Singapore Market Focus

Singapore Digital Transformation

Refer to important disclosures at the end of this report

DBS Group Research . Equity   15 May 2018

Cherrypicking Pro-active Leaders and Fast-Followers

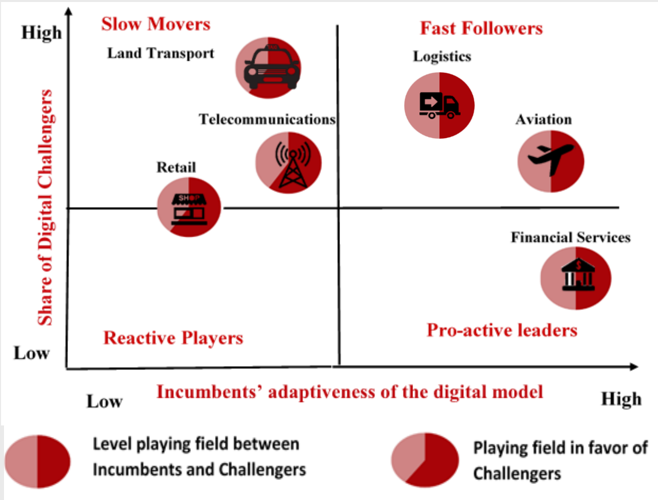
- Playing field across the sectors in Singapore is shifting fast
- Banks are Pro-active Leaders while Aviation and Logistics incumbents are Fast Followers
- Companies we like are– Singapore Airlines, Singapore banks, iFast, ST Engg, Singtel, SingPost, MapleTree Commercial Trust & Y Ventures.

Why should one pay attention to the playing field? We define the playing field as a function of technological capabilities and regulations, and it may favour either challengers or incumbents, depending on the swing of these two factors. We looked at the market share secured by the digital challengers so far and the incumbents' adaptiveness of the digital model to understand the tilt of the playing field. In our view, there is a level playing field across the financial, logistics, and aviation sectors now, whereas the playing field is tilted in favour of digital challengers in the retail and land transportation sectors.

Favor incumbents who are Pro-active Leaders or Fast Followers. Fintech players in Singapore have secured negligible market share so far with many of them adopting Business to Business (B2B) model. Singapore Banks, supported by a nimble regulator, are trying to leverage their customer base to embed banking services into e-commerce transactions, using public cloud services to cut costs and launching application programming interfaces (APIs) for third parties to transform into a platform. We like iFAST for its profitable and highly scalable wealth management platform. Meanwhile, Aviation incumbent Singapore Airlines - challenged by 100% online distribution model of budget carriers – is recovering its share supported by personalized end to end tarvel experience and productivity improvement to move passengers, baggage and cargo. In the logistics sector, there are multiple last-mile challengers such as Ninja Van, aCommerce etc. However, SingPost with regional warehouse and fulfillment capabilities in Asia seems prepared with (a) unique automated parcel sorting facility for rising e-commerce volumes, (b) a network of lockers for pickups in Singapore and (d) latest digital solutions adopted from other countries

There are also winners in sectors where incumbents are slow to adapt. We like MapleTree Commercial Trust for its largely resilient mega-malls and Y Ventures for its data-driven ecommerce in the retail sector. We prefer Singtel for its newer digital revenue streams coupled with digitisation of operations to cut costs and gain market share. We also like ST Engineering which targets to leverage its track record in Singapore to double its Smart City revenue across the globe by 2022.

