. The average order value is low and keeping margins up while your supply fluctuates is an added problem.

The usual approach then is to either aim for volume (which is easier in packed, urban cities), or to aim for high-value deliverables (which limits your target market to white-collar, cash-rich, time-poor folk). So how does group buying solve for this?

The standard procedure is that someone (the self-appointed group leader) will set up a WeChat group for their local community, then will regularly send links to mini-programs through which members of the group can order products. The collective order is arranged and delivered to the group leader who divides up the order & arranges that it gets to the correct group member. For this, the group leaders usually take a 10% commission.

This model dramatically shifts the unit economics of grocery delivery. Not only is the CAC lowered, but the lifetime value of a customer (LTV) rises with the community lock-in. The last-mile delivery costs are trimmed as the group leader solves this, and the group – who buy in bulk – usually get better discounts, while the retailers keep better margins as they don't have to go through the brick & mortar middlemen.

Notice how this entire model is built on WeChat facilitation? This is how Pinduoduo (who benefit from WeChat link support) have managed to grab bottom-rung market share from Alibaba. COVID has brought adoption forward several years, cementing the groups who would use WeChat for both COVID news and group buying. Per McKinsey, the market is set to grow around 30-50% per annum over the next couple of years. This level of growth has attracted increased attention from Pinduoduo, Meituan, Didi and Alibaba, all of whom have established delivery networks here, as well as those less expected competitors like Bytedance and Kuaishou.[24]

Picking the winner at such an early stage is borderline impossible, but the fact that Tencent owns the base platform (WeChat), and stakes in nearly all competitors (PDD, Meituan, Didi

[24] Tanya Van Gastel makes the case that Tencent is likely more of a net beneficiary of COVID than Alibaba, because during the home-bound days of lockdowns, it was online social engagement that people most turned to via games and social media, both of which fall squarely in the Tencent camp, further entrenching consumer habits.

and Kuaishou) means that however this plays out, they're likely to capture significant value from it.

Matthew Brennan has a fantastic 2020 whitepaper on Interactive eCommerce. Group buying, livestreaming, in-game sales and simple friend-recommendations all fall in this category. I will not go much deeper here, but this is probably the biggest frontier for future e-commerce.[25] It is one which Pinduoduo, Tencent and Sea Limited are pioneering, and Facebook, Snapchat and the West are picking up. Figure 52 below is a visual summary of the concept.

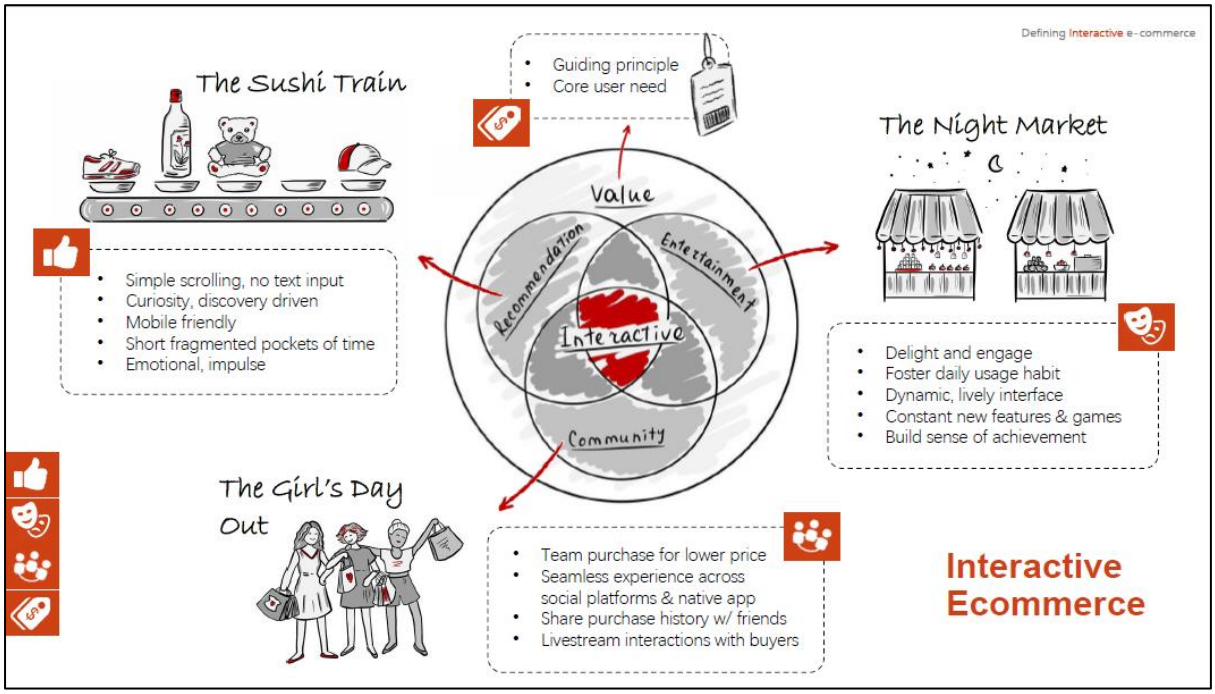

Figure 52: Interactive eCommerce (2020, Matthew Brennan)

In Southeast Asia and still much of China, these markets are hyper-competitive and still underpenetrated. The Thousand Groupon War of the early '10s is a good example of how cash-burning trying to capture these markets can be. Competition is ruthless, and the strategic decisions of the super-app companies (who have bigger chequebooks) are unviable for new competitors at scale.

However, because the market is segmented, in certain instances smaller competitors can compete in local areas. This is again where we see the aggregators (Meituan etc.) buying up the smaller guys. As the industry matures, there is likely to be slowing top line growth and the need to increase costs (as "reinvestment") to maintain this growth rate. Increased competition saturates the market – China is likely no longer a "blue ocean" for e-commerce. The rest of Asia may yet be.

Other Investments

I linked Packy's Tencent Portfolio sheet earlier. I strongly recommend his article on Tencent too. It has a very easy-reading approach unpacking Tencent's history and investment agenda. I have also mentioned above how the big tech corporate VCs are the

[25] For more reading, see Matthew Brennan's titular paper and Connie Chan's *Shopatainment*.

proverbial 800lbs gorillas who can outbid financial VCs, have longer time horizons, and can swing traffic and ecosystem benefits. So, by now you are reasonably familiar with how investments work in China: There are very few successful firms who make it big without buy in from either Tencent, Alibaba, or Softbank.

In the US, big tech accounts for maybe 5% of total VC deals. In China that amount is roughly 50%. Figures 53 and 54 show the sector and geographic angling of both major companies.

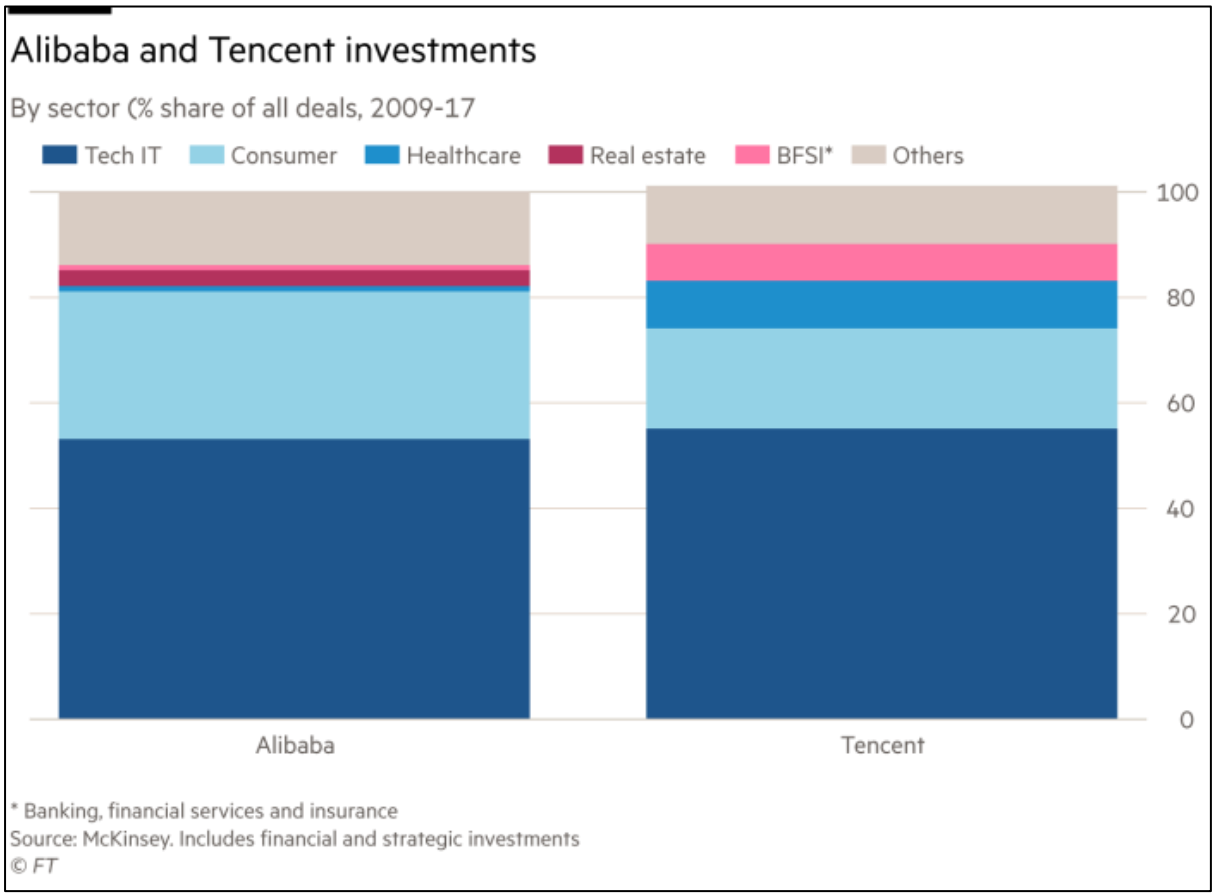

Figure 53: Tencent vs Alibaba Sectoral investments (2009-2017, Financial Times)

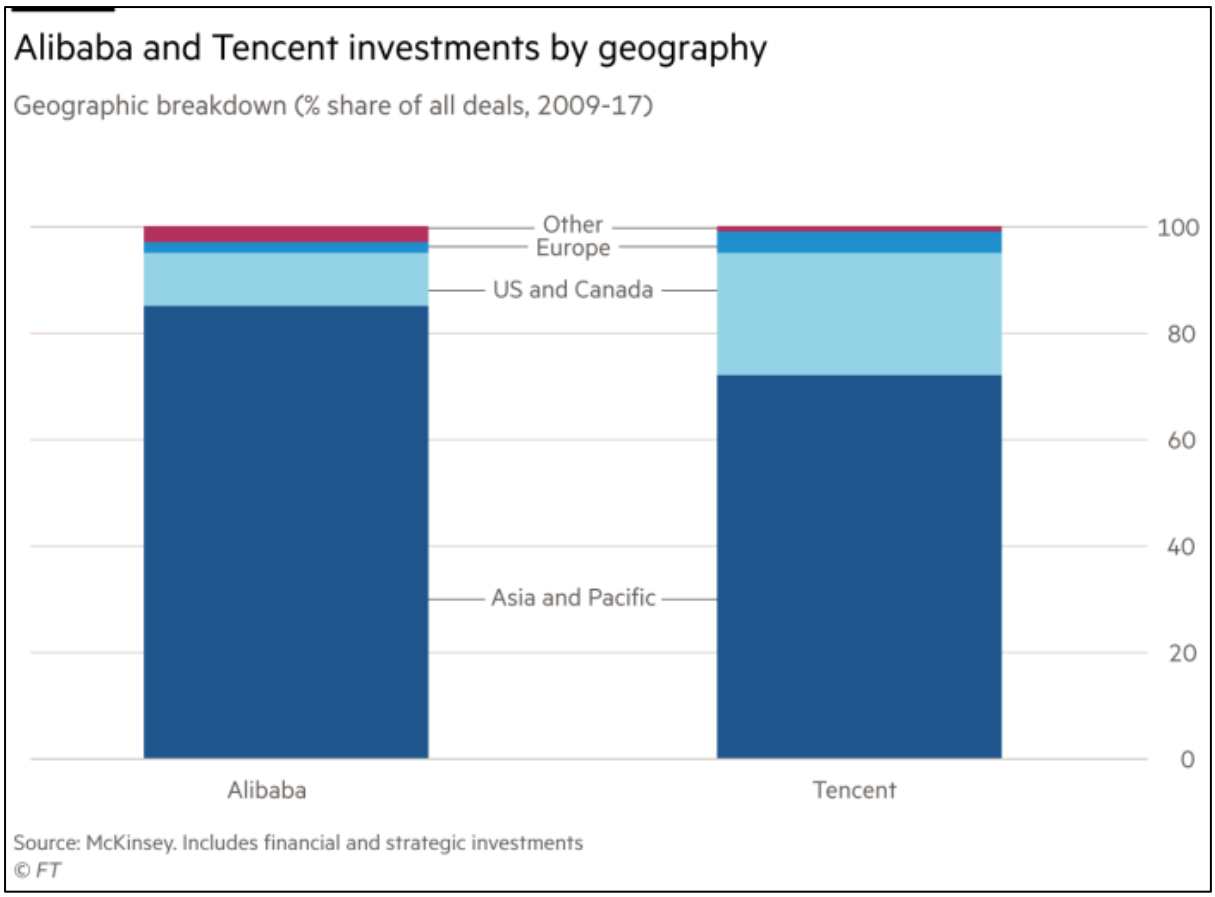

Figure 54: Tencent vs Alibaba Geographic investments (2009-2017, Financial Times)

