



Controlling Our Internal Weather

It is very rare or almost impossible that an event can be negative from all points of view.

-Dalai Lama-

Heyokha's Zen

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What we have learned this quarter

Controlling Our Internal Weather

With the US in tightening mode and China being the only major country that is aggressively easing, it should be clear that China has opted for weakening currency instead of falling asset prices. And with that, the question is whether we should expect the challenging time in emerging markets (EM) to continue for a while longer.

Another, much bigger and much more important question is whether we should be focusing on the structural flaws in the global system rather than the timing and duration of the normal cycle.

After all, the world debt-to-GDP ratio has reached a new all-time high and key EMs continue to borrow overly in foreign currency. Many EMs have foreign debt-to-GDP burdens above 35%. If history is any indication, this is a level that has previously been associated with default. For instance, with its high external debt (53.3% of GDP per year-end 2017) and falling currency (-60% YTD), some believe that Turkey could soon be the largest EM default of all time.

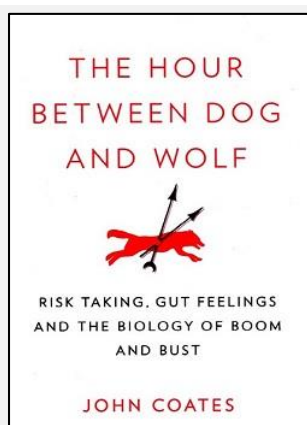
The relevant point here is that the major structural challenges has led to a period of very strong USD, and even an EM USD debt squeeze. The crack in EM credit and the rise in USD have resulted in a dislocation of valuations in financial markets. This creates exciting investment opportunities for long-term investors.

Of course, a prerequisite to enjoying this excitement is to master your fear. A recent addition to our toolbox to help us understand the physiological and chemical source of our emotional response came from the book, *"The Hour Between Dog and Wolf"*. Written by a former Wall Street trader turned neuroscientist Dr John Coates, the book argues that we must act against our base instincts.

The most important reminder of the book is that we need not allow hormones and emotions to control us. Rather, as we are aware of its influence, we are able to process our emotional response just as one variable in our decision matrix.

"Can the optimists and pessimists be reconciled? A minor irony is that both tend to favour American assets—the bulls because they reckon a booming economy will keep delivering fast-growing profits; the bears because America is where capital goes when investors are scared."

-The Economist, Jul 12th July edition, Even stock market bulls are more cautious than at the start of the year-



The book explains the science behind our unconscious mind that could explain the boom and bust cycle in the stock market. There are two hormones in particular, testosterone and cortisol that could lead to over-optimism or pessimism.

Cortisol, also known as "the stress hormone" creates over-pessimism and risk aversion when we lose a trade, which in effect creates a loop of subsequent losses.

On the other hand, our body produces testosterone when we find ourselves on the winning side of a trade. Elevated testosterone level increases the appetite to take on more risk that potentially leads to reckless behaviour.

At a macroeconomic scale, these chemical signals could explain multi-year cycles such as the ongoing 9-year bull market run in the US, the second longest in history.



Chemical signals such as cortisol and testosterone are encouraging us to be overly confident when the market rallies and overly pessimist during a bear market.

Since a big part of investing is about making decisions, we trust that taking out emotions will contribute to successful investing. This is one of the reasons why we write our quarterly newsletter. Writing allows us to organise our thought and ideas. Once we put our thoughts down in writing, we tend to be more disciplined.

Charlie Munger once said that one can't be a really good investor without doing a massive amount of reading. The problem is that we naturally forget a lot of what we learn from reading. From our experience, writing our quarterly report helps us to preserve the essence of what we are taking in. This method works for school students, and it also does work for yours truly at Heyokha.

In my whole life, I've known no wise person over a broad subject matter area who didn't read all the time—none, zero. Now I know all kinds of shrewd people who by staying within a narrow area can do very well without reading. But investment is a broad area...You'd be amazed at how much Warren [Buffett] reads. You'd be amazed at how much I read.

-Charlie Munger, Vice Chairman, Berkshire Hathaway-

From selling air to streaming entertainment

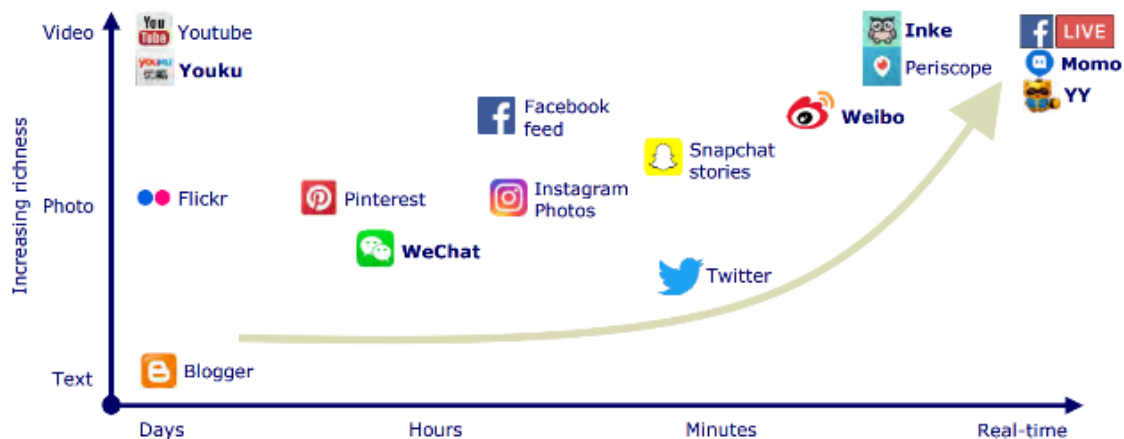
In this particular quarterly edition, we write down our thoughts on investment ideas that seem to come from two different worlds. This report edition is written by and large to illustrate how we could be looking for inspiration in all kind of places, with compelling investment opportunities that can be as diverse as selling air to streaming entertainment.

Who is wise? He that learns from everyone. Who is powerful? He that governs his passions. Who is rich? He that is content. Who is that? Nobody.

-Benjamin Franklin-

The rules of engagement

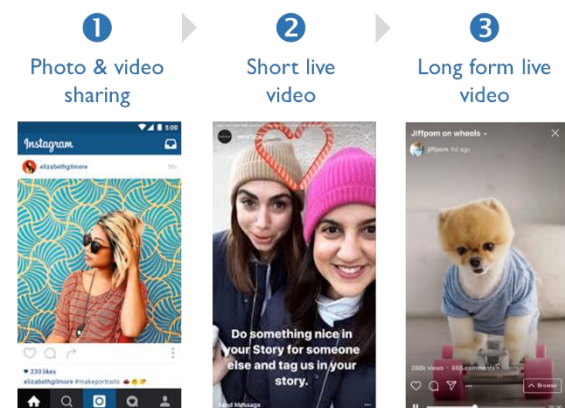
Evolution of social-media content



Social media has evolved towards providing content that is more real-time and rich.