Singapore's Digital Transformation – Challengers versus Incumbents



Source: DBS Group Research

STOCKS

	Price S$	Mkt Cap US$m	12-mth Target S$	Performance (%) 3 mth	12 mth	Rating
iFAST Corporation	0.94	187	1.26	6.8	21.3	BUY
Mapletree Commercial Trust	1.60	3,449	1.80	3.9	3.2	BUY
Singapore Airlines	11.15	9,868	12.00	3.9	4.2	BUY
SingPost	1.36	2,303	1.55	(4.9)	(2.5)	BUY
Singtel	3.55	43,386	3.85	5.0	(4.6)	BUY
ST Engineering	3.39	7,917	4.10	4.6	(12.0)	BUY
Y Ventures Group	0.48	73.6	0.77	(18.0)	N.A	BUY

Source: DBS Group Research, Bloomberg Finance L.P. Closing price as of 11 May 2018

DBS

ed: JLC / sa:JC, PY, CS

Singapore's Digital Transformation

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Table of Contents

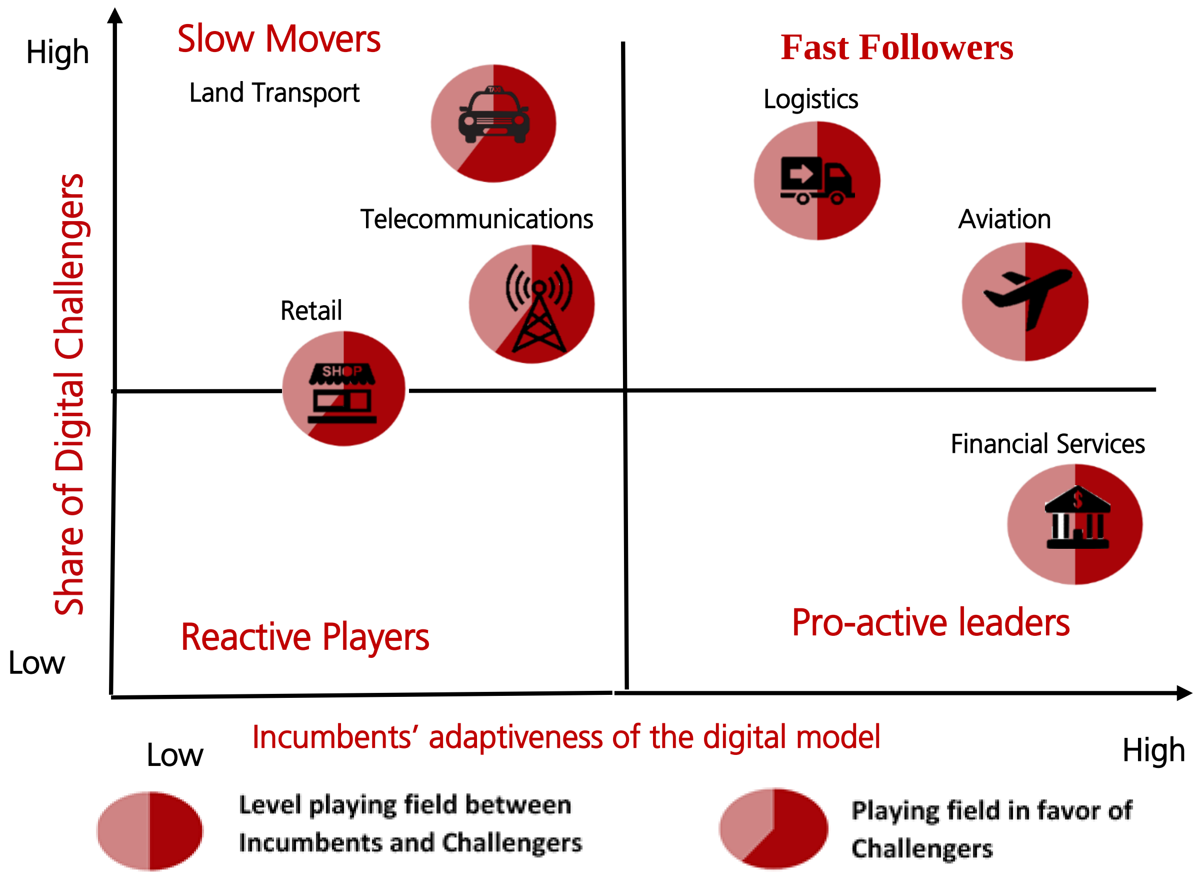
Digital Transformation in Singapore – Cherry-picking Proactive Leaders and Fast Followers

