

Tao Value Q3 2021 Letter

October 27, 2021

For the quarter ended September 30th, 2021, Tao Value recorded a return of -7.53%, compared to -1.26% of MSCI All Country World Index (ACWI). Our YTD return is -5.86%, compared to +10.93% of MSCI ACWI.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year /YTD	MSCI ACWI
2017	+1.94%	+2.34%	+0.33%	+2.80%	+4.14%	+0.07%	+2.65%	+1.76%	+1.31%	+4.69%	+1.34%	+1.60%	+27.91%	+23.97%
2018	+2.07%	-3.85%	-3.74%	-0.80%	+4.81%	+2.99%	+2.20%	+4.16%	-0.87%	-7.26%	+3.79%	-5.53%	-2.93%	-9.42%
2019	+7.68%	+2.62%	+3.19%	+1.46%	-6.54%	+3.28%	+2.40%	-1.53%	+0.43%	+0.52%	+2.42%	+1.25%	+17.88%	+26.58%
2020	+1.88%	-2.56%	-12.32%	+10.50%	+10.68%	+11.56%	+2.92%	+8.16%	-3.80%	+4.74%	+14.88%	+4.99%	+60.66%	+16.33%
2021	+7.55%	+5.30%	-8.20%	+3.17%	-3.83%	-1.30%	-9.88%	+6.58%	-3.73%				-5.86%	+10.93%
Since Inception (*January 1st, 2017)													+121.37%	+83.42%
Annualized													+18.21%	+13.62%

Contributors & Detractors

Contributors		Detractors	
Position	Performance (bps)	Position	Performance (bps)
Long TEAM	355	Long PDD	-228
Long SE	194	Long BILI*	-212
Long CACC	86	Long TAL	-204

* Exited position

Our top contributors this quarters are **Atlassian (ticker: TEAM)**, **Sea Ltd. (ticker: SE)** and **Credit Acceptance (ticker: CACC)**, adding 355 bps, 194 bps and 86 bps, respectively. The largest detractor this quarter is **Pinduoduo (ticker: PDD)** with -228 bps. It was followed by **Bilibili (ticker: BILI)** and **TAL Education (ticker: TAL)** dragging -212 bps and -204 bps, respectively.

As of the end of this quarter, our top 3 positions are **Alphabet (ticker: GOOG)**, **Sea Ltd (ticker: SE)** and **Atlassian (ticker: TEAM)**. Collectively, they are 39 % of the portfolio.

Atlassian (TEAM) delivered a “ripper”(quoting management from earnings call) quarter, adding a record 23K new customers last quarter, which is more than the total new customers of full year 2020. The cloud revenue also shows growth acceleration. This is surprisingly impressive, give that TEAM is believed to pull future demand forward to last quarter (i.e. the market expects de-acceleration after such effect) by ending their on-premise offerings in February 2021. As a result, the stock price jumped up 20+% on the earnings day. TEAM has increased 20-fold from our initial purchase and is now growing into our 3rd largest position.

Due to market turbulence caused by China tightened regulation, all 3 top detractors are China-related names. Among which **Pinduoduo (PDD)** & **Bilibili (BILI)** had no direct impact from specific regulation (or even rumor of regulation) yet were punished due to loss of investors' confidence in Chinese stocks. On the other hand, **TAL Education (TAL)**'s value is largely destroyed by the policy officially released on 7/24/2021, which essentially outlawed for-profit curriculum-related after school tutoring (which is TAL's main business). It is a hard lesson learned here that government related risk is a substantial one, especially for Chinese businesses.

General and Market Commentary

The “Good” Platform - Thoughts on Facebook and Social Networks

In the past quarter, Facebook got into another big public crisis when a series of internal reports & research were leaked and reported by media. The whistleblower - Frances Haugen, later revealed herself and testified in front of the congress. The evidence showed that Facebook management were aware of the negative impact its platform brought to the society but decided to ignore (or at least play down) such impact to prioritize growth. So, is Facebook a bad social platform?