Given the success of these two companies in burning cash investing in Chinese companies to acquire customers and starve competition of users, their offshore interests will be something to watch closely. Both Alibaba and Tencent have invested in Bilibili, Little Red Book and Kuaishou in defence of Bytedance's TikTok. Neither have been as successful as Bytedance at breaking into offshore markets. If Tencent and Alibaba want to continue their investments outside of Asia, their value proposition drops sizeably for targets not focused on Chinese growth.

The global footprint of these companies is already bigger than most see (Figure 55). There are many reports out there on the expanding "digital silk road" that the Chinese megacaps are creating. Much of the expansion has been first into the rest of Asia, but Africa and Latin America are increasingly getting investment too. This expansion is often layered upon CCP-guided Belt and Road Initiative expansion[26]. Early ventures provide digital infrastructure, telecommunication services, data centres and other forms of connectivity, followed by big tech investment into the OTT service providers and cloud infrastructure.

[26] For those looking to learn more, a good report I'd recommend on China's tech giants is by the Australian Strategic Policy Institute here and here.

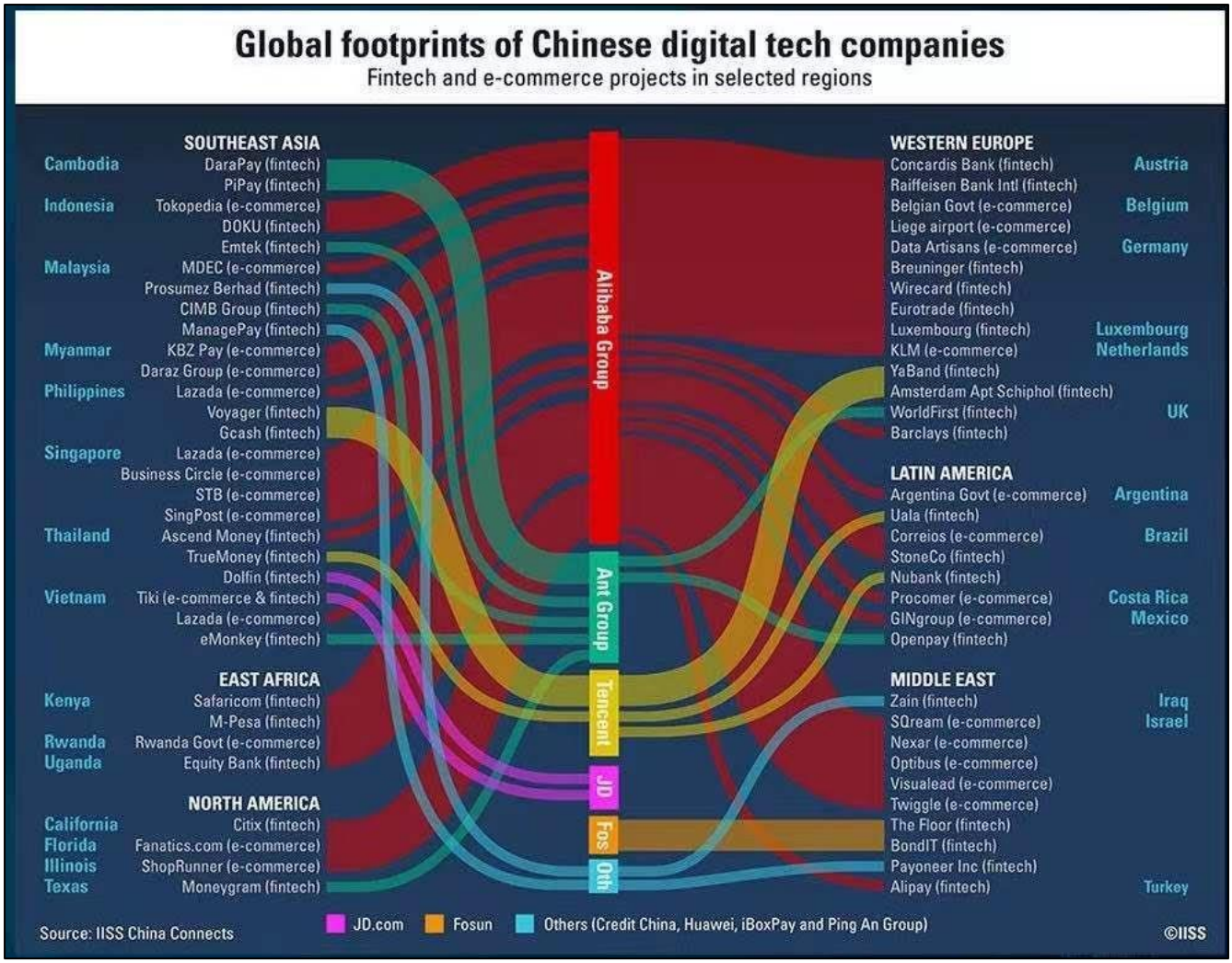

Figure 55: Global footprints of Chinese digital tech companies (2020, ISS China Connects)

There are usually both Tencent/Alibaba backed champions in transport, media, bike sharing, food delivery, mapping, and autonomous vehicles. But, Tencent has been particularly active in their gaming and "metaverse" bets.

The concept of the metaverse has been covered by many before me[27], so I won't dive in deeper than a summary:

Imagine a combined virtual-and-real world, mushed through an evolving blend of online-and-offline participation where creators are rewarded for their building projects. In his piece, Tencent's Dreams, Packy basically makes the argument that – if anyone is able to see this metaverse realized – it'll be Tencent (Figure 56).

They have invested into interactive ecommerce (led by Sea Ltd and Pinduoduo), into virtual worlds (led by Snapchat and Epic Games), into mobile payments and remote productivity (WeChat Pay and WeWork) and into premium social media (Discord, Snapchat, Huya and

[27] Some other great works: Marc Geffen's Minimum Viable Metaverse and Matthew Ball's The Metaverse.

Douyu). There also is speculation that Tencent – who recently raised $6 billion of five-year debt (at 85 basis points!) – are looking to fund a rather sizeable acquisition.

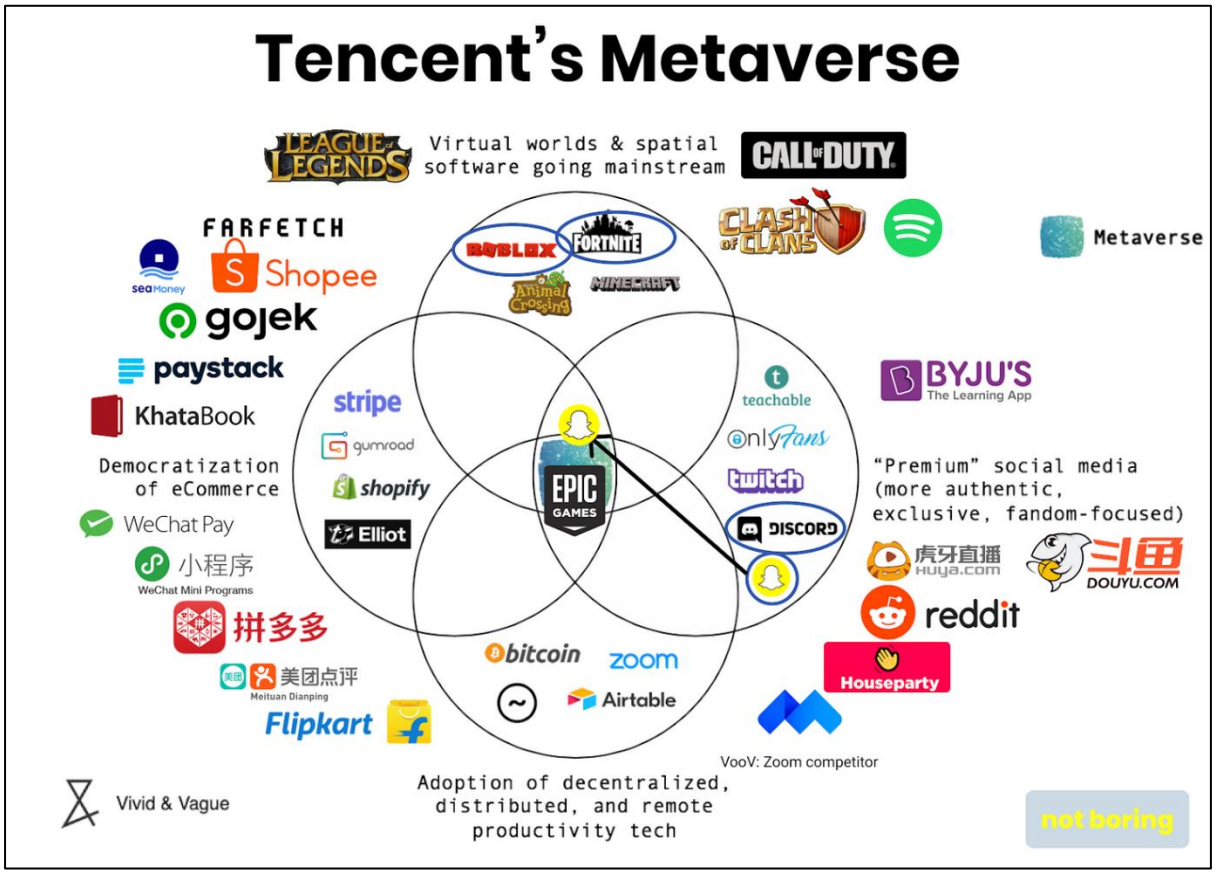

Figure 56: Tencent's Metaverse (2020, Not Boring)

Most use cases for anything metaverse are currently speculative at best. We've seen a decentralization of entertainment – the rise of well-paid amateur creators and such – but it has yet to materialize as anything big for the average Joe. We've seen NFTs, the gig-economy, interactive ecommerce, a legendary run for gaming, and surging hours spent online. We've seen new online-to-offline habits such as online dating, food delivery, corporates working remotely. Venture fintech is receiving all time high rates of interest and between Substack, Twitter Spaces, Reddit forums and Discord chats, the barriers to knowledge dissemination are borderline non-existent. So, while most use cases for anything metaverse are speculative at best, the trend is radically in its favour for years to come.

But more practically, the metaverse is not the only place Tencent is investing in aggressively. In his Q1 2021 letter, Fred Liu of Hayden Capital writes about the state of venture funding in Southeast Asia (SEA). He argues – pretty convincingly – that SEA is at an inflection point in its funding cycle: the "role model" pioneer-entrepreneurs have broken the ground with companies like Sea Ltd, Tokopedia, Grab and Go-Jek. Over the next several years, talent which previously left due to a lack of opportunity, will return. They will bring with them increased discretionary spend and better expertise, starting more companies locally, realizing that competition is lower than in developed markets. As these companies'

scale, their founders will reinvest the wealth into the system they now understand well – the local ecosystem.