Digital Contribution to GDP 10
Financial Services 10
Aviation Industry 22
Telecom Industry 27
Retail 31
Transportation 36
Logistics Industry 38
Singapore Smart Nation 42
Strategic Government Projects 42
Other Ongoing Smart Nation Projects 51
Appendix 56

Digital Transformation in Singapore – Cherry-picking Proactive Leaders and Fast Followers

Digital transformation initiatives in Singapore are all about embracing technology-driven disruption to stay ahead, while enabling nimble players to compete in the new arena. The aim is to create an industry-wide level playing field to better serve consumers in the long term.

Singapore's Digital Transformation – Challengers versus Incumbents



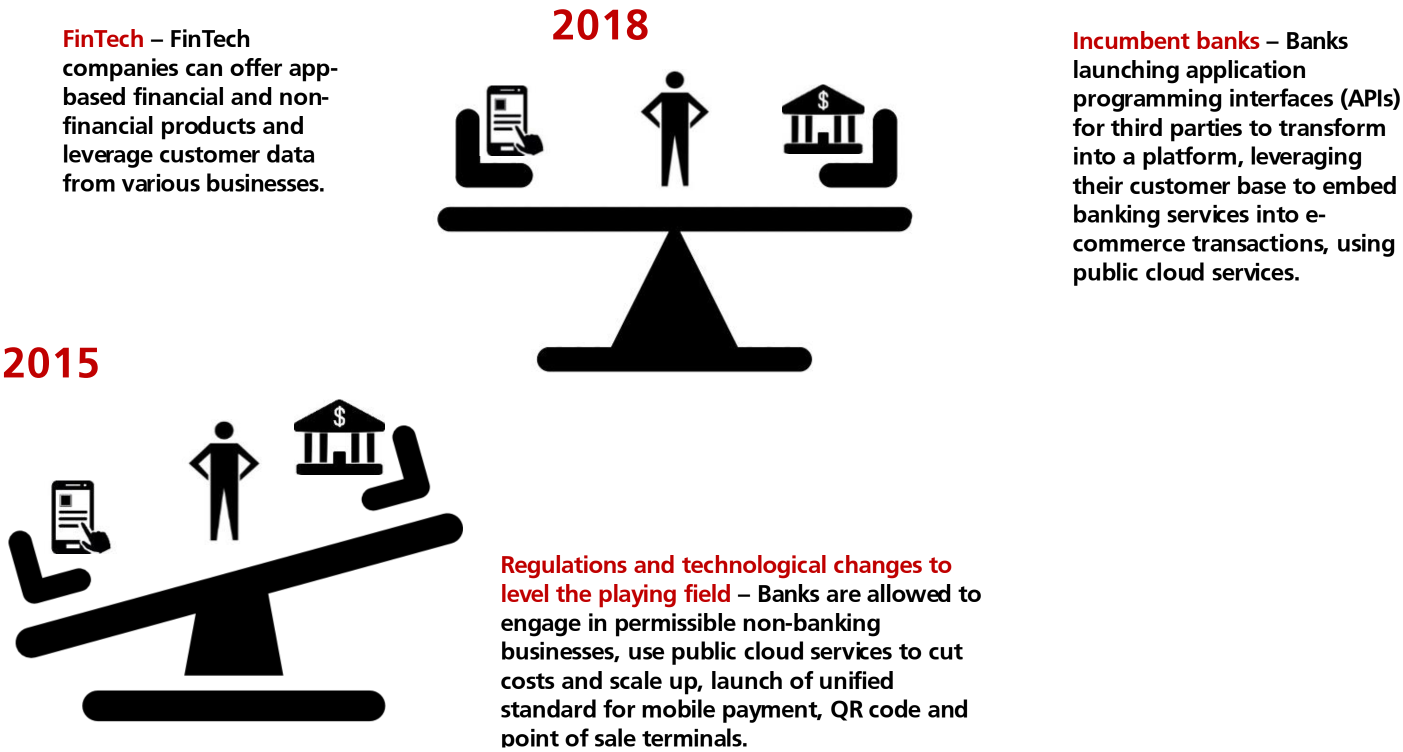
Source: DBS Group Research

We have looked at the market share secured by the digital challengers in Singapore so far and the incumbents' adaptiveness of the digital model to understand the playing field. We define the playing field as a function of technological capabilities and regulations, and it may favour either challengers or incumbents, depending on the swing of these two factors.

