

QUARTERLY SHAREHOLDER LETTER

Digital Wallets in Emerging Markets

30 September 2020

Dear Shareholder,

Since 1999 our research trips to China have been punctuated with Chairman Mao's enigmatic face and a reminder of China's glorious scenic spots as we rifled through our wallets to pull out the right note to pay for our daily Starbucks. But in the last five years this pleasure has gone as we have relied on the less aesthetically pleasing, but more practical, digital wallet in our mobile phones. China has achieved the most complete transition from cash to digital payments facilitated by e-wallets anywhere in the world, with e-wallets handling transactions equivalent to double the level of Chinese GDP in 2019¹, and now many other emerging markets are catching up.



This letter will discuss the investment opportunities in digital wallets in emerging markets. The Fund² has significant exposure to the trend already: Naver in Korea, currently 1.3% of the Fund, is not only the Google of Korea but also its dominant online digital wallet, and is attempting to replicate that success in Japan through its Line subsidiary; Safaricom is a new addition (0.4%) and owns the dominant digital wallet in Kenya; and approximately 15% of the value of Alibaba and a third of the value of Tencent, together over 10% of the Fund, come from their wallets and associated financial services businesses. The holdings in Naspers, Yandex, Opera, and Delivery Hero also benefit from their digital wallets. Plus the opportunity in payments is about to get a giant boost in the form of Ant Group, the payments and financial services arm of Alibaba, due to go public by mid-November in Hong Kong and Shanghai at a US\$200-300bn market cap.

The frenzy around Ant Group's listing is fuelled by considerable investor excitement over the transition from cash to digital payments and the fintech space more generally. Some of the excitement is justified and some is not. We don't expect the payments function of many digital wallets to enjoy juicy profits, and the business will not be as high quality as their developed market analogues, Visa and Mastercard. But on the other hand, emerging market digital wallets will have plenty of scope to sell financial services products, and perhaps to become a distribution platform for lifestyle products. Not all of these wallets will be great businesses and understanding the nuance of each system is critical to establishing their prospects. This is what this letter will explain.

¹ Source: iResearch analysis

² Genesis Emerging Markets Fund Limited

How the digital wallet was born

A digital wallet performs all the functions of a physical wallet containing cash, but it does the job electronically. It can store value, let consumers pay each other, pay online or offline merchants, and channel money to financial products. Value can be added or transferred out of the digital wallet electronically via a bank account, a credit or debit card, or physically by an agent who receives or pays out cash and adjusts the digital value in the wallet.

In 2018, according to McKinsey, more than three-quarters of global transactions were in cash; the less developed the country, the higher the reliance on cash. But cash has problems. It is bulky, potentially dangerous to carry around, easy to lose or destroy, risky to send long distance, doesn't leave a record (good for dodging tax and illegal transactions, bad for governments), and it is costly to count up and account for. Developed countries have dealt with this by moving to card-based digital payments, facilitated by Visa and Mastercard.

But in many emerging markets the infrastructure associated with card payments has been too expensive to drive widespread adoption. A Point of Sale (POS) terminal will usually cost over US\$100, require a phone line, have no other use if the business folds, and leave a payments trail which attracts the taxman – no wonder the millions of small retailers in India or Indonesia have until now not dreamed of using anything but cash. For a smaller merchant that chooses to offer card settlement there is also the merchant discount rate to worry about, which can be 2-3% of the transaction value. These high fees are needed to fund the three major players behind card infrastructure: first, the merchant acquirer providing the physical payments acceptance device linking the merchant to the payments system; second, the multinational networks like Visa and Mastercard with the “payment rails” switching the money from the customer to the merchant’s bank account; and third, the banks and credit card companies that own the customer relationship and issue the cards.

Even in developed markets, cards are not a panacea for all payments needs. Cards may win the aesthetic argument - and in fact a reason for the stellar growth in KakaoBank (a digital bank in Korea) is their cute debit cards below - but consumers can't interact with them, they are cumbersome to use online, can't pay friends, and can be insecure. If an emerging market country is starting from scratch, cards may not be the answer.