Tencent – via Sea Ltd, and their own platforms – are sitting kingly. They have the benefit of seeing in real time what is working and where data and consumer spend are flowing (thanks WeChat, Shopee and SeaMoney). Tencent have also opened a new regional hub in Singapore, making SEA a strategic priority.

The "Internet Part 2"

"The first and second half of the internet". It sounds strange in English, but common parlance in Chinese is to divide internet history into two halves. The first half is consumer usage growth and increased time and spend online, and the second half is industry digitalization where companies collaborate to leverage 4IR processes and "bring new services and reap large-scale efficiencies".[28]

The history of FinTech in China mentioned above (*Context: Beyond WeChat – FinTech*) is emblematic of the broader tech development. First there was top-down mandated "computerisation", then bottom-up "internetisation", and today there is a market-blended, state-guided "intelligentisation". This "intelligentisation" is what many Chinese refer to as the "second half of the internet". It is the push (from state and market alike) towards data collection for AI model training, blockchain infrastructure, cloud computing and "smart" tech integration.

The CCP's 14th 5 Year Plan includes a tech-centric focus, with blockchain and fintech being mentioned by name. It's easy to write these off as buzzwords, but the strategic priority the government has made 4IR tech suggests a strong top-down push for global leadership in many of these areas. China knows they have a competitive advantage in manufacturing and are looking to propel this forward by developing these use cases. Distributed ledger technology can improve supply chains, cloud compute can link varying points of the value chain (see *Context: Beyond WeChat - Manufacturing),* and AI and IoT progressively enable automation of production.

In reality, all governments are trying to do something like this – it is nothing new. Where China has an edge though, is in the market familiarity with top-down directives, in the alignment of the incentives (the CCP wants it done, and big tech's need for growth mandates that they do it), and in the ability of the CCP to dangle carrots, remove barriers, and facilitate scaling. Chinese policy is far less concerned about individual privacy than the West, giving them an inherent advantage in data collection.

On the fintech front, the 5 Year Plan specifically calls for work on smart contracts, multiple consensus algorithms, asymmetric encryption, and distributed fault tolerance mechanisms. All this should be applied in "fintech, supply chain management, and e-governance". President Xi Jinping has publicly endorsed blockchain technology (notably eschewing existing Bitcoin and Ethereum protocols). The plan also calls for increased oversight of financial institutions (hence the Ant Group regulation), and for banks to increase lending to SMEs. Whether this is long term beneficial for big tech is up for debate: Ant's primary

[28] Matthew Brennan, *Tencent's struggle to master B2B* (source).

revenue stream is small loan facilitation, so increased competition is not exactly a good thing.

If you'll pardon the speculation here: it's quite likely that China uses the 2022 Beijing Olympics as a coming-out party for their cryptocurrency/digital yuan. This is a confluence of several factors, some being the increased control over monetary flow that it gives the government, the fact that monetary sovereignty is essential for all emerging powers (cf. Ray Dalio's *Changing World Order*), and their intent to lessen dependence on the dollar for international trade.

Stanley Druckenmiller recently gave a presentation to some USC students, stating his belief that the end of global dollar-supremacy is nearing. He gave no suggested alternatives, but if China's central bank digital currency (CBDC) is any possibility, Tencent is one of the very few companies potentially carrying a call option on its adoption. It is likely then, that the infrastructure for this digital yuan will shift the landscape for fintech in China and China-led Asia. How Alibaba and Tencent adapt to this will be an interesting challenge.

In Debt: The Last 5000 Years, the late David Graeber outlines some of the rationale a government would have to enforce control over a scarce monetary resource (as opposed to debaseable fiat, or ground-up debt-like contracts). I suggest reading Alex Danco's summary of the book. It's a nuanced take on monetary theory which has received a lot of criticism but is worth a mention here as the justification for a CCP-controlled digital currency.

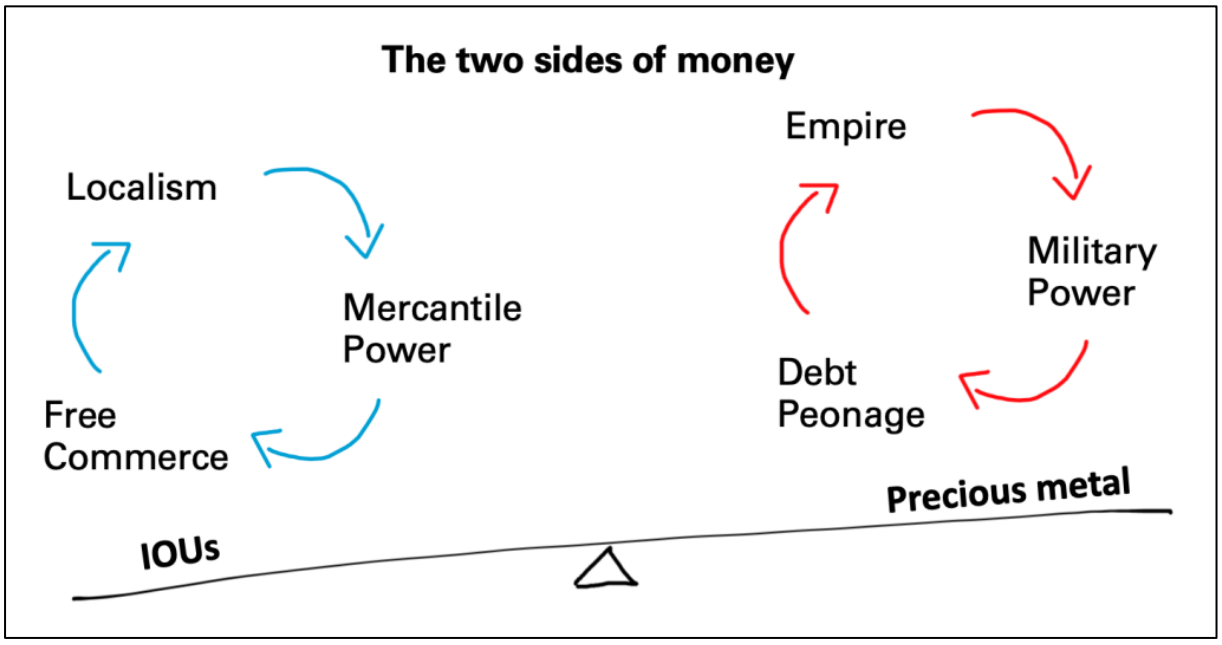

Figure 57: Graeber's two sides of money (2020, AlexDanco.com)

I wrote a thread on the potential for China to shift the global monetary system away from the dollar below.

[Embed: https://twitter.com/JordsNel/status/1293078008341897216]

Were China to follow the trajectory of Graeber's argument, they'd likely begin by mandating the use of their CBDC for payments within the country. Given that the majority of payments are facilitated through Tencent and Alipay, this could materially affect their fintech

operations. It is too early and speculative to say how this effect would play out, but it is something investors should be aware of.[29]

The bottleneck of semiconductors

One of the biggest long-term risks to Tencent is the Sino-US tension over Taiwan. More specifically, over the semiconductors that come out of that country.[30] Semiconductors are the tiny bits of hardware on which all software runs. They are the beginning of the value chain for basically every modern tech company. Taiwan Semiconductor Manufacturing Company (TSMC) is the leading producer of these chips and there is notorious tension between China and the US over who controls the supply chain there.

Semiconductors are China's top import by a large margin (Figure 58). In general, China is not yet competitive in the most high-tech & high value forms of manufacturing (semiconductor fabrication, airplanes, OLED screens), but dominate the production of commodity hardware (solar panels, laptops, smartphones) and are marching steadily up the value chain. However, given the incredibly sophisticated engineering that goes into manufacturing these chips, it has been very tough for China to materially displace the leading US "semicap" companies (Figure 59). Consequently, China has struggled to internalise production of the chips, creating a weak point in their value chain.

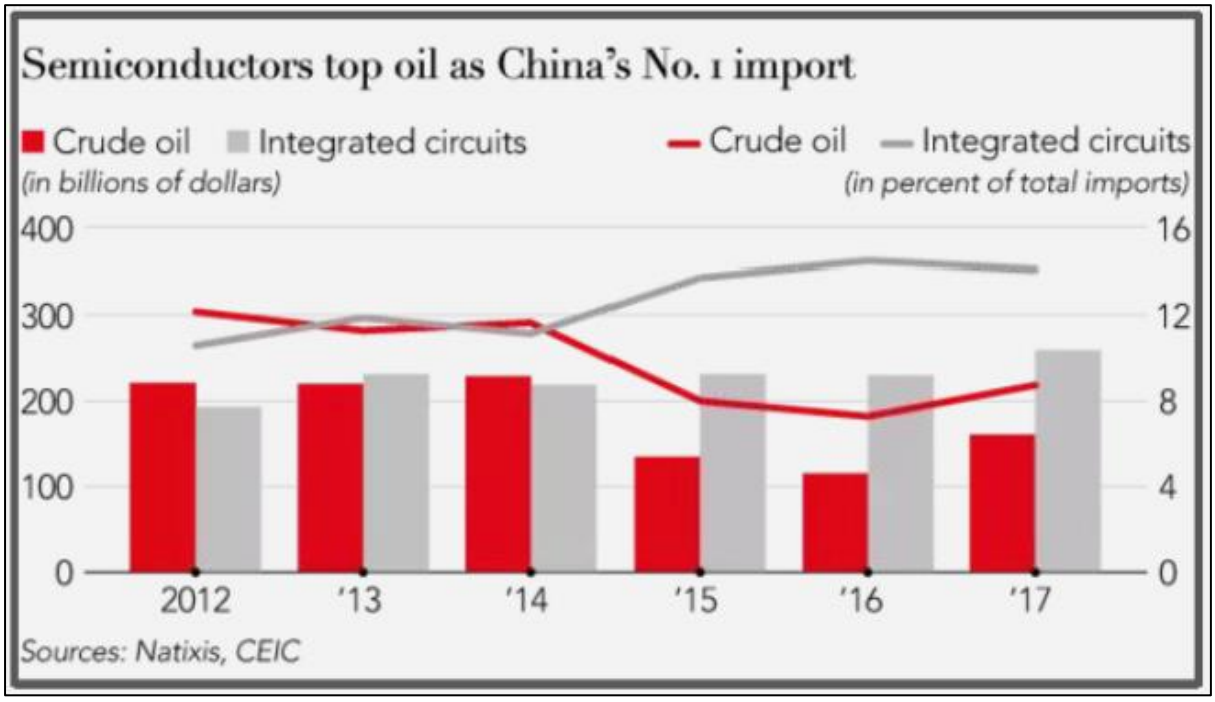

Figure 58: China's dependency on semiconductors (2018, NSCAI Report)

[29] For a deeper look, I recommend The Fintech Blueprint's *Long Take: The battle for Chinese Fintech*

[30] For those who aren't super clued up on the industry, I wrote an introductory twitter thread to semiconductors here and the Semiconductor Industry Association has a great writeup overviewing the supply chain here.