In our view, there is a level playing field across the financial, logistics, and aviation sectors, whereas the playing field is tilted in favour of the digital challengers in the retail and land transportation sectors.

Financial Services

Singapore is home to around 210 FinTech firms, which raked in over US$100m in funding over the first three quarters of 2017.[1] Wealth management is the most concentrated segment with over 41 companies, followed by 32 in payments and 23 in blockchain/cryptocurrency. However, we have not seen much market share gained by these fintech firms in Singapore so far and we see a levelling of the playing field with regulatory and technological changes, which should encourage digitisation of banks in Singapore.



Source: DBS Group Research

Retail

Qoo10 and Lazada are e-commerce leaders in Singapore; Amazon entered the market in 2017.However, e-commerce accounted for around 3.9% of retail sales in Singapore in Feb 20182, still lower than in many developed countries. Around 55% of e-commerce transactions in Singapore are cross-border3, it can be a challenge for incumbent retailers to carry a large range of products for the small Singapore market, unless they have scale in ASEAN.

[1] http://FinTechnews.sg/wp-content/uploads/2017/11/Singapore-FinTech-Map-2017.png

[2] https://www.singstat.gov.sg/docs/default-source/default-document-library/news/press_releases/mrsfeb2018.pdf

[3] https://www.payvision.com/downloads/cross-border-ecommerce-in-asian-markets-singapore-and-malaysia.pdf

E-commerce's popularity on the rise – Qoo10 and Lazada have entered the retail spheres, from consumer electronics and fashion to home supplies and groceries.

Government initiatives aim to level the playing field – The Retail Industry Digital Plan and 99%SME are some of the initiatives to help retailers go online. Budget 2018 proposes the introduction of goods and services tax (GST) on imported e-commerce services from 2020 onwards.

Incumbent retail players – Relatively slow to embrace an omni-channel presence, possibly due to the lack of scale and fear of cannibalising offline profits.

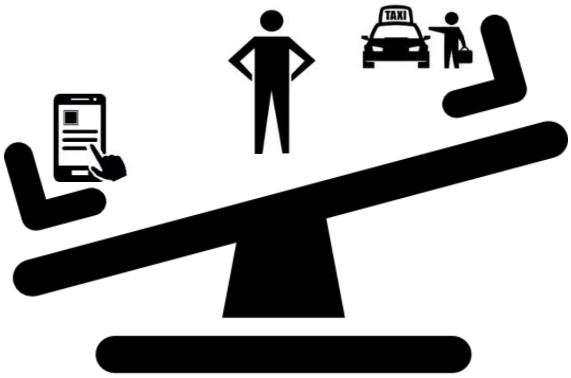
Source: DBS Group Research

Land Transportation

Almost half of point-to-point trips in the country are now served by ride-hailing players Grab and Uber*. The Land Transport Authority (LTA) made it mandatory for drivers of these ride-hailing companies to obtain a vocational license in 2017 for consumer safety but consumers were already hooked on to Grab and Uber by then.

*Uber has entered into an agreement to sell its Southeast Asia operations, inclusive of Singapore, to Grab. The deal is currently under the review of the Competition Commission of Singapore (CCS).

Ride-hailing apps with regional scale – App-based ride-hailing companies have managed to win a significant market share.