The big enabler of the shift from cash in emerging markets is the plummeting cost of POS terminals now that a smartphone can read a QR code. It is no coincidence the explosive growth of Alipay and WeChat Pay in China started in 2013 as smartphone penetration took off.

Cheap technology, though, is not enough to dislodge cash. If Visa and Mastercard are classic network effect businesses, so is cash. In a pre-digital world, every merchant accepts it, every consumer can access it and a new payment method develops only if one side (consumer or merchant) of the network is "seeded" i.e. a

critical mass of consumers or merchants signs up to the service - a tall order. Once a large number of consumers has signed up to digital payments, it makes sense for merchants to incur the costs of setting up the acceptance infrastructure, and the payment system can start to create its own network, and displace cash or cards.

In many emerging markets where cash is king, cards and digital wallets start from a level playing field as neither has an existing network. The key for success is who can develop the network first. In more developed countries like Korea or Brazil cards got there first; in Brazil card payments now account for 38% of household spending. In these countries, digital wallets will take share if they can seed their own networks, by providing better solutions than cash or cards.

One major reason consumers sign up for a digital wallet is for e-commerce. Buying online needs your bank details (or digital money in some form) which essentially means a digital wallet. This solves the pain points of online transactions, eliminating the need for cash on delivery, facilitating escrow transactions and allowing one-click shopping in other online stores. In many countries e-commerce is led by a single dominant company which then spawns a wallet most of the population signs up to. Naver's e-commerce platform - which is the entry point for about one third of e-commerce purchases in Korea - is why Naver Pay has been so successful, and Alibaba's dominance of e-commerce, and its need for an escrow service, explains why Alipay emerged in China. Interestingly, in many early stage emerging markets the first major e-commerce businesses emerging today are focused on online-to-offline (O2O) services such as food delivery or ride hailing, rather than online shopping, because these services do not require an efficient postal or delivery service. These O2O platforms may well become the dominant wallets for all the other things people will eventually buy. Indeed, Delivery Hero via its food delivery business has become the largest e-commerce company by transactions in Saudi Arabia, the UAE, Turkey and Greece, which provides a wonderful springboard for its e-wallet. Dominant e-commerce companies that are not yet pushing their digital wallets (Allegro in Poland, Amazon (!)) are missing a trick.

The other main reason people create digital wallets is to send money to friends. With light touch regulation, dominant social networks are in a fantastic position to provide peer-to-peer payments because they know the details of everyone on the network. Tencent's famous red packets at Chinese New Year to encourage sign-up to WeChat Pay is a great example. Only a dominant social network has the details of you and Granny, and if Granny sends you a red packet, you will bear the hassle of setting up an e-wallet to redeem it. Dominant social networks are therefore in a strong position to develop dominant wallets. It's not just Tencent; US\$25bn of payments was processed through KakaoPay in Korea in the first half of 2020, driven by its messaging app.

Dominant mobile phone companies, in light touch regulatory regimes, can also facilitate peer-to-peer transactions and develop successful e-wallets. Like a social network, a dominant phone company has the details of most consumers and can use them to send value from one person to another. Safaricom in Kenya has used its 65% mobile market share to become the main digital payment company in the country, solving the problem of how city people can send money to upcountry relatives without a nearby bank branch. A dozen or so years ago we expected mobile phone operators to become large players in payments, but in the event this has occurred in very few places. Regulations hampered their entry into payments, mobile markets became fragmented, and telco managements were too conservative. So in most places where the opportunity is still up for grabs it is other companies that are rising to the challenge.

Will digital wallets make much money from payments?

Payments companies like Visa and Mastercard have been incredible businesses over decades as they facilitated the shift from cash to digital, linking consumers on the one side with merchants on the other and clipping a ticket in the middle. Whether digital wallets can also create value for shareholders through payment services depends on the payments plumbing in a particular market.