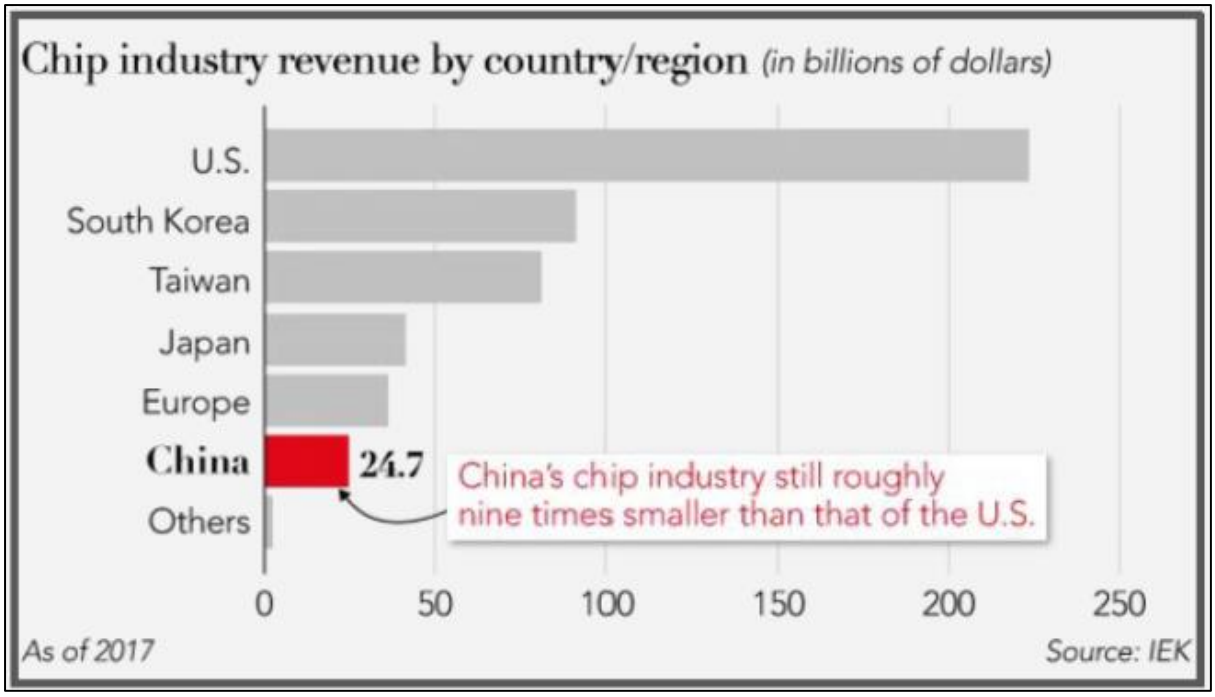

Figure 59: China's nascent semiconductor industry (2018, NSCAI Report)

Amidst this backdrop, and likely at the behest of the CCP, most of Chinese big tech has recently been investing in semiconductor development. It is unlikely any of them will look to fabricate leading edge chips any time soon – the capex outlay alone would be immense. China already dominates the manufacturing of low-end trailing edge (380nm etc.), and the foundries are likely looking to commoditize 28nm fabrication. With increased investment we could see Chinese tech creep into the fabless space too.

Baidu and Bytedance are reportedly developing internal chip development capabilities, with the latter investing into its own cloud AI and ARM server chips. Tencent recently announced a massive U.S. $70 billion "new infrastructure" investment plan over the next five years that includes building next-generation data centres, self-designed servers, IoT operating systems, etc. It is not unimaginable to see Tencent and Alibaba follow their Western FANG+ counterparts into vertical expansion: internalising chip development to reduce dependency on foreign chip vendors.

Quality

The entire point of the last 60 pages has been to demonstrate the depth to which Tencent is entrenched within, often dominates, and stands to benefit from, their current context. Intertwined with this, the next section is here to outline why Tencent is a quality company.

In summary, Tencent has positive scale economics, a strong founder-led management, they are either the lowest cost provider or a monopoly in all verticals they operate in, they share cost savings with customers, and they have incredibly high switching costs across their product range.

Business Resilience

At a high level, the company has a resilient financial position, with very little debt and strong historical growth (Figures 60 and 61). On most eyeball metrics, it shows a decent forward yield, especially relative to the low interest rates globally.

Financial Stability & Yield Ratios

Cash to Debt	0.87
Debt-to-Equity	0.37
Interest Coverage	13.78
Current Ratio	1.18
Piotroski F Score	7
Altman Z Score	6.64
Beneish M Score	-2.25
Greenblatt Yield	3.7%
Yacktman Forward Rate	25.7%
Dividend Yield	0.2%
FCF/EV + 6 Year CAGR %	37.3%
PEG Ratio	1.37
FCF Yield	3%

Figure 60: Tencent financial stability & yield ratios (2020, company financials)

Tencent is integral to the Chinese consumer via WeChat and Mini-Programs, integral to numerous businesses as a point of sale, a distribution channel, an advertising medium, and in providing cloud and data infrastructure, and integral to the Asian gaming market. They also offer potential investees a uniquely differentiated product (traffic) in the commoditized capital markets. The demand runway for Tencent's capital and products has a long runway ahead, and they have entrenched themselves in their current markets through their scale advantages and accumulated customer data.

The company is not dependent on any one supplier (barring the semiconductor risk discussed above), and as an aggregator the demand for their products is definitionally spread across a range of customers. Their push for vertical integration internally, and to provide digital "utility" services across their customers value chain only entrenches this resilience.

Annual Growth Rates

	6 Year CAGR	3 Year CAGR	1 Year CAGR
Revenue	34%	27%	37.04%
Operating Income	29%	22%	42.24%
Net Income	36%	31%	83.74%
Free Cash Flow	34%	30%	88.29%
Operating Cash Flow	33%	23%	40.12%
Book Value	41.25%	38%	86.71%

Figure 61: Tencent annual growth rates (2020, company financials)

As a scaled software, advertising, content, and infrastructure provider, many of Tencent's products have no marginal cost, are easily distributed via their existing channels, and carry a form of scale economics. Tencent will maintain their dominance insofar as they can improve their offering through:

a) Aggregating more end-customers at the same price for business customers.
b) Spreading the cost of improving their offerings (social, gaming content, platform improvements) over a greater number of customers than competitors.
c) Better data collection and more datapoints per customer and therefore better analytics capabilities both internally and for sale.

Like their Western FANG+ counterparts, the more Tencent grows, the better their unit economics become. At current scale, they can afford to invest in companies and initiatives

with poor current unit economics, subsidising them through the cash generated from Tencent's core operations and providing them with distribution channels and more traffic than their competitors. The scalability of their model is shown in Figure 62 below.

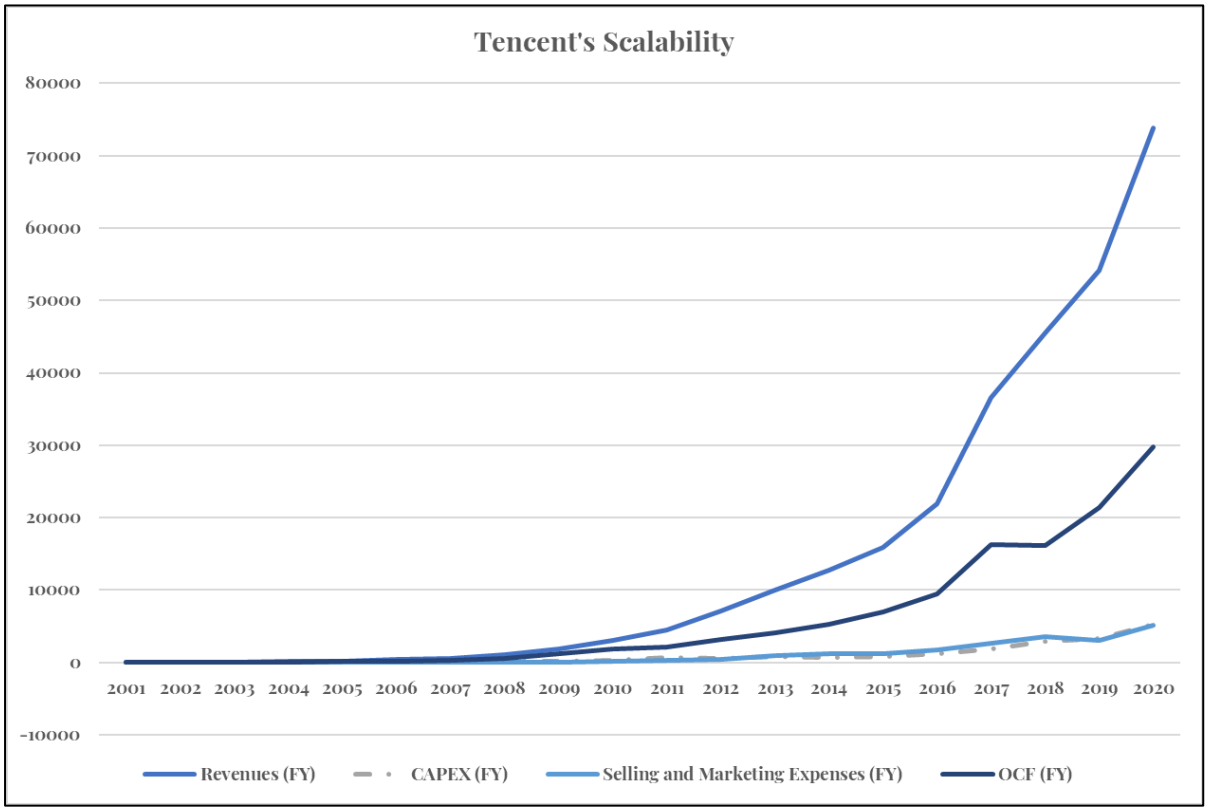

Figure 62: Tencent's scalability expressed through its historical financials (2020, company financials).

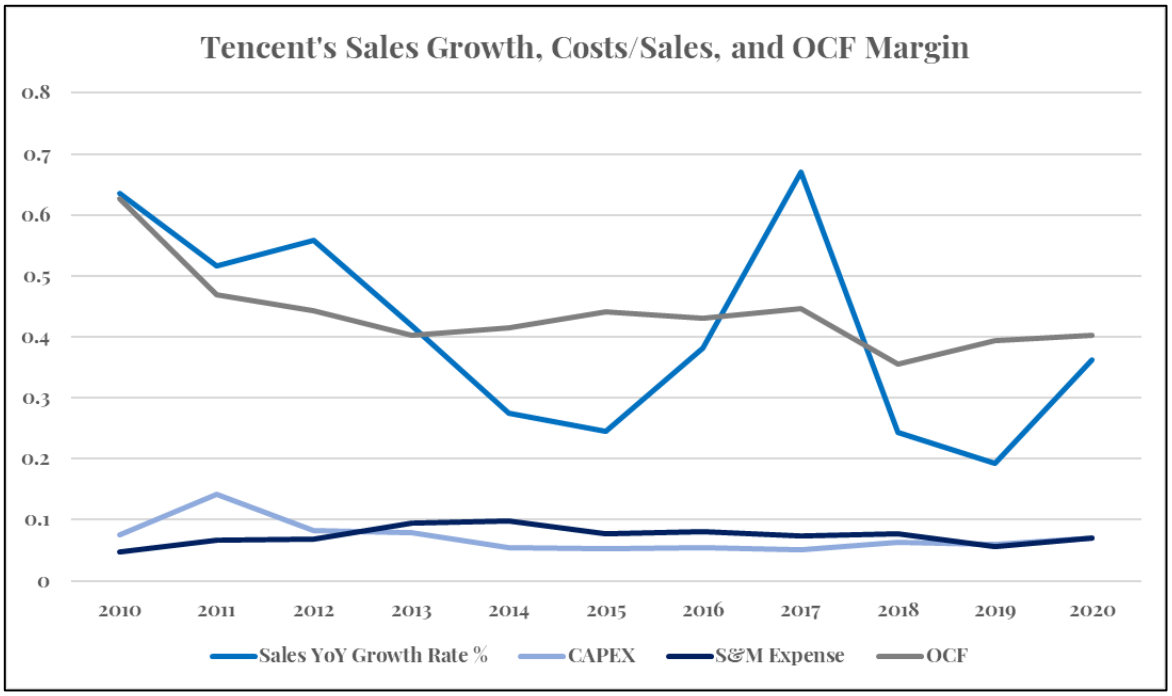

Figure 63: Tencent's growth rates, OCF margins, and Capex and S&M as a % of sales (2020, company financials)

Like much of Big Tech, Tencent consistently has negative net working capital and a negative working capital cycle (-90 days). While only a small percentage of revenue (-0.34%), the benefit of this "float" is well known: it is highly cash generative and provides the company with what is essentially a "costless, zero-coupon bond".

As seen in Figure 63, as the company has grown they have maintained Capex and Selling & Marketing expenses consistently around 8% of sales, and the Operating Cash Flow margin has consistently hovered around 43%. Additionally, growth has understandably slowed over the last decade.

As China's economy matures and as the digital market approaches saturation, the drivers for Tencent's growth will continue to shift. The historic drivers (consumer digitisation and growing consumer spend in China) will lessen in effect. It is possible the downward trend in growth rate continues over the next decade, however opportunities still abound in the digitisation of Chinese businesses and underpenetrated markets in the rest of Asia (discussed below in *Growth* and above in *Context*).