Source: CLSA

Network and technology improvements have spoiled us in terms of novelty and entertainment value that we demand. Social media, e-commerce, and other platforms all strive to provide entertainment value as a way to increase stickiness and engagement.



How Instagram evolved over the time is the perfect example of how social media content has changed

One example of this trend is the rise of live streaming apps in China, such as Momo and YY.

Technology improvements have enabled live stream apps to deliver highly interactive and more engaging content relative to the older forms of social media. Extensive use of algorithms to monitor user's behaviours and interests further ensure that relevant content is never more than one tap away.

Live streaming app 101

Live streaming apps provide a platform for anyone (talented or otherwise) to chat, dance, and sing their way to stardom while creating content for the platform.

Through a stimulating interface, people are encouraged to interact, chat, and send virtual gifts to each other. These gifts have monetary value and the platforms that facilitate these interactions take a percentage of transactions as a source of revenue, in addition to revenue from advertisers.

The leading players in this space are Momo and YY.

Momo was initially created as a location-based messaging platform in 2011. Since then, mobile bandwidth improvement, the rise of social media, and changes in how we interact with technology has led to the rise of Momo into a social media and live streaming powerhouse.

On the other hand, YY is the pioneer in the live streaming platform (YY Live). They started in 2005 and now they have branched out to game live streaming (Huya) which is poised to benefit from the rise of e-sports.

Huya recently went public and its share price has nearly tripled since the IPO as we are writing this report. YY also has the optionality to become the



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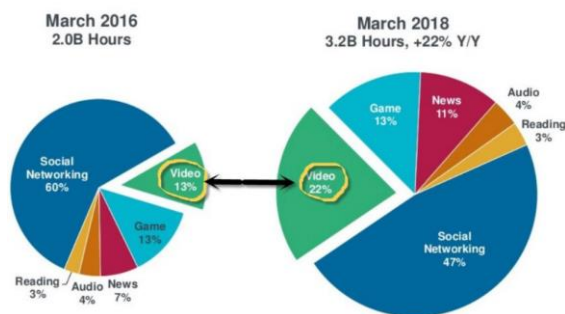
controlling shareholder in Bigo Live, one of the most popular live streaming apps globally. Based on App Annie, the mentioned apps are currently included in the top five most downloaded social apps in 13 (mostly Asian) countries.

The key difference between these two platforms is that YY provides a platform for diverse and professional content, whereas Momo is focused on social interactions between digital friends.

For example, YY content ranges from young people singing/dancing/broadcasting to live feeds of pets, where there is a clear distinction between the entertainer and the entertained. Yes, watching animals such as rabbits or hamsters is a thing now...

Momo, on the other hand, focuses on features enabling its users to hang out and do things together in the digital world, like playing games and singing Karaoke.

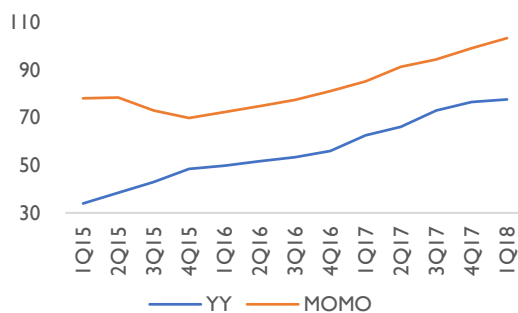
China Mobile Media / Entertainment Daily Time Spent



Source: Mary Meeker

Momo and YY become the beneficiary of people spending more time on video-based entertainment

Monthly active users, in millions



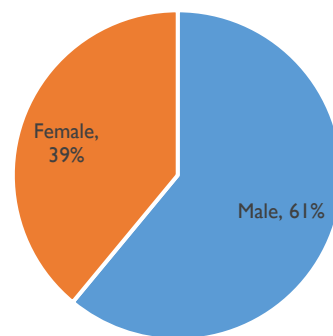
Source: Companies data

Momo's business model revolves around social networking with live streaming and real-time interactions with the performers.

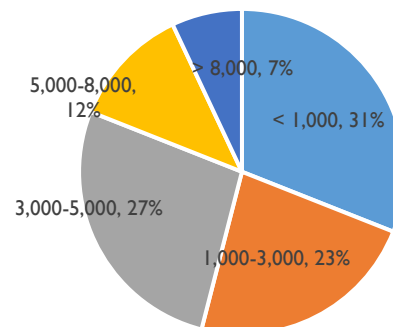
We believe live streaming's addressable market will continue to benefit from network and technology improvements and certain trends in demography, outperforming the use of traditional social media.

Live streaming users based on demographic

Based on gender

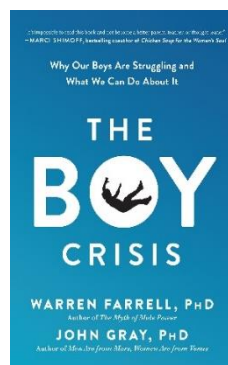


Based on monthly income in RMB



Source: Analysys

Live streaming app users primarily comprise under-educated young men, a fast-growing segment of the world population.



We recently read a new book, "The Boy Crisis: Why Our Boys Are Struggling and What We Can Do About It" by Dr Warren Farrell and Dr John Gray. They have spent 30 years focusing on the crisis facing men and boys.

This book observes that the performance of boys is declining relative to girls in virtually every key metric.



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The book attributes the cause to a lack of father involvement in our families today. The book is fascinating and we trust that it represents a major trend. The boy crisis is one of the saddest, least understood, and most devastating problems in the world today. Yet, we remain blind to the crisis.

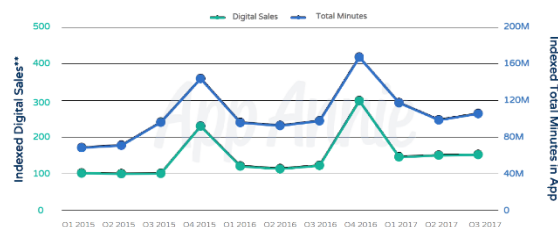
Please see Appendix I for further discussion on the book.

In light of the boy crisis and our understanding of social media trends, the live video format is a short-term antidote for the “boy crisis”, a highly customizable, personal, and engaging experience. We believe live streaming platforms will continue to grow in the Chinese market and beyond.

E-commerce gamification

Besides social media companies, e-commerce platforms also came to appreciate the importance of user engagement. According to App Annie, time spent in shopping apps is positively correlated with gross merchandise value (GMV).