The best way a wallet can extract value from payments is when it provides each of the three sub-networks in the payments chain: merchant acceptance, switching, and the loading of value into the wallet. M-Pesa, owned by Safaricom in Kenya, controls all three. It controls the merchant acceptance system through proprietary PIN or QR codes, the switching of value between the consumer and merchant, and also sits on the cash top-up and withdrawal process through its network of 173,000 mobile phone top-up agents. As a result, M-Pesa provides the payment rails and owns the network, creating a so-called "closed loop". Merchants pay 50bps of any payment they receive to M-Pesa, and M-Pesa keeps all this value. As long as regulators don't disrupt this system – and a 50bp charge for this service is not high in less developed countries – the business could be extremely profitable for a long time, whilst also creating significant value to society. Transactions equivalent to 133% of GDP went through its network in 2019, and half the population of Kenya uses M-Pesa every month, making a chargeable transaction every three days.

On the other hand, from a pure payments perspective, Naver's wallet is less fortunate. Naver Pay runs on the existing "rails" of the South Korean equivalents of Visa and Mastercard. They are responsible for the switching, and most consumers add value to their wallet through their credit card, where Naver has to pay a fee to the credit card company. Consumers use Naver Pay because they can buy from small merchants with a simple, one-click process, and merchants accept it because the simple process means consumers are more likely to buy from them. As a result, 10-15% of e-commerce sales in Korea will be made using Naver Pay in 2020, with payment GMV growing over 50% in the first half of 2020. As the dominant search engine in Korea, Naver bundles the e-commerce store's marketing, checkout process, and payment acceptance into one commission paid by the merchant, so it is not quite clear where the payment fee and e-commerce platform fee starts and ends. Bundling like this usually protects profits, but here much of the value sits with the payment rails and credit card issuer. While Naver's solution works well online, the offline card network in Korea already solves most consumer needs, so Naver Pay is unlikely to be much of a player in the physical world.

Naver Pay's business model is similar to PayPal's and works well where card infrastructure is quite developed. In emerging markets that use cards, like Brazil, we would expect a similar system to develop. However, using existing card networks as payment rails means the wallet's profitability depends on the gap between the merchant discount rate and the rate the wallet can negotiate with the card companies or banks to use the rails. The gap is high in the US and Brazil, but has largely been regulated away in Korea, and it would be naive to think the profit pool will persist elsewhere.

The billion-dollar question is how far Alipay and WeChat Pay can monetise payments. They pioneered digital wallets in China when regulation was light, creating closed loop systems akin to M-Pesa where they controlled all the moving pieces. With Alipay and WeChat Pay sharing the wallet market, and no other company having the scale to set up a wallet, the stage was set for them to form the payment rails in China and enjoy considerable profitability. However, China's central bank, the PBOC, wasn't impressed by an incipient payments oligopoly, so set up a settlement platform which Alipay and WeChat Pay joined in 2018-2019. The PBOC has also announced plans for universal QR codes, where the merchant's QR code can be "read" by any wallet. The Chinese digital payments network is therefore now "open". The open network has two implications: first, the e-wallets shouldn't be able to capture value from the switching or the merchant acceptance systems because the government is providing these services, and second, it becomes easier for new wallets to take share. This constrains the ways a wallet can generate value from payments, but the two

giants still have an ace up their sleeves: consumer inertia. This is a persistent feature of financial services and implies a big incumbent advantage, albeit a less guaranteed source of earnings than sitting on top of a network.

Regulators across emerging markets have analysed the growth of digital wallets in places like China, seen the value extracted by Visa and Mastercard in developed markets, and many have decided their digital payments systems should be open. As in China, governments are starting to set up payment rails any wallet can use. So far India has the most advanced government-backed system, the Unified Payments Interface (UPI), which facilitates peer-to-peer payments between any wallet, creates a standardised merchant acceptance system through common QR codes, and operates centralised switching. Indonesia is now trying to implement universal QR codes, Nigeria has developed a centralised instant payment switch and is emulating India's model, and even Brazil – with its legacy of high financial sector profitability – is introducing PIX, a low-cost interoperable payments platform. The switching infrastructure means wallets do not need to create their own networks and can plug into the government system, meaning the wallet industry is likely to be fragmented and competitive. These low cost digital payments are great for consumers and economic development, but present a paradox concerning the excitement over digital wallets: the core payments business in many emerging markets is unlikely to generate much value.