The financials above reflect the company's core operations. Their investees carry an entirely different economic profile, and many of them are set to continue growing at high rates for the foreseeable future. The company has sufficient access to untapped capital markets that, should they need to raise capital, they can borrow at record low interest rates with very little risk. Given their low debt and low capital requirements, the company is also resilient to changes in global interest rates.

Tencent has the 2nd most valuable brand in China (behind Alibaba), and the 7th globally. Their members are well connected within the CCP, they place a lot of emphasis on having a great work environment, employees give the company a 4.3-star rating on Glassdoor and customers speak highly of the company across their verticals, with even Alibaba's executives using WeChat.

Outside of Naspers (who own 28%), Pony Ma (8%), and Vanguard and Blackrock (2% and 1.3% respectively), the company has a diverse shareholder base, with no other owners owning more than 1%. Despite being a publicly traded corporation, Naspers have a voting structure which prevents outsider shareholders from having much say in the business. There is a slight risk for Tencent that Naspers management – who sit on the Tencent board – begin to throw their weight around. I do not believe this is a likely risk, given the pressure Naspers management are under to close the discount to their own NAV. Nor do they have enough political sway in China to push much against Pony and the team.

The capital light nature of their business, plus their scale and indispensability, protects them from inflation. What little costs they incur from inflation, they can pass on to customers through price increases. It is unlikely they will do this, given their ongoing land-grab war with Alibaba in many of their verticals.

The one area where Tencent is a less-than-resilient business is in the very real risk of state-intervention. I have discussed the role the CCP plays in China ad nauseum above and will cover specific legislative risks below (*Risks*).

Besides this, Tencent is evidently an incredibly resilient business.

Moat

The moat of all Big Tech is scale. Tencent is no different. Across all verticals, Tencent is able to leverage scale benefits to offer customers uniquely compelling value propositions.

In gaming and media, Tencent offers studios unparalleled distribution and offers consumers a constantly improving range of quality content (for which it can outbid competitors by spreading the cost over a larger customer base). Tencent's growth in user-generated video has lagged Bytedance, Bilibili and Kuaishou, but they lead in owning professional IP for both music and long-form video. One emerging moat for Tencent is the continued push into quality content. Similar to Netflix or Disney, the more entertainment IP that Tencent owns, the greater their value proposition to customers, and the stronger their pricing power.

In social media and fintech, the network effects in place mean that users are constantly interfacing with WeChat to talk to peers. These network effects are the winner-take-all, V=N^2 type. Fintech piggybacks off this, as users are incentivised to use WeChat Pay simply for ease of use. The frequent use of WeChat means that on most phones, the app is located closer to the thumb. The app also loads from the hard disk faster than apps like AliPay due to the cache storage difference. The improved user experience stacks another reason to use WeChat over competitors. Their emphasis on consumer experience for WeChat means that consumers have very little reason to want to switch to any competitor.

Cloud is the area where Tencent's moat is the least developed. They can leverage their scale through data collection across the rest of their business units, but Alibaba is in much the same position, *and* they have the benefit of being the dominant cloud provider already. That said, the nascency of the Asian cloud market means that there is still room for several players and Tencent's offering is increasingly competitive with Alibaba's.

Scale is incredibly tough to replicate, and at this point Tencent can outbid and outcompete most all potential entrants to their markets. Where Tencent may be mortgaging their moat is in their curation of the user only. Outside of cloud and business infrastructure, Tencent's focus has clearly been on the end consumer. This has led to a dynamic where many small businesses feel they *have* to market through Tencent, where small start-ups feel they *have* to have Tencent as an investor, and gaming studios feel they *have* to build and sell off Tencent infrastructure. Their recent B2B focus may alleviate this.. This is partially to address this one-sided dynamic.

All Tencent's markets have sufficiently large TAMs, with the majority of Asia being underserved in all of them. The risk of not having sufficient projects to invest in is low. Both Alibaba and Tencent have publicly committed to this, stating their intention to continue investing aggressively in growth. This reinvestment will likely carry high returns given both companies' respective moats and successful capital allocation track record. However, as the industry matures this reinvestment will be required to maintain the same growth rates. This will likely eat into the companies' margins.

NZS Capital have a great whitepaper on why innovation layers a margin of safety into investments. The idea is that an innovative company who can adapt well to changing circumstances face lower disruption risk and are usually pretty good at foreseeing the changes that their business is facing. Management of these businesses can then prepare in

advance, allocating resources to projects which capitalise on these changes. When these companies have long-duration of growth and a large TAM in industries where growth is governed by negative feedback loops, there is a decent likelihood that a company will earn above market, durable returns on capital.

Innovation is a debateable trait. While not necessarily creating the zero-to-one product, Tencent has a history of copying others, improving on their original design, and distributing excellently. For instance, their first chat platform, QQ (see Figure 3), copied Israeli ICQ. WeChat later copied QQ, taking the learnings and tailoring them for a different use case. WeChat Pay was a copy of AliPay. Tencent's team turbocharged their fintech distribution by taking old tech (QR codes) and an innovative spin on an ancient Chinese tradition (the gifting of red packets with money inside), digitising both and punting them on the WeChat platform. Mini-Programs was arguably truly zero-to-one and was a great example of the management team (specifically Allen Zhang) stacking S-curves onto their core products.

The management have demonstrated considerable business agility in the past, branching into non-core verticals and innovating on existing products. Now, their tight integration with consumers (and increasingly businesses) gives them a better leg up to aggregate data on customer requirements. This data helps to remove some of the guesswork associated with navigating uncertainty and gives them time to adapt.

Management

On the topic of management, Tencent is still led by the core team who founded it. Buffett famously suggested looking for businesses "a ham sandwich could run". However, in the hypercompetitive, hyper-innovative world of technology today, management do not have the luxury of being ancillary to the business fundamentals.

Management are responsible *inter alia* for determining company culture, facilitating innovation, managing employee morale, allocating capital at the highest returns for the longest time, and planning for the long term. Managers who own the company (and hence have skin in the game) are more likely to do these jobs well. Management who founded the company (and hence have *soul in the game*) are far more likely to do these jobs well.

Of Tencent's founding five, two are still executives (Pony Ma, CEO and Xu Chenye, CIO). The other three are on the advisory board. Most of the rest of the executive body have been with the company since around 2005, with the most recent newcomer being James Mitchell (2011, ex-Goldman, CSO), and Davis Lin (2013, ex-McKinsey, Senior Vice President). Their average age is late 40's, early 50's, and all have material amounts of their personal net worth invested in the company. Collectively, board members own ~$90 billion worth of stock (of which Pony Ma makes up $70bn.

Currently, Tencent's business units are structured like this[31]:

[31] For a dive into the history of Tencent's organisational structure, I suggest Matthew Brennan's *A Deep Dive into Tencent's Restructuring* and his *2018 report* on the company (which includes writeups on each of the executives).

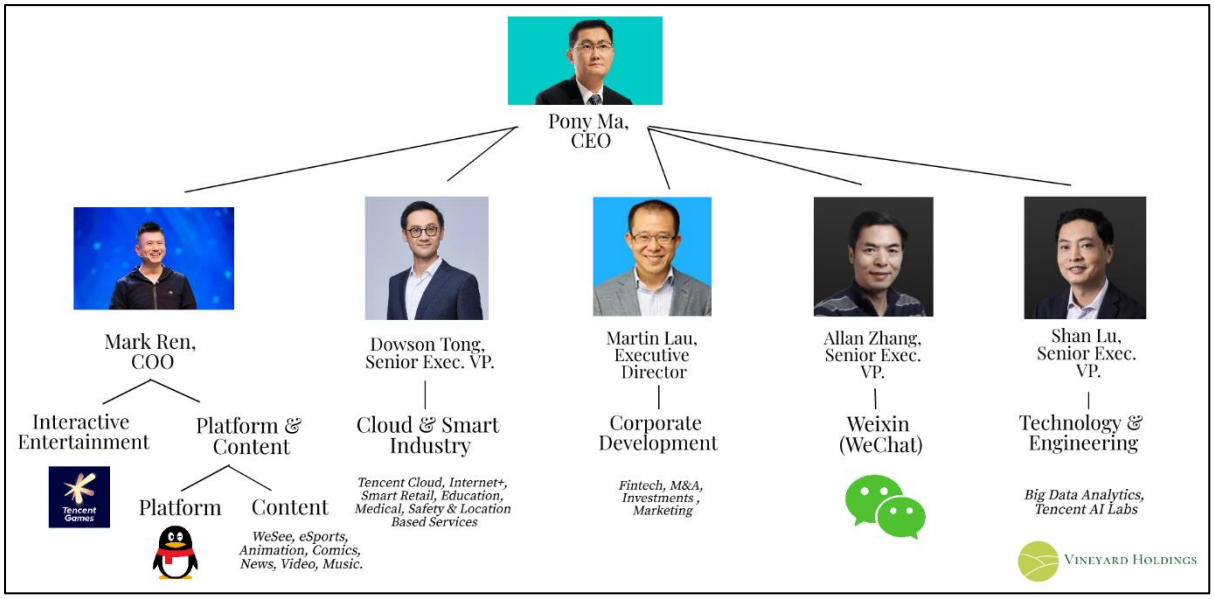

Figure 64: Tencent's Management lines (2021, company website)

There have been three different restructurings for Tencent's management. First (2005-2012) was from a Pony-Manages-Everything to systematized business units where different lines of business could look after different aspects. While this corporatization was much needed in 2005, by 2010 it was causing issues. For instance, QQ was divided across three separate business units (R&D, business development, and internet).

The second restructuring (2012-2018) moved Tencent to a more agile, product-first structure where each team is focussed on the entirety of a product and is responsible for that product's organic growth.

The third restructuring (2018-present) has emphasized thematic sectors being divided into "the first and second half of the internet". This restructuring has placed both B2B and "smart tech" at the heart, while Mark Ren and Allan Zhang can continue to oversee the cash cows of the business. While the company's AI initiatives are divided amongst Youtu Labs (Cloud & Smart Industry), AI Labs (Tech & Engineering) and WeChat AI (Weixin), Tencent have also set up a Technical Committee specifically to facilitate data flow between the business units. Alibaba did something similar in 2015, and it has paid off well.

In part, the Cloud & Smart Industry line is designed to take on Alibaba, and the Platform & Content is designed to take on Bytedance. Measuring the performance of these lines is tricky, given Tencent's obscure reporting, but judging from the Cloud and Fintech growth (*Context: Beyond WeChat, Cloud, Fintech*), Dowson Tong has done a great job. The Platform & Content angle has arguably been won by Douyin/TikTok, but Tencent's push into quality content suggests a strategic shift away from directly competing with Bytedance – letting their investees Kuaishou and Bilibili fight that out instead.

With their strategic emphasis on B2B reflected at an exco structure level, leadership is very much aware of the shift in management required to move beyond focusing on consumers primarily. The move towards enterprise customers – who are looking to digitize to improve efficiency – means that they need to lean on their AI, big data, and cloud computing

offerings. Their competitive advantage over Baidu and Alibaba (earlier market entrants) here is in connecting "consumer internet" with "industrial internet".

Culture

Prior to entering this industrial internet market, Tencent's B2B capabilities were divided among different (product-centric) business groups. Adding to these silos was the fact that management had embraced a "horse racing mechanism" of encouraging internal competition between business units. While this Adam Smith approach does promote innovation and motivation, it also limits internal cooperation. It is especially tricky to move data between these products. Hence the Technical Committee.

A further advantage of the restructuring was the creation of the Platform & Content, and Cloud & Smart Industries groups. Both sell mainly to key accounts in the enterprise, industrial internet market. Housing these key accounts in dedicated business units (rather than previous product-centric units) lets Tencent tailor products to the unique needs of the client, while the Technical Committee ensures the data which provides the competitive edge is available.

A potential problem with this approach is that key account decision-makers may be overwhelmed by information from the Technical Committee (who are receiving massive amounts of data). This stalls effective sales and can build resentment between the key account owners and the Committee. Unless the Committee is able to manage data presentation properly, the cross-functional data can cause problems in the process flows between business units.[32]

Given Tencent's size, complexity, and relative lack of experience in B2B markets, it would be a good idea for them to hire people from competitors with extensive experience managing key accounts and facilitating B2B sales. They will also need to upskill their product managers. Currently these people are majority used to discovering commonalities among a broad base of users and tailoring the product to meet the aggregated needs of this base (like they would've done for WeChat). However, enterprise products need to be more bespoke. Their current hiring segmentation is shown in the Appendix (*Figure A*).