Target Corp. digital sales positively correlated with total minutes spent in App



Source: App Annie

For example, Pinduoduo offers attractively priced merchandise with a social shopping experience that leverages social networks as a tool for buyer acquisition and engagement.

Due to their focus on gamification and social shopping experience, they have become the 3rd largest mobile shopping app based on monthly active users and GMV. Pinduoduo envisions themselves to be a combination of “Costco + Disneyland”.

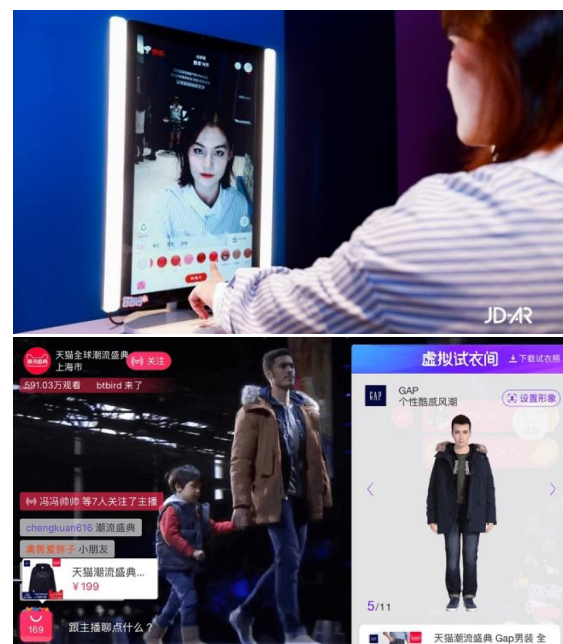
This three-year-old company that was valued at US\$ 24 billion at its IPO in July 2018, has become a serious competitor to the incumbents.



Lucky draws and daily check-in to win cash rewards to ensure Pinduoduo's user open the app on daily basis.

The incumbents, Alibaba and JD.com are also looking to improve user engagement and have both invested in Augmented Reality (AR) technology to facilitate features like a virtual makeup mirror and a virtual dressing room.

By improving user engagements, these companies hope to increase visit-to-purchase conversion rates and time spent in their app.



JD.com's AR makeup mirror (top), Tmall's virtual dressing room (bottom)

Source: South China Morning Post, Chozan.co

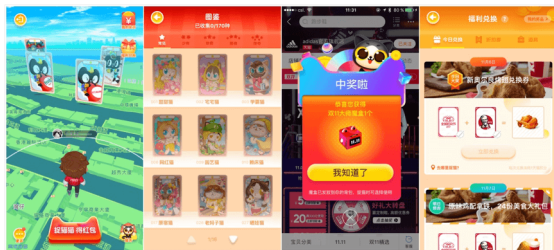


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Augmented Reality and Virtual Reality 101

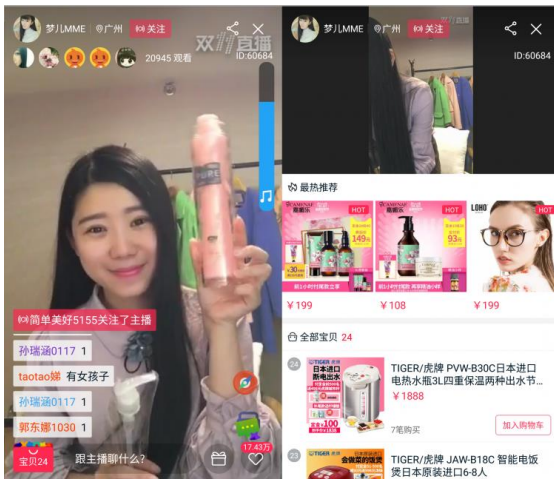
Augmented reality (AR) – a virtual data layer is placed on top, or associated with, the real-world layer. Applications are in manufacturing, higher level of technology. Examples of current technology: Pokemon Go (app), Hololens (hardware), Google Glass (hardware).

Virtual reality (VR) - a virtual data layer replaces real-world data. Applications today are in gaming or entertainment. Examples of current technology: Oculus, Playstation VR, HTC Vive.



Taobao (Alibaba) introduces “Catch The Cat” game for users to get gift cards and coupons.

Source: Chozan.co



Taobao live streaming is a great example of how e-commerce companies are evolving their platforms by blurring the line between social media, entertainment, and e-commerce.

Source: TechinAsia

We expect the pace of user engaging innovation to accelerate and that the platforms who win this “engagement war” will be dominant in their space.

For now, the most engaging online platforms (outside of gaming) are the live streaming apps.

While it is difficult to predict whether live streaming alone is sustainable in the long term, companies like YY and Momo are aggressively adding new verticals to their offering to increase the stickiness of their apps (which should also translate into improved monetisation).

Not to mention, the strategic value they have could make them an attractive partner or target of tech ecosystem operators such as Alibaba and Tencent.

With such potential, these live streaming apps are trading at compelling valuations. Momo and YY are trading at price-to-earnings multiples of 13x and 9x respectively (based on 2019 earnings estimates), which implies a 60-70% discount to average Chinese tech company valuations and a 50% discount to the valuation of its US peer Match Group (Tinder).

The margin of safety is also very compelling considering that both YY and Momo have net cash positions and are generating 5-10% free cash flow yield.

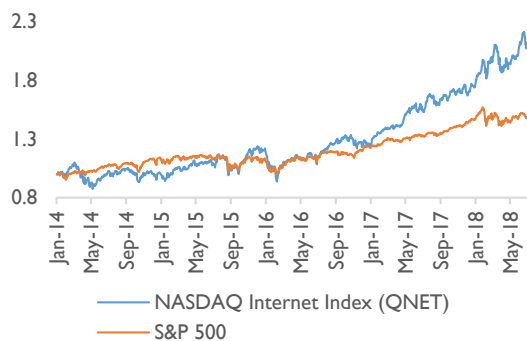
Out of thin air

When we started Heyokha in 2014, tech investment was seen as a risky strategy, particularly in Indonesia. Nowadays even the most sophisticated Indonesian conglomerates are stepping up their tech investments.

For instance, Astra International and Djarum Group invested in Gojek in Feb 2018. Particularly, Djarum Group has also been investing in Tiket.com, the 2nd biggest online travel agency, and participated in the pre-IPO fundraising of the ASEAN gaming and e-commerce company, Sea Ltd.

In more developed markets, tech has been a trend for many years now and it is easy to overlook traditional businesses (for example, the FAANG stocks now account for about 15% of the S&P 500 market cap, compared to only 6.7% five years ago). In a very interesting twist, we have reached a point whereby the interesting/contrarian strategy will be investing in the old economy businesses.