First, we must admit that the root of many of these problems is not Facebook. Humanity is undergoing a generational transformation from purely physical existence to physical and virtual co-existence. The world is now weaved by new social fabrics and many old rules do not apply anymore. We human are struggling with new problems created by ourselves. For example, with swaths of information, we cannot easily tell “misinformation” from truth.

It is still a myth how government was first originated, but it's widely accepted that the earliest & most primitive government was formed around a similar generational shift from hunter-gatherer societies to more settled agricultural societies. With such generational shift, there are significant changes and additions of the definition of “Public Good”, thus a centralized entity is needed to establish and maintain new orders. Given the important role social platforms play nowadays, I would argue they are essentially in such a centralized entity role. Among them, Facebook is the biggest one, and is probably more powerful than the mightiest empire in human history. A small decision made by Facebook management (sometimes even a developer) in building its platform is no smaller than a government policy and could have profound impact to billions of people.

However, based on multiple sources of evidence, Facebook showed that it is either ignorant, or worse refutative to assume the responsibility of such an entity – to define and enforce the new “public good”. For example, in the infamous leaked 2016 internal memo¹ of Facebook CTO Andrew Bosworth, he essentially claimed that “connect more people”, regardless of good or evil outcome, is “*de facto* good”. As we are at the dawn of a new age, I do not expect social platforms can get things right at their

¹ <https://www.buzzfeednews.com/article/ryanmac/growth-at-any-cost-top-facebook-executive-defended-data>

first try, after all it took human centuries to iterate through the best forms of government, but Facebook's blatant negligence of its power & responsibility appears shocking to me.

Give the similarity of social platforms and government, we can use Lee Kuan Yew's good (and ideology-neutral) government model to test platform's value. Lee once famously refuted the universal applicability of western-developed democracy and said, "a good government means our government consider ourselves as the trustee of the people, whether you are King, Sheikh or whatever."

Based on records made public thus far, I believe Facebook proved that it did not put its stakeholders' trust & wellbeing as priority, thus not a good social platform. This is by no means a dismissal of Mark Zuckerberg. I believe he is a visionary businessman to say the least. Yet it's clear that running Facebook requires a mindful "King, Sheikh or whatever" who can serve as the trustee of its stakeholders. Unfortunately, a great merchant just doesn't cut it.

Now if you are wondering why I spent time thinking about and discussing a business that we don't own, it is because I researched a good social platform from the opposite end of spectrum, who put stakeholders' trust and security first and has been actively trying to define and enforce the new "public good" even it is a much smaller society. It is our new position – **Roblox**.

Portfolio Updates

Roblox (ticker: RBLX)

Roblox is a new position of "Mindful Compounder" category and is a new breed of business that is hard to define at this point. It started with gaming but has the potential to evolve to a new being for human society. Roblox management calls it "human co-experience" and many practitioners call it "metaverse".

Tao

The company made many "drastic and rational" decisions which shows deep mindfulness - an important trait I look for. The first thing caught my attention is management's attitude towards security, privacy & trust. Different than Facebook, Roblox took trust and security seriously very early on. So serious that they actually report "Infrastructure and Trust & Safety" as an accounting item in its operating expense breakdown, indicating that they see the trust & safety is an integral part of the infrastructure of the virtual world. Roblox didn't just say it, but also did so. For example, Roblox doesn't have voice chat functionality, which is a key engagement feature and is almost a standard setup for almost all gaming platforms. Yet it is also a feature that is very hard to moderate in real time with old day technologies and can be abused heavily. Roblox made a conscious decision to put security/trust before product stickiness and deferred the audio chat until recently (Roblox recently rolled out an alpha test moderated by AI-based technologies).