Moving to the company culture: the impact of a top leader is tough to overstate. Pony Ma – who has an engineering background and is (relative to Alibaba's Jack Ma, and Huawei's Ren Zhengfei) comparatively reserved. Over the years, Pony's influence has contributed to Tencent's pragmatic, understated and action-first approach. This is partially why the company has been relatively understudied in Western coverage.

Since 2005, the company's division into lines of business (LOBs) has cultivated the "horse racing" competition internally. To quote Seven Tsui:

> *"In order to obtain more resources, such as funds, each business group must compete with each other, even if different business groups do not have direct competition in business because they meet the different needs of different customers. Because the target customer groups of different project groups in the same business group are often the same, the competition relationship between*

[32] Hat tip to Seven Tsui for noting this in his Tencent case study.

the project groups will be more intense than the competition between the business groups."

The result of this competitive focus is that Tencent often has more than one product in the same sphere. For instance, WeChat first competed with QQ. Inevitably, the "losing" products will result in "wasted" resources. Management believe this is not waste, as the trade-off is Tencent receiving the Darwinian winner, while fostering innovation and employee motivation.

As mentioned, the massive downside of this is that information is not shared. For example, when punting WeChat overseas, the team responsible was Corporate Development, not Weixin (wherein the product is locally housed). Typically, new markets require tailoring the product to the targeted audience. But because of the lack of practiced communication between the business units, Corporate Development was not quick enough to adapt the product, resulting in a loss of the markets to WhatsApp.

This model can also result in a form of winner-take-most. Teams which "win" are rewarded with praise and are seen as the go-to teams. Those which "lose" develop a fear of failure, as repeat-fails are not given the exciting projects to work on. As a result, the company develops a dependency on old, successful employees, and can struggle to fully engage mid-level new ones. Because employees want to be promoted, they push to move to the most high-growth, exciting projects. This results in employees chasing momentum. If Tencent does not set lofty goals (ala Amazon's space exploration) or grow as expected, the highly educated employees may look to other opportunities.

This hands-off, "horse racing" approach extends beyond their internal business units. They encourage competition between their investees too. To quote a Fortune article:

"Being hands-off doesn't mean Tencent always plays nice. Imitation is ingrained in its culture, and Tencent doesn't shy away from simultaneously licensing the products of its partners and creating similar offerings. "Tencent is both an investor and a competitor," says Jeff Smith, co-founder, and CEO of San Francisco start-up Smule, whose mobile apps allow a community of 50 million users to play and sing more than 20 million songs a day, often with each other. "Their views on the realpolitik of building successful technology companies reflect our own," says Smith, citing the storied QQ-versus-WeChat competition. The entrepreneur calls Tencent a "great partner," including, for example, the access Smule gets to Tencent's content distribution network, a service that competes against Google and Amazon. Tencent, in turn, benefits from its broad investing by keeping close tabs on smart technology and talented people, even without owning their companies outright."

This kind of competitiveness is not unique to Tencent. The scrappy corporate Darwinism is evident in many major Chinese internet companies. The intensity of the competition has far reaching effects on working culture and employee-employer dynamics. The Chinese stereotype of a hardworking, STEM-field-focussed child stems partly from what is called the 996 culture locally. Within the software development community particularly, younger workers are pushing back against a culture which "encourages working from 9 AM to 9 PM, 6 days a week".

Notably, the biggest pushback on this culture has been towards Pinduoduo, JD.com, Youzan and Alibaba. Tencent is not mentioned in the Wikipedia article about the worker pushback. How Tencent navigates the increasing worker resistance to such work intensity will determine their labour relations with many highly educated Chinese, who are increasingly able to work overseas if they want to.

Comparatively, while Tencent's working culture may have some areas to improve, it is ranked as the second-best Chinese company to work for (Bytedance is the first) on Glassdoor. Relative to its peers, I believe Tencent's management have done a good job in making employees want to go to work. Reading through Quora's answers to "what is it like to work at Tencent" seem to reaffirm this view anecdotally.

Growth

Historically, the company has grown well, with a highly profitable model. Recently, much of the value gain has come from listed investees outperforming as well. Figures 63 and 64 below show the profitability growth, and the growth in investee portfolio.

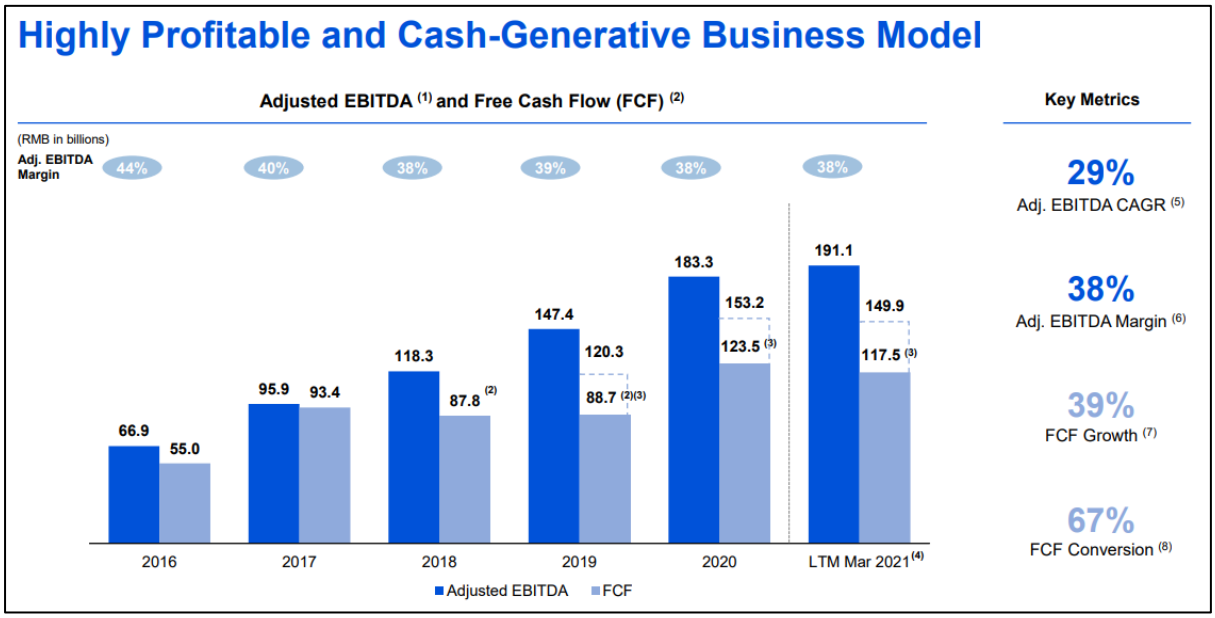

Figure 65: Tencent's profitability and cash generation (company 1Q21 Corporate Overview)

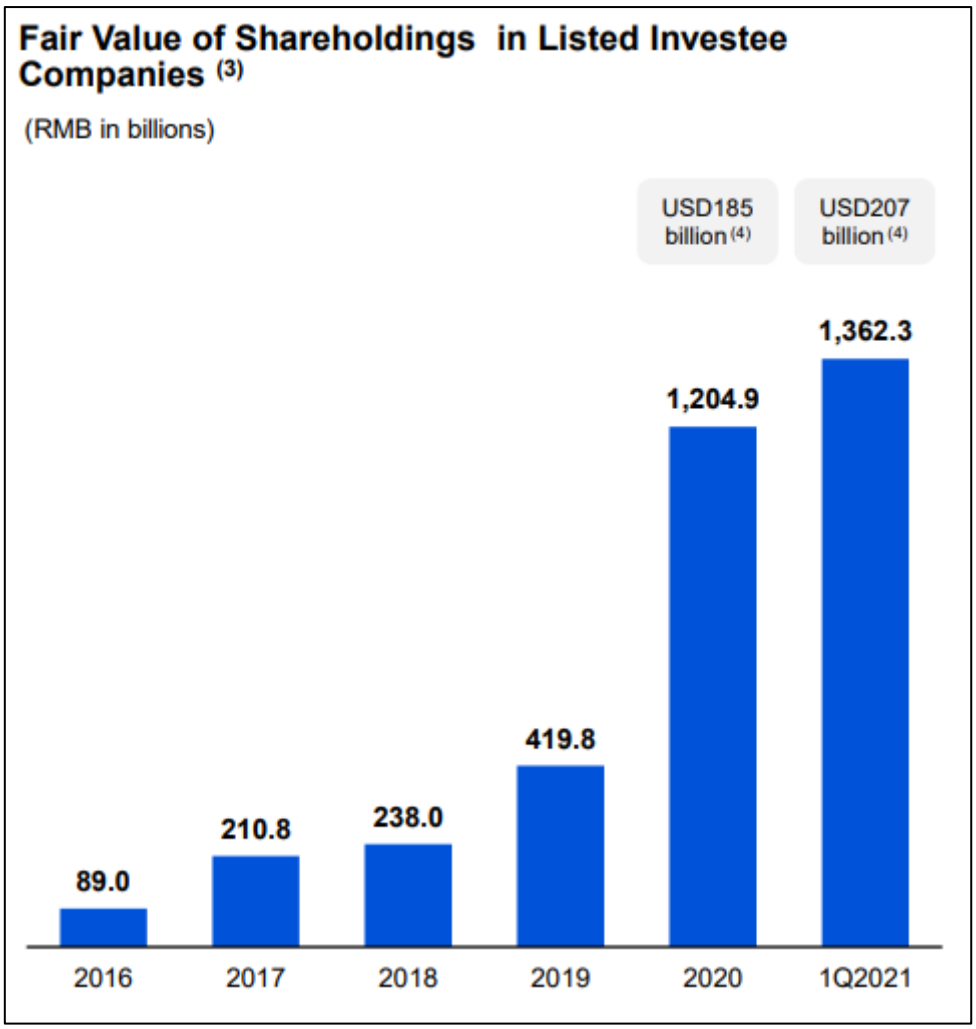

Figure 66: Tencent's investment portfolio performance (1Q21 Corporate Overview)

So, what do the growth prospects for Tencent look like? Well, there are several avenues they are pursuing across their verticals. I've tried to sum it up in Figure 67.