Internet stock significantly outperform S&P 500



Source: Bloomberg

Traditional businesses become attractive as they are outshined by the tech sector

Obviously, valuation levels of some traditional business have de-rated dramatically as they become disrupted by tech companies.

Certainly, there are also some traditional businesses that are gaining from tech instead.

For instance, we previously wrote about an Indonesian minimart chain which we expect to play an important role in the O2O convergence. Our minimart chain has been gaining a lot of traction

from the investment community. The share price went up by 57% since our report in IQ 2017.



Click [here](#) for our IQ 2017 report

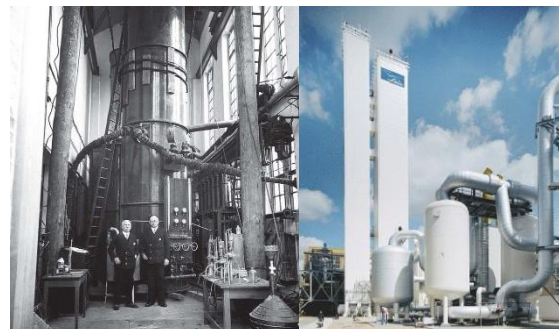
However, there are some old-school businesses that are not directly impacted by tech companies, whose valuation levels have de-rated too, despite improving fundamentals.

This creates buying opportunities in capex heavy, traditional companies with strong cash flows. We believe our air gas company is one of them.

The sky is not less blue because the blind man does not see it.

-Danish Proverb-

This company is a perfect representation of an overlooked pillar of the Indonesian manufacturing economy. Aside from innovations in improving efficiency, the air separation process used in this industry is still very much the same as in 1879 when Carl von Linde designed the first industrial-scale air separation plant.



Carl von Linde with its liquid oxygen storage (left) and Linde's oxygen storage today (right)

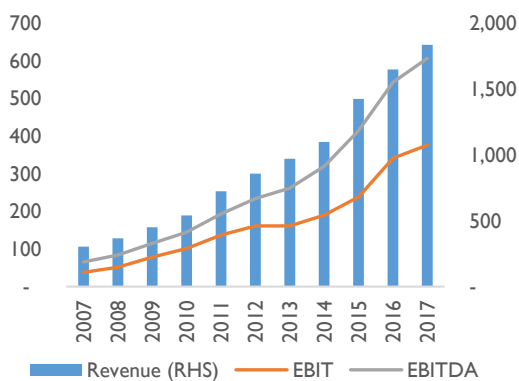
Source: Linde



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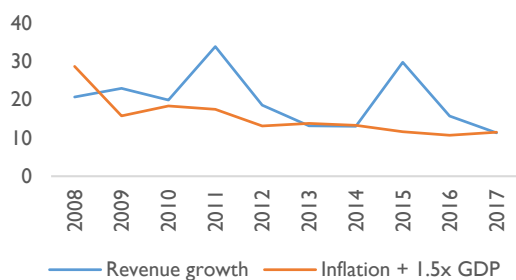
Sales and operating income of our air gas company has grown consistently in the past 10 years

Sales, EBIT, and EBITDA in billion rupiah



Sales growth consistently outperforming the industry

Revenue growth vs. 1.5x Indonesia GDP growth + inflation



Source: Company data

The importance of industrial process gasses in the manufacturing and packaging industries is becoming more critical as new materials and processes are developed, yet our air gas company is largely dismissed by investors.

Industrial gases such as nitrogen and oxygen are widely used in many different areas of the economy, ranging from consumer products, healthcare, infrastructure and heavy industries. Hence, we can safely assume that demand is highly correlated with overall GDP growth. Based on data published by Gasworld, Indonesia's air gas industry has been growing at 1.5x the rate of GDP growth.

A local champion with a strong moat

Our air gas company is the local champion in the industry, commanding a 30% market share. The company is able to compete with global players such as Praxair, Linde, and Air Products, thanks to its strong nationwide footprint.

By aggressively investing in filling stations across the country, it creates a high barrier to entry for competitors, especially outside of Java Island. The company's competitors on the other hand, only focus on serving large-scale clients in industrial estates.

As a result, our air gas company is dominant in the healthcare and infrastructure sectors. Given its network of 44 air separation plants and 92 filling stations, hospitals tend to choose our air gas company as their supplier due to the security of supply.

Hence, the company is able to command more than 80% market share in the healthcare segment; a rapidly-growing industry post the introduction of Indonesian universal healthcare program in 2014.

In addition, the infrastructure sector has also been a key driver of our air gas company's growth. As the only local major player, coupled with a solid presence outside Java, they are the only viable choice for contractors in many cases.

Our air gas company also has an impressive track record. It managed to grow revenue, EBIT and EBITDA by double digits consistently in the past 10 years, including during the 2008 GFC.

Looking ahead, we believe that our air gas company can grow its revenue by at least double digits. Indonesia's GDP is expected to grow by some 5%, so if we take relative historic growth as a reference, this industry can be expected to grow by about 7.5% per annum.

On top of that, factoring in the average selling price adjustment from electricity tariff and inflation, two-digit revenue growth is almost warranted.

As the company dominates the faster-growing segment such as healthcare and infrastructure, the other big boys focus on heavy industry (i.e. steel) which is not doing very well due to increasing



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imports from China. As such, we could see our air gas company's market share expand further.

Lucrative business model: 70% of revenue is based on 5-15 year contracts and EBITDA margin is warranted

The business also has very limited risk given that 70% of revenue is based on long-term contracts usually from 5 to 15 years, with annual/semi-annual adjustments of selling prices based on electricity price and inflation. Hence, there is almost no downside to profitability margins.

In fact, we believe the profitability margin could only go up given the currently low utilization rate of 60% following years of capital expenditure. Not to mention, its balance sheet could start to deleverage as the major capex cycle has ended and it will start to generate strong free cash flow.

With double-digit revenue growth coupled with operating leverage from utilization improvement and a deleveraging balance sheet, its net income will grow dramatically. We foresee net income to increase by a 35-40% CAGR FY17-20E.

Young energy in the oldest industry

Recently, the son of the founder became the new CEO. We believe this will bring fresh energy and direction to this old-school business.

Based on our conversations with him, we learned that he has taken many new initiatives such as digitizing the supply chain management. For instance, they now track all the clients' daily usage and inventory levels, which enables them to replenish filling stations ahead of the next order.

He is also actively involved in the association of global air gas companies to make sure that they are aware of the latest technology development. As our air gas company is re-energised, we are confident that this company can keep up with the big boys.