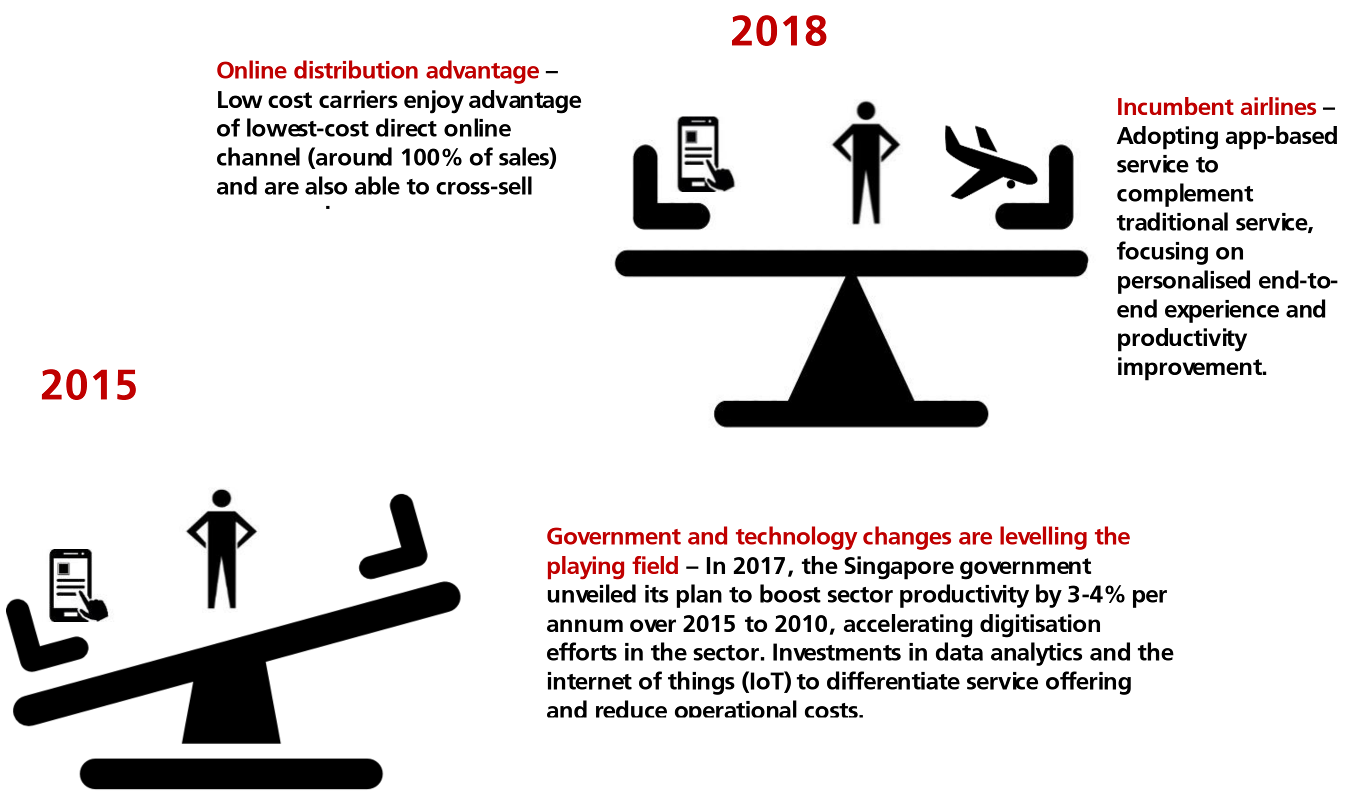
Incumbent taxi companies – Traditional taxi companies, such as ComfortDelGro, have moved into app-based services to complement their traditional service offering.

By the time regulator stepped in, new entrants were already successful– LTA stepped in in 2017, making vocational licenses mandatory for app-based drivers, and is mulling over an operating license for ride-hailing companies.

Source: DBS Group Research

Aviation

Budget airlines such as AirAsia have altered distribution with a low-cost direct online channel to cross-sell ancillary services. The Air Transport Industry Transformation Map launched by the Civil Aviation Authority of Singapore (CAAS) in 2017 aims to achieve real value-added growth of 16% from 2015 to 2020 and boost productivity by 3-4% per annum. Singapore Airlines launched a three-year transformation programme in 2017, which, among other things, will focus on a personalised end-to-end travel experience and productivity improvement through the deployment of autonomous systems to move passengers, baggage and cargo.