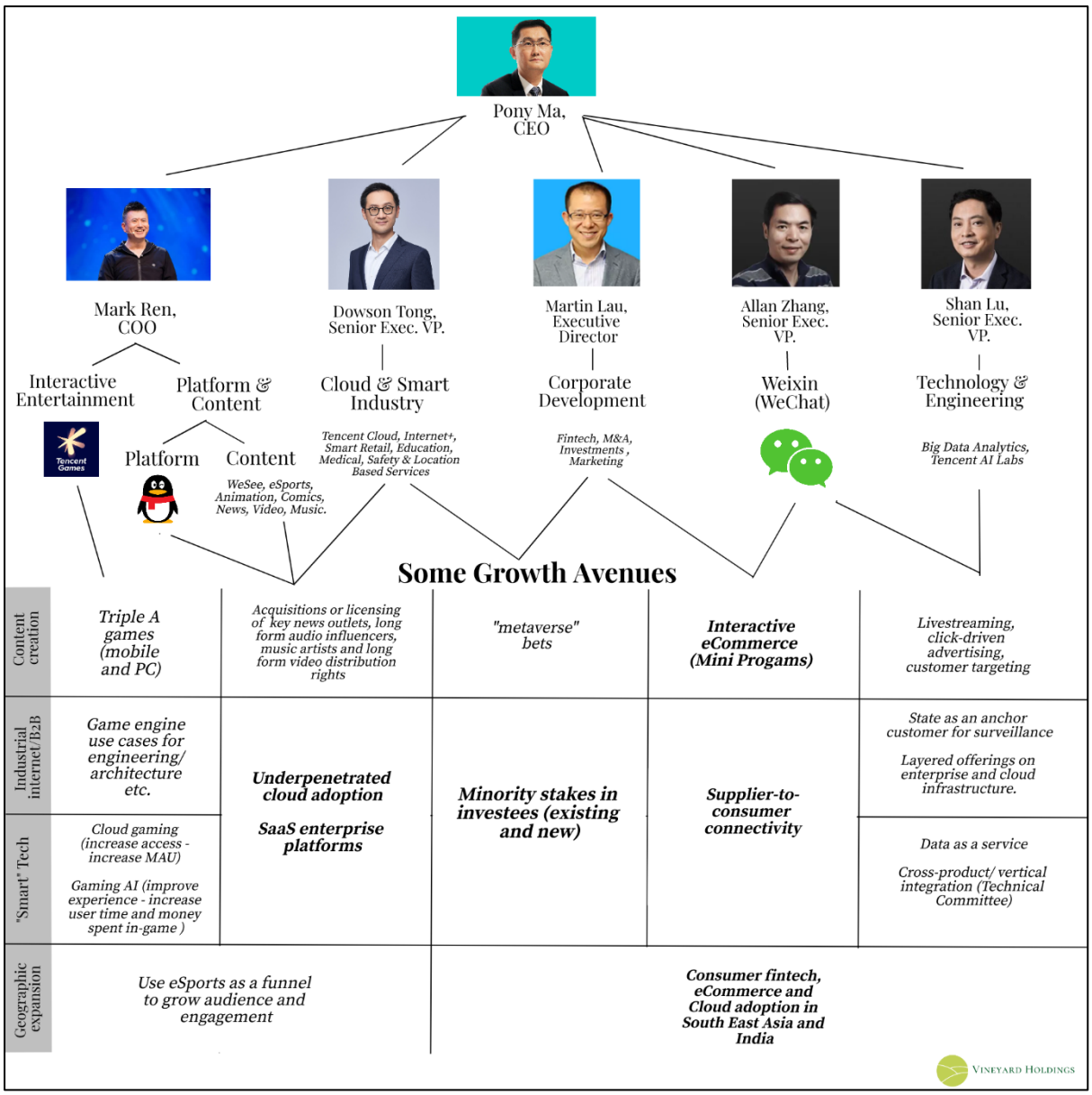

Figure 67: Potential growth avenues and call options on future expansion (2021, Vineyard Holdings)

Each of these growth prospects have been touched on qualitatively above. Forecasting growth in each of the verticals is tricky given a) the obscure reporting, and b) the complexity of the organisation and subsidiaries.

Recently, growth has been higher than average (see Figure 61 above). The current pandemic has boosted the revenues of most gaming and entertainment companies as people spend more time alone and indoors. Relative to their peers, this has disproportionately benefitted Tencent (see *Context: Beyond WeChat, Gaming*). Further, in an [increasing returns to scale] environment, modelling decay in these rates is not necessarily more accurate.

Tencent have proven themselves adept at stacking s-curves and breaking into new markets (e.g., QQ -> WeChat -> Red Packets & payment QR codes -> WeChat Pay -> WeChat Mini-Programs). They've also proven shrewd capital allocators with their M&A. The optionality

embedded across their platforms is arguably the highest in any company globally[33]. Given Tencent's heavy content and connectivity focus, a 5G rollout would provide them with strong tailwinds too. They don't pay for the capex of building the towers and infrastructure needed for 5G, but they are one of the major beneficiaries worldwide. Combine this with high base rates for growth (Figure 68) in the gaming industry broadly, a rising Chinese consumer spend and a very large and underserved B2B/SaaS/Cloud market in China, and you have a set up for a high base growth rate across their business.

In the table below, I've tried to approximate global industry growth rates from a variety f sources (Appendix, Figure B). The "Others" segment does not correspond to Tencent's "Others" in their financial statements. The weighting is largely guesswork from a variety of sources, based partly off Ming Lu's work in a previous Smartkarma report.

Base rates for Tencent's core industry growth.

Industry	Current Global Market Size (USD'm)	Est. Global Industry 5Y Growth Rate	Est. Weight on Tencent's Current Revenues.
Value Added Services: Online Games			
Mobile Games	109 000	10%	21.7%
Computer Games	36 000	7%	9.3%
Value Added Services: Social Networks			
WeChat Pay	1 450 000	24.5%	15%
Subscriptions	141 700	16.6%	7%
Advertising: Social & Other			
WeChat Adverts	110 628	5.76%	10%
Advertising: Media			
Video Adverts	169 700	11.87%	2%
Livestreaming	55 961	28.1%	5.5%
Fintech & Business Services			
Cloud	371 400	17.5%	4%
Mini-Programs' eCommerce & Payment Services	10 360 000	14.7%	24%
Others			
Data Engineering	59 000	18.2%	0.5%
Analytics & Visualisation	27 000	7.5%	0.5%
Artificial Intelligence	46 000	42.2%	0.5%
Average Growth Rate		**17%**	
Weighted Average Growth Rate		**14.6%**	

Figure 68: Base rates for Tencent's growth (2020-2025E, sources in Appendix B).

The implications of this table are:

1. If Tencent grows just at industry rate, that's 14.6% per annum.
2. There are enormous markets globally for the industries they operate in. eCommerce and mobile payments are particularly large.

[33] I suggest reading my Cartrack article where I break down a framework (inspired by Michael Mauboussin, Dennis Hong, and Fred Liu) on how to think about optionality.

3. Currently, Cloud is really a negligible contributor to sales.

Given Tencent's scale, their growth increasingly becomes linked to the country-wide tailwinds too. China has grown GDP per capita at a 6.9% CAGR between 2010-2018, and was forecast to grow at 7.5% from 2019-2026. There are very few other markets growing at this rate. Given that the industry growth rates above are global, it's likely then that the China segment of these industries will have higher growth than the world average. Offsetting this is the already-high rate of internet use in China (see Figure 39), so growth will need to come from increased ARPU rather than increased MAUs. At the end of the day, a 14.6% growth rate is a conservative floor.

With the push into overseas markets, and into a more investment-centric model, I expect markets in India and Southeast Asia to underpin a chunk of growth going forward. These two countries are somewhat similar to China a couple of decades ago, and while Tencent focuses on the move to B2B within China, they will look to repeat much of their B2C growth within these markets.

Valuation

Now, a quick comment on valuation. It's borderline impossible to properly model Tencent's plethora of businesses. They do not disclose average users or pricing for many of their products, and the cross-selling within the apps makes accurately discerning product specific revenue challenging.

Below is a rough valuation of the company, with assumptions listed on the side. I have also included a comparison of valuation multiples at the time of writing for various gaming, ecommerce, and payments companies (*Appendix: Figure C*).

RMB'm	**Worst**	**Bad**	**Base**	**Good**	**Best**
Scenarios	Bad scenario + CCP sentiment worsens. Multiple contraction on investees. Growth rate halves across in all verticals.	Anti-Monopoly Guidelines prevent M&A and limit distribution exclusivity. Bilibili & Bytedance eat market share in entertainment. Increased regulation on Asian gaming. Growth rate declines below industry rate. Shrinking margins.	Growth rates slow below 3Y CAGR. Outworking of anti-monopoly guidelines favour incumbents. Margin contraction due to reinvestment for growth & tougher competition. Gaming vertical expands offshore & into quality.	Unprofitable investments turn profitable. WeChat international expansion & increased local ARPU. eCommerce expansion (via Kuaishou & Mini Programs) into rural China. Cloud becomes a major revenue source (+ possible spinout) Key B2B accounts diversify and increase enterprise revenue.	Growth rates continue at current 3Y CAGR (& halve for Cloud) + Sea Ltd dominates South East Asia & Epic becomes the lead in virtual rendering. Continued data-driven M&A yields successful investments. Expansion via BRI into Africa & underpenetrated Asia. Top 4 Global Cloud provider 2026.
2019 Revenue	377 289	377 289	377 289	377 289	377 289
2020 Revenue	482 064	482 064	482 064	482 064	482 064
2026E Revenue	**984 941**	**1 238 899**	**1 517 033**	**1 904 033**	**2 331 708**
VAS: Games	264 395	341 046	389 416	443 524	508 088
VAS: Social Networks	173 019	220 008	251 693	318 783	365 188
Advertising	123 553	169 857	223 641	286 325	363 476
Fintech & Business Services	275 037	313 253	400 182	532 028	683 704
Cloud	148 937	194 734	252 100	323 372	411 252
6Y Revenue CAGR Estimate	15%	21%	26%	32%	37%
Optimised FCF Margin	20%	22%	25%	30%	35%
2026E Free Cash Flow	196 988	272 558	379 258	571 210	816 098
Assumed FCF Multiple	15	20	23	26	32
2026E Core Valuation	2 954 822	5 451 153	8 722 937	14 851 454	26 115 134
2020 Portfolio Value.	1 794 800	1 794 800	1 794 800	1 794 800	1 794 800
Assumed Portfolio 6Y CAGR	-4%	5%	12%	16%	22%
2026E Portfolio Value	1 404 894	2 405 204	3 542 617	4 372 844	5 918 001
Total 2026E Valuation	**4 359 715**	**7 856 357**	**12 265 554**	**19 224 298**	**32 033 135**
Current Valuation	5 870 000	5 870 000	5 870 000	5 870 000	5 870 000
Hypothetical Annualized Return	-5%	5%	13%	22%	33%

Assumptions

Gaming: Assumed 8-18% growth rate. 3Y CAGR: 12%

Social Networks: Assumed 6-18% growth rate. 3Y CAGR: 18%

Advertising: Assumed 8-24% growth rate. 3Y CAGR: 19%

Fintech & Business Services (excl. Cloud): Assumed 14-30% growth rate. 3Y CAGR: 28%

Cloud: Assumed 25-45% growth rate. 3Y CAGR: 99%

5 Year Range: 25-35%. Peer averages of a similar range (FB, GOOG, AWS, BIDU, EA, TTWO, ZNGA, NTES, WB, BABA payments)

5 Year Range: 24x-35x. Peer averages (peers above) are slightly higher.

Used 6.41 RMB/USD and Packy McCormick's calculation for the investment portfolio value. Historical 3Y CAGR: 72%

Figure 69: Tencent Valuation (company financials, Vineyard Holdings)

Risks

There are many risks around Tencent, most of which have been raised above. This segment is just a summary of a bunch of them.

First, let's divide the risks into internal and external. Within internal we have culture risk, strategic and investment failure, and product failure. Under external, we have regulatory risk, geographic risk (of which Sino-US tensions are a subset), the VIE structuring, supply chain risk, and competitive threats. These threats are technically not "risks" but are worth mentioning.

The 996-culture lash back is one of the more underrated ones. Big tech relies heavily on innovation to maintain a competitive advantage, innovation requires elite workers, and elite workers don't want to work at company where they feel mistreated. While Tencent seems to lead its Chinese peers here (*Culture*), devolving culture is a key risk for management to prevent.

Similar to culture risk, management have so far been great at mitigating strategic or investment failure risk. Rather, their track record has been preeminent. Their evolving business architecture, strong investment track record, and consumer focus gives them a good trajectory here. However, their primary markets are hyper competitive, making effective strategy ever more essential.

Considering product failure, Tencent's small-steps-fast-iteration approach offsets the risk somewhat. However, as a megacap, Tencent's structuring removes many of the decision-makers from a customer-facing role. While their data capability is superb, the company's growing complexity and external competition means product owners will shoulder ever more responsibility to adapt to shifting demand.

One interesting take on the product evolution risk come from Sheji Ho here. Ho's idea is essentially that as users become more sophisticate and discerning, and as the competitive landscape evolves, users will not be so incentivized towards the "super-app" as they once were. While companies like Didi and WeChat (via red envelopes) have punted user acquisition by giving out "free money", this is not long-term sustainable and – to paraphrase – iOS is a fundamentally better user experience than a single WeChat do-it-all app. Whether this plays out as Ho suspects remains to be seen, but his article is well worth the read if just for the idea.

Since direct foreign ownership is limited in China, many companies have opted for the Variable Interest Entity (VIE) structuring to facilitate capital inflows. They do this through contractual agreements with onshore operators – seen as the "real" companies they intend to invest in – that give them an economic claim instead of an equity stake. So, owning Tencent isn't actually owning Tencent. It's owning a right to a share of Tencent's profits through a web of complex legal agreements. This is understandably an existential risk for foreign shareholders of Chinese equities. Property rights are, legally and philosophically, very nuanced ideas, however it remains that a shareholder's link to Tencent is largely less secure than their link to an equivalent company like Apple or Amazon.