Valuation has halved since IPO

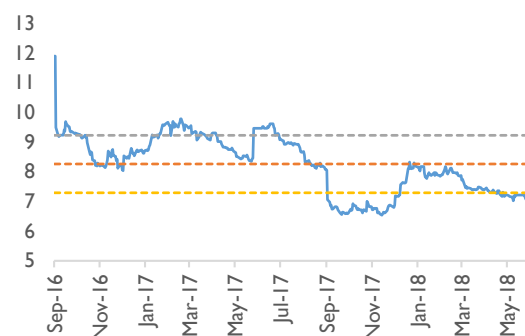
Despite its lucrative growth and impressive track record, the market seems to overlook this opportunity. The company's share price has nearly halved since its IPO and now it is trading at a discount of more than 50% and 70% relative to its

peers in terms of EV to EBITDA and Price to Book respectively.

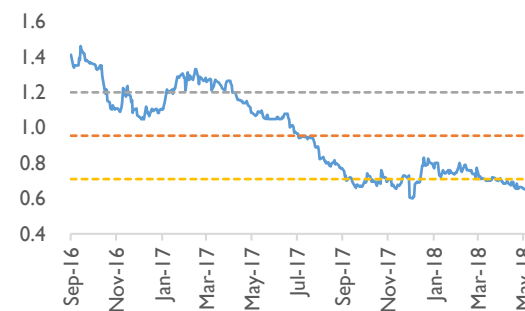
We believe the low valuation is mainly attributable to the company's low ROE of 4.3% in 2017, compared to peers' average of 15%. Also, earnings have remained flat during the past six years due to the burden of debt-financed expansion.

Yet, we feel it is normal for an asset-heavy company to have low ROE during a capex cycle, considering that utilization rate is still low, operating leverage has not yet kicked-in and while earnings are already burdened by interest expense. As noted earlier, we foresee strong net income growth of 35-40% CAGR in the next three years.

EV/EBITDA band



Price/Book band



Source: Bloomberg

By end of 2020, the ROE (excluding the asset revaluation) is expected to be 9.5%, thus, the valuation gap should narrow. Conservatively, assuming our air gas company could re-rate back to the IPO level at 10x EV/EBITDA, the upside would be 3x from the current price.

Enjoy reading our reports? Check out our [website](#) for more!

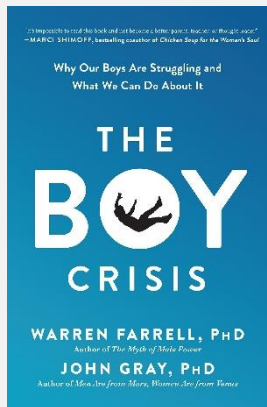
-The End-

Boy crisis

“Yin sheng, Yang shuai (阴盛阳衰)”

The female (yin) goes up, male (yang) comes down.

—Old Chinese proverb—



We recently read a new book, titled “The Boy Crisis: Why Our Boys Are Struggling and What We Can Do About It” by Dr Warren Farrell and Dr John Gray. They have spent 30 years exploring the crisis facing men and boys.

Their conclusion is that the performance of boys

is declining in a dramatic way in virtually every key metric. Since this will have a profound effect on our social structure, there will be major investment implications.

The book is fascinating and we trust that it represents a major trend. The boy crisis is one of the saddest, least understood, and most devastating problems in the world today. Yet, we are so blind to the boy crisis.

Today, dads-to-be are almost twice as likely to prefer a daughter to a son. As for moms-to-be, they are 24 per cent more likely to prefer their firstborn child to be a daughter.

Moreover, the crisis is also worldwide in nature. Some statistics from the book:

- Boys scored lower than girls in the sixty-three largest developed nations in which the PISA, a set of international standardized tests, was given.
- More men in the UK have died by suicide in the past year than all British soldiers fighting in all wars since 1945.

- A large study from the UK finds that boy's IQs have dropped about 15 points since the 1980s.

- In China, they say yin sheng, yang shuai (the female/yin is on the way up, while the male/yang is on the way down)

- In Japan, they use the derisive expression soshoku danshi (herbivores) and hikikomori (socially isolated) to describe the new generation of boys.

- In Europe, the acronym NEET describes young men who are “not in education, employment, or training”

- The average global life expectancy for girls is about 7% greater than for boys.

- The rate of increase in male suicide in India is growing at more than nine times that of female suicide.

- Worldwide, boys are 50% more likely than girls to fail to meet basic proficiency in any of the three core subjects of reading, math, and science.

- The US jail and prison population increased by more than 700% between 1973 and 2013. Of that population, 93% are male and are disproportionately young.

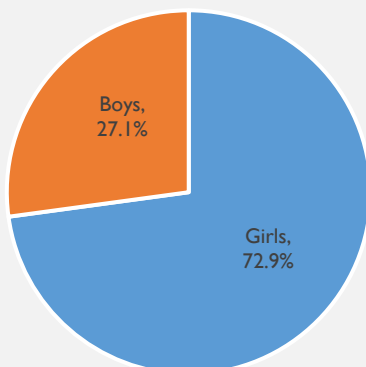
- Between fifteen and nineteen, boys commit suicide at four times the rate of girls; and between twenty and twenty-four, the rate of male suicide is between five and six times that of females.

- In Nesse's summary assessment of a study of premature death in twenty countries, in which he found that that “being male is now the single largest demographic factor for early death,” the word “now” is important.

- It is only now that boys and men under fifty are twice as likely to die as girls and women the same age. That is a greater life-expectancy gap than at any time since World War II.

- A third of young men are not fit for military services, owing to obesity and other physical and mental problems. And this problem extends to other professions on which our security depends:

Scholarships awarded by Titian Foundation based on gender



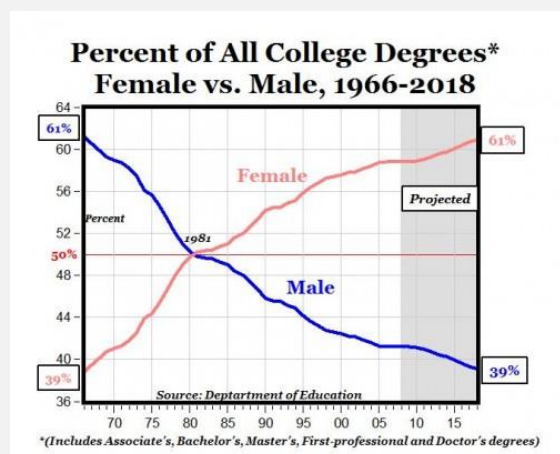
In Indonesia, the case of the boy crisis is also prevalent. As an example, out of the 814 scholarships awarded by Titian Foundation in the past 10 years, the significant majority are for girls.

Source: Titian Foundation

70% of firefighters and 80% of police officers are also obese or overweight. The US has the highest rate of overweight males among all major countries.

- Young men between twenty-five and thirty-one are 66% more likely than their female counterparts to be living with their parents.