Other ways to skin the cat

Not making money from the payments infrastructure does not mean digital wallets are necessarily bad businesses. Instead of monetising payments directly, most wallets will probably earn money from other financial services. Ant Group is the pre-eminent example of a wallet which has moved seamlessly from payments into financial services distribution. At the end of June 2020 the outstanding balance of consumer loans distributed by Ant reached Rmb1.7trn (US\$250bn), representing a 10-15% market share in consumer credit, or about 30% larger than the consumer loan balance (ex-mortgages) of any of the big four Chinese banks. At the end of June its wealth management division had an outstanding balance of Rmb3.4trn (US\$600bn), primarily invested in money market funds. And arguably the growth of these online products in China is only just beginning.

Apart from Alipay and WeChat Pay, not many wallets have distributed large volumes of financial services products yet, but many are trying. One genuinely good reason consumers buy products from digital wallets, and we hear this almost everywhere, is that the sign-up procedures of a financial innovator tend to be much easier than at a bank, even if the bank tries to do it online. The application process for a loan, for example, can be done in a few minutes in many wallets compared with 2-3 days for a bank. KYC can be done through facial recognition online. MYbank, a digital bank 30% owned by Ant Group, can approve loans in "3-1-0" (3 minutes to apply, 1 second to get a decision, and 0 humans involved). In some places banks can do the same, but haven't really focused on it, and tiny differences in the number of clicks, the data you need to submit or the time to approval makes a big difference to the consumer experience and successful application rate. Digital wallets in some countries are benefiting from easier regulation for innovators, but we shouldn't underestimate the importance of convenience in driving the adoption of financial services via wallets, or how difficult it seems to be for incumbent financial institutions to be innovative, make things fun or educate their customers.

Wallets can sell financial services easily because every time the consumer opens the wallet is an opportunity to sell them something. Wallets that are used a lot, either on the high street or for regular things online like food delivery and ride hailing, become part of people's lives. Users of Alipay on average make a payment a bit more than once a day. By contrast, banks and card companies have less frequent interaction with their customers, and when they do it is often through a cumbersome bank branch, phone line, or a passive system rather than an interactive smart device. But a wallet can use an interactive smart device to engage, educate

and sell a product along the way. ICBC, one of the large banks in China, has used Alipay's live streaming function to produce a show about wealth management and reporting financial fraud which attracted a staggering 620,000 views in less than an hour. These features are particularly good at attracting younger, tech savvy consumers who are difficult to reach through other channels. In addition, the data the wallets have on you will enable very targeted advertising. In a neat role reversal, wallets in Korea even sell referrals to credit card companies, earning US\$7 for a sign-up.

The trick is for wallets to make the leap in the consumer's mind from being just a payments platform to providing other financial solutions. Financial services products that are very closely aligned with payments can most easily make that association. In emerging markets, these first products are typically "buy now, pay later" loans where small amounts of credit are given for a short period, often at high rates. These loans are extremely convenient as they can be facilitated at checkout, and the loans can be credit scored using the wallet's transaction data, which can bring down the price. It is helpful that small loans for short periods are not very high risk even if the customer information is not perfect. Once consumers start to use it, and the wallet gathers data on the repayment history, the wallets can move into longer term loans with larger ticket sizes. This distribution platform can be extremely powerful; M-Pesa's lending products make up 10-20% of banking system loans in Kenya.