Roblox, as any other large social platforms (which becomes the human society itself), will unavoidably have the dark side of the humanity. One Wired article revealed the story about “How 'Roblox' Became a Playground for Virtual Fascists”². Yet it is how the platform sees and treats the problem matters. In Roblox' case, it seems to me that they have a very strong stand on their responsibility (to be the trustee of its users). According to this article, a Roblox spokesperson said the company reviews “every single image, audio file, and video before it is uploaded.” Accordingly, Roblox disclosed that it has 3600 people (albeit outsourced) working on trust and safety, compared to only 1200 full time employees.

Meteorology

The Metaverse will bring a new form of human society, like what internet did. As we look back how internet transformed the world, many existing business models migrated over to new forms (e.g. physical text content becomes digital text content). But more importantly, there were many new business models enabled by such new form (e.g. video streaming), for which we could only see the tip of the iceberg initially. I believe similar thing would unfold that the most value of Metaverse will come from new markets that is “unimaginable” yet. Given the huge potential, there won't be a single winner of Metaverse, just like there is no single winner of the internet.

For Roblox, one low hanging fruit is Ads. Roblox intentionally did not introduce ads in its platform and is very thoughtful about building novel “brand experiences” (rather than just building “virtual billboards”). Take Gucci Garden for example, it was a limited time event Gucci built in May 2021 that allows Roblox users to experience Gucci's brand and products in a virtual way (think of it as a pop-up store in the game). I think such experience-based ads in terms of effectiveness is another level above the best digital ads of current generation (arguably video). Take one example, one hottest limited virtual item - Gucci Dionysus Bag with Bee (initially sold for 475 Robux) - is currently traded at 17,000 Robux (\$170) and was once traded as high as 1342,578 Robux (or \$1343!). With new technology like AR, it is not too hard to imagine such platform can facilitate physical fashion goods transaction, thus could create an e-commerce business.

Additionally, Roblox is experimenting new forms of entertainment in Music. For example, Lil Nas X hosted a concert in Roblox and recorded 33 million attendances. Recently, Roblox also collaborated with Poppy to launch a live listening party as a new music release event. Like iTunes reshaped how music is released and transacted, Metaverse could reshape how it's done. It's still too early to think about monetization, yet I'm excited to watch Roblox's dedication to explore new forms of human experiences. I think Roblox is positioned well to be one of the winners in Metaverse age.

² <https://www.wired.com/story/roblox-online-games-irl-fascism-roman-empire/>

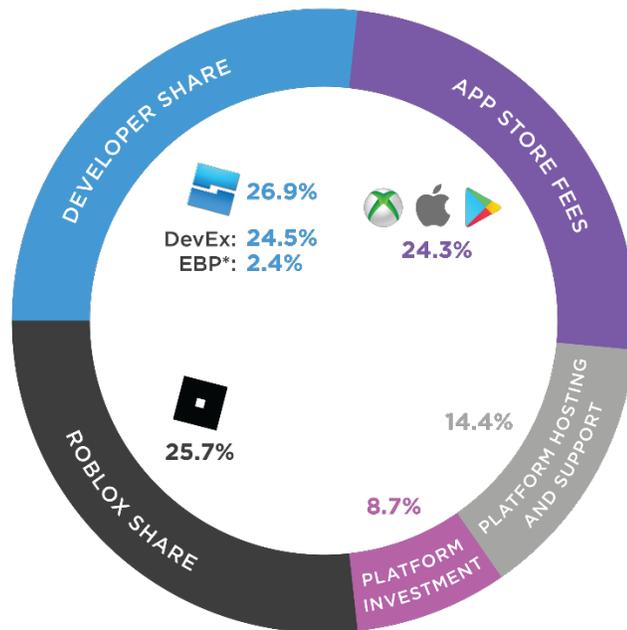
Now let's connect above analysis to KPIs & forecast. As lastly reported, Roblox's Daily Active Users (DAUs) now stands at 43 million, Hours Engaged per DAU per day is about 2.6 hours, & Average Bookings per Daily Active User (ABPDAU) in the past year is about \$62. First, I think Roblox's DAUs still have long runway to grow based on the direction humanity is heading towards. With such "yet-unimaginable" use cases unlocked, a major "Metaverse" platform should be able to reach similar popularity in 5-10 years as YouTube or Facebook nowadays, which translates to DAUs between 200m to 2b. Second, I also think Roblox still under-monetized and should be able to grow its ABPDAU substantially. Let's look at the monetization of current generation matured platforms, Facebook is earning \$110 per user engagement hour (1.9b DAUs, 0.5 hours/day, 105B Rev), whereas YouTube is earning \$119 per user engagement hour (280m DAUs, 0.75 hours/day, 25B Rev). Roblox yet only takes \$24 (also note this is bookings which is fairer, using revenue would yield an even smaller number) per user engagement hour.