And the chart below is worth a thousand words...



In one generation, young men have gone from 61 percent of college degree recipients to a projected 39 percent; young women, from 39 percent to a projected 61 percent. Also, nationwide girls make up 70 percent of valedictorians, while boys get 70 percent of Ds and Fs.

Source: US Department of Education

In our previous IQ17 report, we discussed Titian Foundation and its goal to fight poverty through education in Indonesia.



Click [here](#) for our IQ 2017 report

The authors argue that the boy crisis' primary cause is dad-deprived boys. Dad deprivation stems primarily from the lack of father involvement, and secondarily from devaluing what a father contributes when he is involved.

Whether our children become financially rich or poor—emotionally rich or poor—depends increasingly on whether they grow up dad-rich or dad-poor.

The fact is that a staggering 85 per cent of youths in US prison grew up in a fatherless home. A study of ISIS fighters concluded that almost all male and female fighters had in common “some type of an ‘absent father’ syndrome”.

Children with father loss have, by the age of nine, a 14% reduction in telomere length – the most reliable predictors of life expectancy.

Even if a boy does live with both his dad and mom, if he sees his dad doing work that is meaningless to him because dad needs to support the family, it can dampen the boy's inspiration to work hard, marry, and have children himself.

Boys may experience a “failure to launch.” Especially if they are bright and sensitive, this can emanate not from laziness or ignorance, but from their unconscious wisdom.

There are special qualities that a dad brings to parenting. Dads have a crucial role in setting boundaries. “The amount of time a father spends with a child is ‘one of the strongest predictors of empathy in adulthood.’

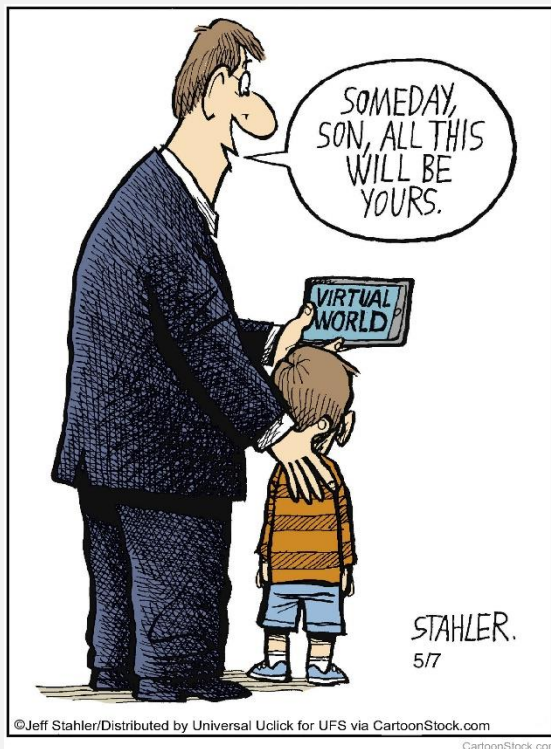
Teaching a child to treat boundaries seriously teaches him or her to respect the needs of others. Respecting another's needs contributes to empathy. "Empathy doesn't trigger shooting."

Heyokha's point of view:

In our view, until there is broad recognition of the societal forces behind "boy crisis," it will remain a major overlooked trend.

We see a number of compounding factors that will accelerate and deepen the effects of the "boy crisis"; an abundance of boys in some of the most populous countries in the world (in China alone, some estimates there are 34 million more men than woman). As women in these countries rise out of rural villages, become educated, and join the workforce, there is a trend toward women delaying marriage and starting a family.

Together, these factors place tremendous pressures on under-educated young men, their dreams of career, marriage, and family are out of reach. Instead, they increasingly seek distractions and escapes from a lonely reality.



Here at Heyokha, we see a positive correlation in gaming and the rise of real-time social media as a short-term antidote for "boy's crisis" (i.e. video streaming apps such as Momo and YY).

The war for talents in the boy crisis era

A derivative effect of the "boy crisis" is a recent survey showing 49% of the well-educated dads and moms in the workforce would both prefer to spend more time at home with their children.

This trend of well-educated parents recognizing and actively seeking to avoid "the boy crisis" means high-value employees in the workforce seek out flexible schedules to spend more time at home with their family.

The result is that the most innovative companies are offering flexible work schedules and so it is of little surprise that the tech industries increasingly dominate the list of "The 50 Best Places to Work for New Dads".

Correlated to trends in the growing income gap worldwide, we foresee a widening gap of boy achievement. As high earning parents devote more time at home and low earners increasingly struggle with increased automation and depressed wages.

We see an increased demand for female-dominated, service-oriented occupations such as dental hygienist, nurse, and pharmacist. These are more resistant to an economic downturn and less likely to be outsourced and automated.

Meanwhile, high-labour and low-skill jobs in sectors like manufacturing, construction, and other traditionally male-dominated jobs are experiencing a decline and increasingly disrupted by digital and automation.

We see few short-term solutions to the "boy's crisis" and while it is a difficult topic, we will continue to look for investment ideas from this major, yet not widely recognised trend.

On the ground: The ubiquitous Go-Pay

Following the steps of Alipay and WeChat pay, Go-Jek has started to expand Go-Pay services outside of their ecosystem.

In April 2018, Go-Pay obtained the QR code payment license from the Indonesian central bank. Since then, Go-Pay was able to move quickly, tapping into both modern and traditional retail stores.

In May 2018, 3,000 merchants already accept payment using Go-Pay QR code. By August 2018, no of merchants who accept Go-Pay is over 20,000 after gaining access to Indonesia's biggest minimart franchise. This is a critical and exciting milestone for Go-Pay, as more merchants drive e-wallet user growth, in turn leading to more merchants. Ubiquitousness is the key.

Fintech opportunity in Indonesia

As a developing country that has the 4th biggest population in the world, Indonesia is an attractive landscape for fintech companies. The lack of banking penetration, favourable demographic structure, and high mobile phone penetration could potentially lead to the success of digital payment as seen in China where almost half of the world's digital payments were made.

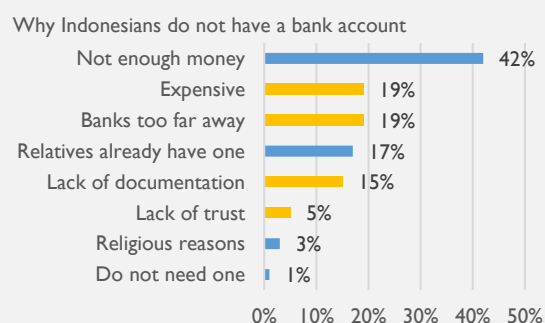
According to PwC, the population under 30 years old represents more than 75% of all online transactions. This bodes well for Indonesia, as this age group represents approximately half of its population, and only 31% of transactions are conducted using the non-cash method.