In conjunction to the VIE structure, in most people's minds, the CCP poses the biggest external risk to Tencent shareholders. Their regulatory strength and recent flexing towards

Jack Ma and Alibaba have created the impression that they are in direct opposition to shareholders of Big Chinese Tech. As discussed above (*The Interplay Between The State And The Market)*, this is not the case. Nevertheless, they are the major risk in many eyes. Within China, there is growing anti-monopoly regulation:

The State Administration for Market Regulation (SAMR)'s 2020 Anti-Monopoly Compliance Guidelines specifically targets the platform economy, proposing merger control for VIE structures, anti-competitive agreements (like data sharing), and extends the definition of "abuse of dominance" pretty broadly. For Tencent, this is likely to mean it's tougher to do M&A as they have done in the past. But given the sectors Tencent dominates, social media and entertainment, are pretty open in nature, the changes are unlikely to prove too detrimental.[34]

In other domains, like India and the USA, geopolitical tensions have increased anti-Chinese regulations as well. This includes bans from these countries on Tencent's apps and games. While this does not threaten their existing position (given that these geographies make up only a small part of their revenue), it does inhibit future growth.

Given China's lagging semiconductor design and manufacturing capability, Tencent relies heavily (as most technology companies) on the major global players in that supply chain. While Tencent does not expressly manufacture hardware, their ecosystem relies on hardware supported by advanced semiconductors. Should geopolitics cause a constraint here, Tencent will feel the downstream effects pretty painfully.

These geopolitical tensions have increased under more under President Xi than under his predecessors. It is likely that as China continues rising in global prominence, these tensions will worsen. Since Tencent is such a big part of the Chinese economy, this means there are likely to be more anti-Chinese regulations to hamper their growth offshore. Add to this, slowing national GDP growth, an already hyper digitized consumer, and the declining population in China, and it is increasingly obvious that Tencent cannot lean on the same growth trends that have propelled them thus far.

I've covered their competitive threats extensively above (*Context: Beyond WeChat*), but in a nutshell, Bytedance is the biggest threat to Tencent. Attention is a zero-sum game, and Douyin/TikTok is taking substantial user time from Tencent Video and WeChat accounts. Stripping out all the investments and B2B, the core of Tencent is really online social media and entertainment – this is their bread and butter, and it is the area in which Bytedance is *rapidly* gaining user time.

Bytedance is now the second largest time-consumer in China, below only Tencent. Unless Tencent can implement similarly addictive algorithms within their products, and if Bytedance can effectively monetize and expand horizontally into other verticals, then Bytedance could become a very competitive rival to Tencent. Already, Bytedance's global reach is larger – something Tencent has struggled with in the past.

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[34] For a broader regulatory look, I recommend Yupei Zhao & Zhongxuan Lin (2020): Umbrella platform of Tencent eSports industry in China, Journal of Cultural Economy, DOI: 10.1080/17530350.2020.1788625

Conclusion

If you've made it this far – well done! In conclusion, I believe Tencent's scale, dominant market position and unique data capability combined with their investment strategy position them as one of the most high-quality and resilient companies in the world, risks notwithstanding. Trading at a relatively conservative valuation – presumably because of prevailing anti-Chinese sentiment – with a lot of "out of the money optionality", I believe Tencent offers an attractive entry point for the Fisher-esque investor.

Usually a conclusion contains a summary, but the *Explain Like I'm Five* segment should suffice for that. Besides, this has been a long article.

As always, I owe a stack of thanks to a great many people, a number of whom have no idea that I've utterly cloned their thinking. Thanks to David Eborall, Dede Eyesan, Aheesh Singh, Graham Rhodes and Paul Kim for the chats that went into building my thinking here. Thanks to Fred Liu, Dennis Hong and the NZS Capital team for their online letters and papers – the frameworks from which I've used in the construction of this report.

Finally, a massive thanks to all the Chinese analysts and twitter profiles who've been invaluable in my research process. Special thanks here to: Lillian Li, Connie Chan, Packy McCormick, Matthew Brennan, Thomas Laarson, @east_cap, Michael Norris, SuperJoost substack and many others.

Further Reading:

On Bytedance:

- Bytedance interview with Matthew Brennan
- Bytedance, TikTok, and China's Growing Influence in Global Tech with Matthew Brennan
- Will TikTok beat WeChat
- Livestreaming Monetisation – Lillian Li

General:

- Council on Foreign Relations – The Chinese Communist Party
- Rise of BAT and their role in China's BRI (PDF)
- 20 Resources to Understand China Tech Ecosystem
- Chinese Tech Analysis with Lillian Li

On Tencent:

- Tencent, A Manufacturing Re-evaluation
- #2 Deep-dive into WeChat with Tencent expert Matthew Brennan
- Tencent's History and Future with Matthew Brennan
- China readies a possible R22bn Tencent fine in crackdown against tech giants

AI/Surveillance with the Government as an anchor customer:

- Tencent's AI Whitepaper vs Alibaba's AI Lab fizzles out

- Limits to surveillance state
- Application of Artificial Intelligence at Chinese Digital Platform Giants (PDF)
- AI status deck

Questions to answer:

1. To what extent could the government compel Chinese tech giants to act with their foreign properties?
2. How concentrated will Tencent's offshore markets be? Network effect, winner-take-all effect, incremental vs reserve market, low/high frequency of usage, upstream/downstream effects.

Appendix

Figure A: Tencent's hiring segmentation (June 2021)

Recruitment Segmentation

Job Category	Number of Positions Available	%
Technology	**4251**	44.1%
Software Engineering	3088	32.0%
Quality Control	164	1.7%
Technology Operations	330	3.4%
Security	143	1.5%
AI & Big Data	522	5.4%
Enterprise Management	4	0.0%
Design & Art	**1000**	10.4%
Design	372	3.9%
Game Art	628	6.5%
Product	**3051**	31.7%
Product Design and Operations	1888	19.6%
Game Design and Operations	798	8.3%
Project Management	365	3.8%
Marketing & Public Relations	**278**	2.9%
Sales, Service & Support	**462**	4.8%
Sales	452	4.7%
Customer Support	10	0.1%
Content	**131**	1.4%
Finance	**115**	1.2%
Human Resources	**216**	2.2%
Legal & Public Affairs		
Strategy	**138**	1.4%
Administration	**90**	0.9%
Strategy & Investment	**183**	1.9%
	9637	100.0%

Figure B: Sources for Tencent's Estimated Industry Growth Rates.

	Current Global Revenue TAM (USD' million)	Est. Global Industry 5Y Growth Rate	Source
Data Engineering	59 000	18.20%	Source
Analytics & Visualisation	27 000	7.5%	Source
Artificial Intelligence	46 000	42.20%	Source
Mobile Gaming	109 000	10%	Source
PC Gaming	36 000	7%	Source
Mobile Payments	1450 000	24.5%	Source
OTT Video and Audio Subscriptions	141 700	16.6%	Source
Social Media Advertising	110 628	5.76%	Source
Media Advertising	169 700	11.87%	Source
Livestreaming	55 961	28.1%	Source
Cloud	371 400	17.5%	Source
Global eCommerce	10 360 000	14.7%	Source

Figure C: Relative Valuations of Gaming, eCommerce, and Payments companies (May 2021, Bloomberg)

Valuations

Table 1: Gaming peers comp (consensus estimates)

Company name	Ticker	Market cap (US$mn)	P/E		P/S		EV/EBITDA		EPS CAGR
			FY21E	FY22E	FY21E	FY22E	FY21E	FY22E	FY19-22E
Tencent	700 HK	750,649	31.8	25.6	8.2	6.8	22.7	18.7	26%
NetEase	NTES US	72,875	26.1	22.2	5.3	4.5	21.2	16.8	-2%
EA	EA US	39,710	25.1	22.2	6.5	5.5	16.2	14.7	23%
Nexon	3659 JT	22,251	20.7	17.1	7.5	6.6	13.8	10.5	7%
Bandai Namco	7832 JT	16,003	35.4	23.0	2.4	2.2	14.6	11.2	6%
Netmarble	251270 KS	10,221	34.7	29.7	4.3	3.8	25.4	20.3	34%
Konami	9766 JT	8,259	28.0	19.5	3.4	3.1	11.7	8.7	8%
PearlAbyss	263750 KS	3,467	28.2	15.9	7.0	4.6	17.8	9.4	13%
Com2uS	078340 KS	1,581	12.5	9.7	2.7	2.2	6.2	4.0	16%
Mobile peer average			**26.9x**	**20.6x**	**5.2x**	**4.4x**	**16.6x**	**12.7x**	**14%**

Source: Bloomberg Finance L.P. estimates. Priced as of 18 May 2021.

Table 2: E-commerce peers comp

Company name	Ticker	Market cap (US$mn)	Price (LC)	JPM rating	P/E		P/S		P/GMV		EPS CAGR	PEG
					FY21E	FY22E	FY21E	FY22E	FY21E	FY22E	FY19-22E	CY22
Amazon	AMZN US	1,630,116	3,372.2	OW	49.3	38.5	3.3	2.8	2.6	2.1	53%	0.7
Alibaba	BABA US	579,420	223.3	OW	21.0	19.0	5.3	4.0	0.5	0.4	29%	0.7
Meituan	3690 HK	203,431	314.0	OW	NM	139.2	7.3	5.2	1.2	1.1	58%	2.4
JD.com	JD US	108,724	80.4	OW	38.5	27.9	0.7	0.6	0.2	0.2	24%	1.1
eBay	EBAY US	41,755	62.5	N	15.7	13.6	3.5	3.2	0.4	0.4	29%	0.5
MercadoLibre	MELI US	67,104	1,584.7	OW	NM	NM	10.7	7.7	2.3	1.8	NA	NA
Pinduoduo	PDD US	153,202	137.6	OW	NM	NM	9.2	6.6	0.4	0.3	NA	NA
Rakuten	4755 JT	18,457	1,319.0	N	NM	-	1.2	1.1	0.6	0.5	NA	NA
Zalando	ZAL GR	27,549	87.7	N	88.7	73.0	2.2	1.8	1.6	1.3	44%	1.7
Vipshop	VIPS US	16,977	28.5	N	14.2	11.8	0.9	0.8	0.5	0.5	31%	0.4
Coupang	CPNG US	64,538	45.9	N	-	-	3.3	2.4	2.2	1.5	-68%	NA
momo.com	8454 TT	6,715	988.0	NC	70.3	55.3	2.3	1.8	NA	NA	34%	1.6
PCHome	8044 TT	476	88.6	NC	46.6	36.8	0.3	0.2	NA	NA	30%	1.2
Global ecommerce average					**43.0x**	**46.1x**	**3.9x**	**3.0x**	**1.1x**	**0.9x**	**26%**	**1.1x**

Source: Bloomberg Finance L.P. estimates, J.P. Morgan estimates. NC - Not covered. Priced as of 18 May 2021. For stocks covered by JPM, GMV is based on JPMe.

Table 3: Payment peers comp

Company name	Ticker	Market cap US$mn	Price (LC)	JPM rating	P/TPV		P/S		P/E		Sales CAGR 20-22E	Earnings CAGR 20-22E
					21E	22E	21E	22E	21E	22E		
PayPal	PYPL US	285,706	243	OW	0.23	0.18	11.1	9.1	51.5	41.6	21%	24%
Square	SQ US	92,513	203	OW	0.63	0.54	5.4	4.4	127.8	97.0	48%	71%
Western Union	WU US	10,174	25	UW	NA	NA	2.0	1.9	12.1	10.9	5%	9%
MasterCard	MA US	359,820	363	OW	0.05	0.04	19.6	16.4	46.2	34.8	19%	27%
Visa	V US	497,516	226	OW	0.05	0.05	21.2	17.7	40.2	32.0	14%	17%
Stone	STNE US	18,409	59	OW	0.35	0.27	17.7	11.8	60.8	37.1	62%	78%
PagSeguro	PAGS US	13,812	42	OW	0.32	0.27	7.5	5.8	41.9	27.7	38%	39%
Peers average					**0.3x**	**0.2x**	**12.1x**	**9.6x**	**54.3x**	**40.1x**	**30%**	**38%**

Source: Bloomberg Finance L.P. estimates. J.P. Morgan estimates. Priced as of 18 May 2021. *TPV estimates are based on JPMe.