Topography

Roblox enjoys a strong network effect moat commonly seen in top UGC (user generated content) two-side platforms and maintained a 30% free cash flow margin which is rare for early-stage tech business. To understand its moat's strength & durability, we need to look further into the Roblox economy around its own currency Robux.

Users first purchase Robux using fiat currency (at an average rate of \$0.01/Robux as of 2020 per \$1). Users then spend Robux in Roblox buying virtual items for their avatars or directly in experiences. For such spending, developers (referring to users who create experiences) keep 70% of the Robux spent on an experience, custom tools, and content, while creators (referring to users who create avatar items) keep 30% of the Robux spent on items purchased in the Avatar Marketplace. Developers & creators then can use such Robux to reinvest in its business within Roblox or convert them to fiat currency (at an average rate of \$0.0035/Robux). It can be seen that developers & creators are the core of Roblox economy, creating 3 distinct and potentially large marketplaces - experiences (think of game titles), avatar items, and developing tools & assets (e.g. 3D models, dev tools).

As you may already noticed, the Robux exchange rate bid/ask spread (\$0.0035/\$0.01) is "unfairly" wide, although it could also be Roblox's incentive for developers to reinvest Robux within the platform. As a result, when measuring in dollar, we saw that developers on average keep only about 27 cents for each dollar users spent (see billings breakdown figure below). This rate, in my opinion is low, but it is not due to Roblox taking unfair share (who takes about 26%), rather it seems to me that the distributors (Apple, Google etc.) are taking too much share (24%) considering what they provided. The recent ruling of Apple vs. Epic Games shows positive sign that such "over-earning" power is subject to further challenges. Roblox is fully aware of the importance of developers & creators in its ecosystem and committed on many occasions that their primary goal is to increase developers' payouts, even faster than booking growth, through cutting OpEx (e.g. increasing efficiency & productivity, or reducing app store distribution fees).



Source: Roblox, based on data from 12 month period ending June 30, 2021

Roblox also creates an insurance-like negative working capital model, from which Roblox receives capital upfront and only needs to pay out a small portion (to qualified developers) later. Given this strong economic advantage, Roblox has been cash-profitable at least since 2018 (earliest disclosed in IPO prospectus) and is earning 30~% free cash flow margin as lastly reported.

Another advantage of Roblox is the Monetary Multiplier Effect. For non-sovereign entities to harness such power, the keys are: 1) creating its own currency; & 2) encouraging wide range of transactions between its “citizens” in its own currency. Historically, Tencent’s QQ Coin achieved the first yet not the second, thus the network’s connection (i.e. transactions) is linear to the number of nodes (users). While in Roblox’s case, we see the early adoption of the second part where developers would use earned Roblox to purchase assets (3D models) and tools from other developers. Once scaled up, such monetary network would be much more valuable since the connections would have combinational relation to number of nodes, or $C(\text{nodes}, 2)$ to be more specific. I’m positive to see that Roblox economy team already started to think like a sovereign by measuring Roblox denominated “GDP” (rather than just US dollar denominated billings).