Beside a large millennial population, Indonesia also has a stubbornly low banking penetration. According to the World Bank, only 49% of Indonesian adults have a bank account, among the lowest in the region. Thus, abundant opportunity exists for Go-Pay to bring e-wallet and FinTech services to the remaining 95 million unbanked adults in Indonesia.

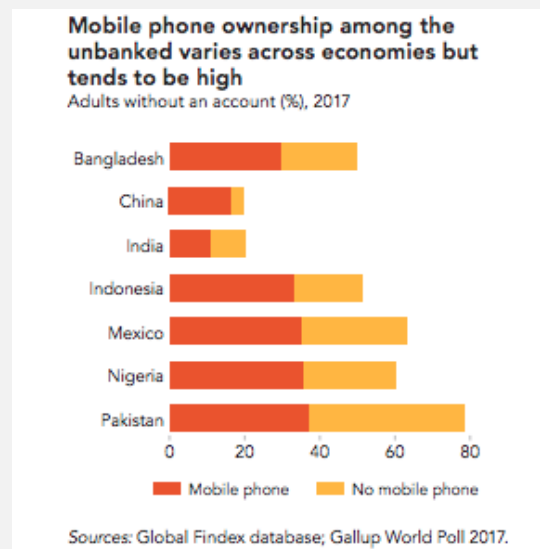
The graph below illustrates several of the reasons behind Indonesia's low banking penetration. We believe that traditional banking institutions cannot

profitably address many of the identified problems but are ideally suited for fintech companies.

Being the dominant player in Indonesia, Go-Pay has the opportunity to bring its e-wallet to as much as 58% of the unbanked population, or 56 million people.



Interestingly, a big portion (70%) of Indonesia's unbanked adults owns a mobile phone. This is a critical component and we believe all the pieces are in place for Go-Pay to quickly scale across Indonesia.



Source: Global Findex World Bank 2017

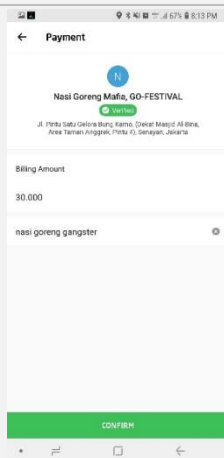
As we discussed in the previous section, social media and e-commerce companies are increasingly focused on user engagement. Beyond social media companies, we believe that advertisers also need to adapt to this change.

The transaction process is simple, quick, and more convenient than cash payment.

1
Scan QR code



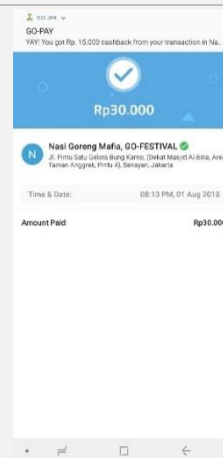
2
Enter billing amount



3
Enter pin



4
Transaction done!



GO-PAY

01 Aug, 08:14 PM

YAY! You got Rp. 15.000 cashback from your transaction in Nasi Goreng Mafia, GO-FESTIVAL!

Go-Pay users also get 50% cashback for transactions during the festival.

Source: Heyokha

Traditionally, the fastest way to acquire users is to simply provide discounts and promotions. However, without user engagement features to promote stickiness, it is less likely for the user to come back when the promotion ends.

We are happy to see Go-Jek addressing and promoting user engagement, through in-app and real world (offline) interactions with their user base.

In terms of their marketing strategy, in December 2017, Go-Jek started creating Go-Food festivals to promote both its Go-Food and its new Go-Pay QR code payment. Only Go-Pay QR code transactions are allowed in the festival.

In Heyokha tradition of hands-on research, our team recently visited one of the Go-Food festivals in Jakarta. Currently, the festival is available in 12 venues in 10 different cities, and the company targets to have 100 venues by the end of 2018.

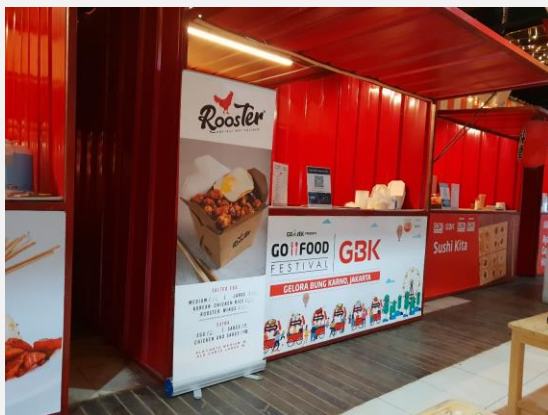
During the event, we learned that participating merchants share 30% of their revenue with Go-Jek,

which is inclusive of all rental fees. This is a great win-win-win for merchants, Go-Pay, and the visitors.

Visitors are pampered with the abundant choices of food stalls available, with live music, movie screening, games, and events that are regularly provided at the festival.



The venue is nicely decorated. Very crowded even on a weekday evening.



One of the food stalls at the festival

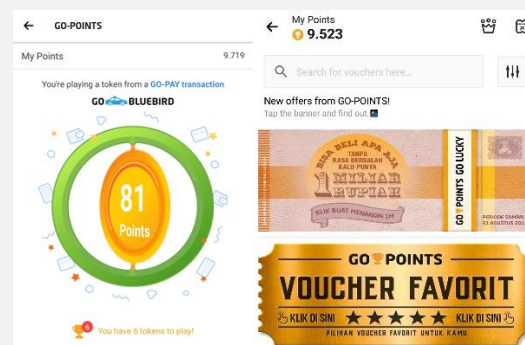
During our visit, we got a chance to chat with several visitors. The response to the festival was very positive, with many of them coming mainly to enjoy the food and to hang out, while some were even unaware of the huge 50% cashback.

Considering that Go-Pay is already a popular e-wallet with more than 10 million users, the majority of the visitors already had a Go-Pay account before visiting the festival.

However, we learned many users were not aware that Go-Pay had expanded beyond the app and into QR code payments, therefore the festival was a great introduction to the service.

Overall, we felt the festival experience for the visitors is very engaging, generating positive user engagement for both Go-Food and Go-Pay. The fact that many of the visitors actually came to enjoy the festival (not only for the discount) is a sign of effective user engagement.

Inside the app, Go-Jek also made improvements to engage users and keep them attached. One of the interesting features is the gamification in the Go-Jek app. Users earn a token for every time they use Go-Pay, which can be used to play a simple game before it is converted into points to be traded into vouchers.



Go-Points feature (left). Points can be used to purchase vouchers (right).

With our belly's full, we are happy to report Go-Jek is fully engaged with their users across many of their verticals. Their innovative efforts in app and offline will have positive, long-term impact in improving user engagement.