The data a wallet has on you can be impressive, taking in your spending, location, contacts, and how you use the app – every click matters – processing the data into a more accurate credit score than traditional financial services companies can generate. Ant Group's credit scoring not only looks at traditional credit data but also your assets on the Ant platform, your personal characteristics such as education and career, your shopping patterns, utility payments, charitable donations and transfers to friends. The whole Alibaba ecosystem will add things like television viewing habits, the type of food you order and the behaviour of your contacts. This can all be used to identify as creditworthy a currently unemployed engineering graduate, with a large but inaccessible savings balance, a bunch of lawyer and doctor friends, and a penchant for Italian cuisine (a quirk related to credit worthiness established by big data). To a sharp, innovative digital company this information is a gold mine. The marketing and other power that it could have over our lives could be devastatingly effective.

And it is not just financial services. Wallets that become entrenched in consumers' lives can cater to their every online and offline whim, so you can also buy travel tickets, find hotel rooms, rent a bike, and order food. Paytm in India is not just a digital wallet but also the country's largest seller of bus tickets. In the process the wallets make money in a few ways, including traditional commissions, marketing fees like digital coupons, or just from sucking up more data on their consumers and using it now or later. Providing these extra services may become critical not just as part of the wallet's monetisation strategy, but also to entrench habitual usage and reinforce competitive advantage – particularly important as governments open up the switching and the network barrier to entry falls away.

Implications for the traditional banks

The extent to which digital wallets can disrupt the banks' traditional payments business depends critically on who owns the payment rails in each country. Banks and credit card companies in places where the wallet rides on the credit card infrastructure are likely to see more payments through their networks, so digital wallets are not a threat. However, where the banks or cards don't own the rails the wallets will be more or less eating their lunch. Many emerging countries, like India or Indonesia, have relatively low card penetration, so the banks don't have much of a lunch to lose – but digital payments would have been a big growth opportunity.

But a bigger risk is lurking here. Even if missing out on payments does not mean much for bank profitability today, banks should worry about losing their customer relationships to upstart wallets. The crucial thing we are watching in our legacy banks is therefore how well they play the customer focused game. Banks that try to protect their legacy systems and management hierarchy are sitting ducks and will pass the opportunity to others, while those that aim to make the online process smooth and fast, and really try to offer what the customer wants, can still be competitive. HDFC Bank in India is strengthening its digital offering so that loans can be approved in minutes. GT Bank in Nigeria has launched a mobile bank running on technology that doesn't require a smartphone. BCA in Indonesia is unusual in wanting its digital bank to be more successful than the parent and is pushing the regulator to approve online-only applications. These are the ways banks can do well in low income, young markets, where banking penetration still has a long way to go.

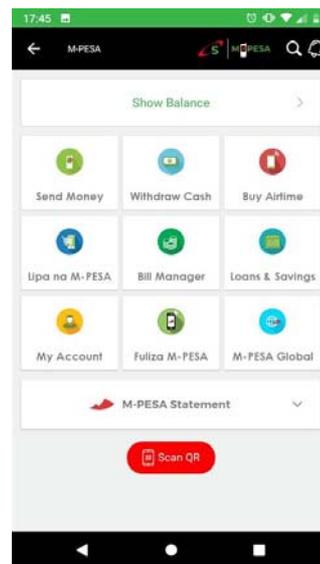
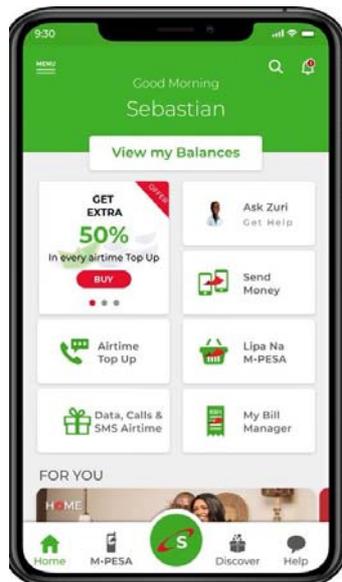
Fortunately, the main competitive advantage of most of the banks in your portfolio is their low-cost deposits, and most wallets, except for Alipay and WeChat Pay, are not currently able to attack the deposit market. Regulation is against them, as even relatively loose regulators do not let the wallets hold deposits. The banks' capital adequacy regime and stringent regulation protect this enormous benefit. In Kenya, Safaricom controls the wallet's float but is not allowed to earn interest on it. And in most emerging markets, the float has to be deposited in the banking system, so the banks tend to benefit from the cheap deposits. Most wallets we know of are not yet really addressing the unbanked as a source of growth, perhaps because the cash handling process is too complicated or they just don't buy enough extra services; nor are they trying to grab payroll accounts. As a result, wallets rely on bank connections for top-ups, meaning the bank account is still a critical enabler of their businesses. In Indonesia, despite a large unbanked population, bank accounts are responsible for 90% of wallet top-ups. The success of Ant Group in deposit substitute products should be a warning bell to the banking industry, but at least for now the banks have been benefiting from the low-cost deposits.