Commander

Roblox’s cofounder and CEO Dave Baszucki is among the most mindful managers I have studied. Baszucki, studied electrical engineering at Stanford University, started his career in late 80s by building “Interactive Physics”, an award-winning educational simulation software allows users to do virtual physical experiments. After working for the acquirer of his old company and then doing a short stint of angel investing, Baszucki cofounded Roblox in 2004, with a long-range grand

vision of “people doing things together in a virtual space”. Roblox showed little evidence that it could be a great business until circa 2018. Such a long time of “underperforming” would grind most founders out (e.g. pivot business model or quit altogether) if they are for financial or reputational incentives. Yet Baszucki showed deep passion and unwavering mission in building the product he envisioned. Through the emphasis on security and trust (analyzed in Tao section above) and the new engagement-based payout (analyzed in System section below), Baszucki & his management demonstrated their deep mindfulness in making hard decision based on first principles.

System

When evaluating System factor, I look for culture and thoughtful incentive system designs which, in my opinion, are manifestation of deep rationality and mindfulness. Such culture and designs are usually encapsulated in relentless pursuit of fundamental truth and could have profound long term positive impact. Roblox’s recent push of a new economy model - engagement-based payout, is a good example of such pursuit.

In existing model, Roblox users must make conscious decision to spend Robux within experiences in the forms like unlocking features. Thus, the developers must design an in-experience monetization model, which 1) may not be the best time spent for their creativity; and 2) can cause unfair earning (both under- and over-earn) due to improper pricing. In a perfect scenario, I would argue that developers should be compensated by their value created for the users. So, what would be the best proxy of such “value”? Roblox came up with a new engagement-based payout model, where in conjunction with its subscription service, all developers can earn a prorated share of the users’ monthly subscription fee based on their engagement (currently defined as the amount of time spent in a particular experience). I believe this new model is superior as it enables developers to solely focus on experience creation and creates a more inclusive and fairer economy system.

Valuation

Thanks to the great economic model and intentionally deferred low hanging fruit harvesting (Ads), Roblox is easier to value than some other early-stage tech businesses. It seems likely to me that Roblox could reach 100 million DAUs in 5 years, which could be fairly monetized at \$20 billion assuming \$110 per user engagement hour of current mature platform rate. With a fair 25% FCF margin, Mr. Market currently priced Roblox at 8 times FCF in 5 years. Using 5 years exit multiple about 10X free cash flow, I estimate such an investment can yield IRR north of 15%. I also strongly believe Roblox will be able to capture more value from “unimaginable” use cases, for which I didn’t model or value. Overall, Roblox appears to be a great business undervalued to near term profitable visibility, who also has long term optionality.

Others

As witnessed in the past quarter, the government intervention in Chinese private sector is elevated to an unprecedented level. Given this background, I thoroughly reviewed all our Chinese holdings and made a few changes. We exited **KE holdings (ticker: BEKE)**, for high potential regulatory risk and the passing of the visionary founder & CEO Zuo Hui (who was a core tenet of our original thesis). We exited **Agora (ticker: API)** as we estimated that it has 25+% of evaporating revenue tied to online education use cases, but the management seemed to be evasive about the potential impact. We also exited **Bilibili (ticker: BILI)**, given its priced-in valuation in the context of Chinese ADR confidence loss. On the other hand, we added on our **Meidong Auto (ticker: 1268.HK)**. It reported a strong 1H with very positive near-term profitability but the market didn't budge. Its forward PE valuation had dropped to pandemic low (25~). Overall, we exited positions that were either opportunistic in nature or with high regulatory risks, but stayed put or added our core "Mindful Compounders" positions.

Final Note

The past quarter was a humbling one, but also a one that inspires deeper thinking about the purpose of a business. From both Facebook and Chinese education regulation cases, it is revealing that businesses who did not create value for all stakeholders would eventually meet their repercussion. As we focus heavily on businesses' benefit to the whole value chain, I'm confident that our holdings will be rewarded fairly in long term. As usual, I look forward to reporting to you next time.