Go-Pay in modern retail

In penetrating the modern retail channel, Go-Pay leverages on their newly acquired subsidiary Kartuku (Indonesia largest independent EDC provider), which already has more than twenty thousand merchants.

We believe this has provided Go-Pay with a huge head start relative to other e-wallet providers in penetrating the modern retail channel. E-wallet providers who do not have access to modern retail will have a hard time, given that they need to be able to connect with many different types of POS (point of sales) systems.

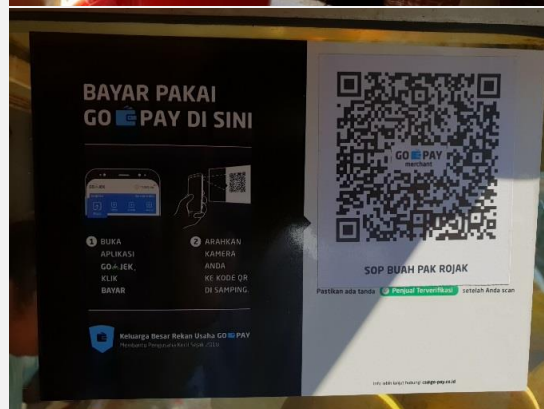


St. Ali coffee shop in Jakarta accepts Go-Pay payment (left) and so does all the merchants on the right side



Go-Pay in traditional retail (warungs)

The Indonesian retail market is dominated by the 3 million small traditional stores, a.k.a “Warungs.” Compared to only 40,000 modern retail stores.



A warung in Jakarta that accepts Go-Pay QR code payment

In this space, again, we believe that Go-Pay already has an edge, from leveraging the 200,000 existing merchant base of Go-Food, where 80% are small to medium enterprises.

We are starting to see more non-Go-Food partners adopting the Go-Pay platform.

Seven Days in Tibet: Tech and Spirituality in the Roof of the world



Tibetans prostrating in Lhasa.

On a recent trip to Tibet, Heyokha team had the opportunity to see how things are in one of China's most remote and desolated areas. It turned out it was not quite what we expected.

Hidden on the highest plateau in the world, Tibet is known as being the home of golden monasteries and imposing mountain ranges. For most visitors Tibet's attractions will be of a spiritual nature: secluded sceneries, chanting monks in temples and local pilgrims whispering mantras while turning their prayer wheels and prostrating themselves. It is captivating, inspiring and boundlessly photogenetic.



Potala Palace in Lhasa, Tibet, once the residence of the Dalai Lama..

This is what people write about after their travels, what is posted on Instagram and it is also how Tibet is depicted in movies, etc. It is true, Tibet has such a level of piety and faith that it seems to belong to an earlier, almost ancient age. Yet, this is a one-

sided view of the region that has shown double-digit GDP growth (!) for the past 24 years¹.



Tibetan monk taking a picture with his smartphone, while it looks like he is also carrying a tablet.

Our own mystic and spiritual view of the country was eagerly satisfied by our Tibetan tour guide, who welcomed each of us with a Khata, the white Tibetan scarf that symbolises purity and compassion.

We consumed all of the brochure-promised experiences, until we found ourselves dumbfounded by an otherwise perfectly mundane act. It was the sight of a monk flipping out his smartphone...

We came to realise it kind-of "troubled" us to find the supposedly traditional and spiritual Tibet being 'polluted' and made 'inauthentic' by such modernity.

Of course, we realise such feelings are totally misplaced – after all, who are we to decide that Tibetans are to refrain themselves from the comforts of modern life? But experiencing that brief moment of discomfort - when reality bashes into misconception - is a valuable lesson.

Our reaction highlights that certain narratives perpetuate, even long after reality has changed.

Apparently, this is a popular topic among anthropologists, some of whom are of the view that promotional efforts by both governments and the tourist industry capitalise on one-sided histories

¹ Zhao Shijun (Nov-2017), "Tibet: economy rockets in China's fast-moving region", retrieved from

<https://www.telegraph.co.uk/news/world/china-watch/business/economic-growth-in-tibet/>

and imaginaries of countries and places, and thus keep such narratives alive.

As investors are only human, we are certainly not immune to these biased and outdated narratives in our investment decisions. The remedy for this is obviously to go see things for yourself – Heyokha style.

“You know nothing, John Snow...”

Wise words spoken by a barbarian lady to a future King.

One of the things that surprised us the most, is the extent to which Chinese tech companies managed to penetrate such remote area characterised by tradition and spirituality. Here is what caught our attention:

QR Code Stickers



Alipay and WeChat Pay QR codes everywhere, even in Buddhist monasteries in Tibet.

² CLSA (September 2017), “China leapfrogs the West: World’s largest e-finance ecosystem”

We saw many shops in Tibet accepting Alipay and WeChat Pay, even the shops located in monasteries. Extrapolating from our observation that QR codes have penetrated most corners of Tibet, we can be certain that the penetration across other Chinese rural and suburban areas must be very high as well.

As such, we feel that while online payments still only make-up about 20% of all payments in China², it represents not a “work in progress” but rather the population racing to catch up to a technology that is here to stay.

Food delivery apps

With altitude-induced headaches making the thought of leaving our hotel rooms a herculean challenge, food-delivery apps such as Meituan proved to be one of the most useful apps during our stay in Lhasa and Shigatse. Not only did the app give us access to delicious food, it also secured our supply line to much-needed painkillers and oxygen cylinders.

With such a strong footprint across the various regions in China and expected growth of China’s online food and grocery delivery market, we will be keeping a close eye on Meituan Dianping’s \$ 60bn planned IPO.



Meituan-Dianping drivers in Tibet. The company provides on-demand delivery services such as food and grocery shopping, etc. They are a distant leader in the food delivery service.

2017 was the year of bike-sharing in China. During our trip, the yellow bikes of bicycle sharing company ofo emerged everywhere, even in Tibet.

To see how the company rolled out its operations to such remote areas is very impressive. The bikes are being used by all kinds of people ranging from kids to grandpas and students to monks. Unfortunately, we didn't dare to try to book and ride the bikes, anticipating further oxygen deficiencies...



The yellow Ofo bikes spotted in Lhasa, Tibet.

Wrapping it up:

Our views will always be shaped by narratives. For us, our Tibet experience confirms that seeing things on the ground is essential in recognising what is usually *not* being told.

While modernity in China may be associated with metropolitan cities like Shanghai and Beijing, it became clear to us that the reach of its tech giants goes all the way into the remote regions, albeit perhaps in part driven by Chinese tourism.

With tech manifesting in Indonesia as well, we should not be mistaken to think that the tech revolution in Indonesia will be limited to its major cities.