Big brother

Digital wallets work well because they are convenient, but the data they collect is the iron fist in the glove. We have seen how a strong player can access data on payments and integrate it with a wide range of other digital information to create a detailed picture of each customer. It may be helpful when you are out shopping to be reminded by your smartphone to pick up a waiting parcel but it may be too much if it then warns you not to buy beer because you bought rather a lot yesterday. Worse, your beer data could be sent to someone pricing your health insurance policy. Consumers today seem willing to trade privacy for convenience, but if the data is not used appropriately they may rebel. We must therefore look for sustainability in our ESG assessments. First we ask whether the regulatory environment protects individual privacy. In China, although the government has significant access to personal data, the developing regulations around data privacy and usage by the private sector are closer to European than US regulation, giving a relatively sound framework. Korea is similar; Naver Pay is not allowed to integrate its financial services data with data from Naver search. Next, we need to know how easy it is for consumers to understand what data is being collected, how it is being used, and how to delete it. And more subtly, we are looking for wallets with an evolving sense of privacy as consumer perception shifts, arguably as Apple has done in the developed world.

Conclusion

The buzz around digital wallets in the last 18 months has been huge and we expect more opportunities to emerge. However, not all wallets are created equal, and we need to dig into the weeds to understand the prospects for profitability. In the meantime, when we can next visit Kenya, we'll be enjoying the convenience of M-Pesa to pay for our morning coffee, and perhaps suggest to the Safaricom management that its carefully optimised, clean and green landing page would be even more delightful if it included a scene of glorious Mount Kenya emerging from the bush.



Important Regulatory and Risk Information

This document is issued by Genesis Investment Management, LLP (“Genesis”), which is authorised and regulated by the Financial Conduct Authority (“FCA”). Registered office: 21 Grosvenor Place, London SW1X 7HU. Registered in England, number OC306866. A member of the Investment Association.

All investments and services mentioned are directed at persons who are Professional Clients or Eligible Counterparties as defined by the FCA and to persons falling within the Financial Services and Markets Act 2000 (Promotion of Collective Investment Schemes) (Exemptions) Order 2001. This document should not be relied upon by Retail Clients. It does not constitute investment advice and should not be used as the basis of any investment decision, nor should it be treated as a recommendation for any investment. Under no circumstances should any part of this document be construed as an offering or solicitation.

Past performance should not be relied upon as a guide to future performance, which is not guaranteed. The value of investments can go down as well as up and there is no guarantee that you will get back the amount originally invested. Your investment should be viewed as long-term. Genesis invests in emerging markets which tend to be more volatile than more established stock markets and therefore your investment is at greater risk. You should be aware that currency movements can affect the value of your investment. Other risk factors such as political and economic conditions should also be considered.

This document has been prepared by Genesis on the basis of information and sources believed to be reliable. Index performance calculated by Genesis is based upon index values supplied by MSCI. Other statistics in this document are from a variety of publicly available information obtained through Genesis’ research. This document is not intended for distribution to any other person and may not be reproduced in whole or in part without the prior consent of Genesis.

For information on how Genesis processes personal data, please refer to www.giml.co.uk and click on the Privacy Notice link.

Genesis Investment Management, LLP
21 Grosvenor Place
London SW1X 7HU
United Kingdom
Telephone: +44 (0) 20 7201 7200