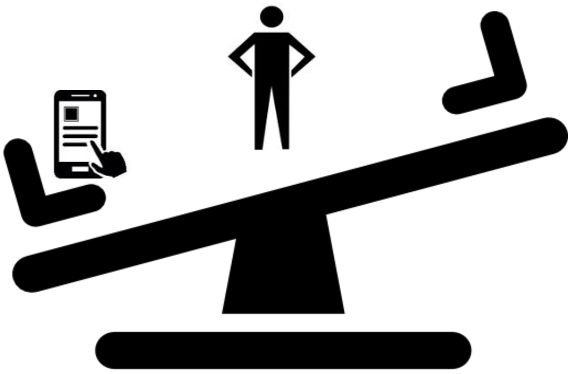


Source: DBS Group Research

Telecommunications

Competition has intensified with three new mobile virtual network operators (MVNOs) - Circles.Life, MyRepublic and Zero Mobile, and the expected launch by TPG in late-2018. The fourth mobile operator, TPG, would also benefit from jumping directly into the 4G network, as evident in its network rollout capex of only S$200-300m. We expect TPG to secure around 7% revenue share of Singapore's mobile market by 2022. The incumbents are investing in initiatives such as Internet of Things (IoT), cyber-security and digital advertising etc. to secure new revenue streams which will pay off gradually over next 3-4 years.

2018



New entrants not burdened by legacy revenues and networks – New entrants are not exposed to declining legacy revenue streams and are able to rollout network at much lower capex.

From telcos to smart communication providers – Existing telcos are repositioning as smart communication providers with investments in cloud technology, cyber-security, IoT, etc

Regulator awarded a fourth mobile operator license in 2016 – The regulator's granting of the fourth mobile operator license to TPG has ramped up competition for the incumbents.

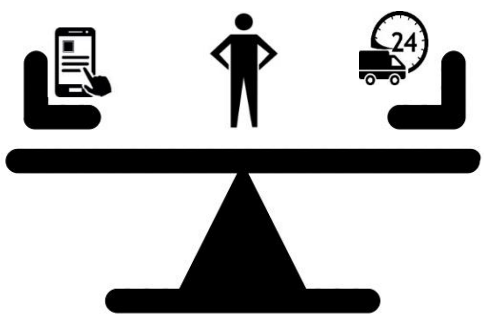
Source: DBS Group Research

Logistics

The surge in online sales, consumer demand for multiple channel options to collect online purchases, and the entry of logistics start-ups such as Ninja Van and aCommerce has challenged incumbents like SingPost to invest in automated last mile delivery solutions and follow an omni-channel approach for logistics services. SingPost had around 21% share of the last mile parcel delivery market in Singapore in 2017 and intends to raise its share going forward.

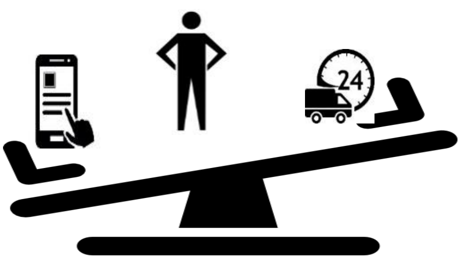
Start-ups exploiting opportunities in last-mile delivery – New entrant Ninja Van uses proprietary algorithms to plan its routes and manage its vehicle fleet. UrbanFox, another start-up, has introduced an Uber-like network of drivers with ratings to bid for last - mile deliveries.

2018



Incumbent logistics players have built regional scale – SingPost, has invested in (a) automated parcel sorting machines for rising volumes, (b) a network of lockers for pickups in Singapore, (c) regional warehouse and fulfilment capabilities in Asia, and (d) US companies with digital solutions, and is bringing those solutions to Asia.

2015



Technological advances levelling the playing field – Technological advancements such as automated parcel sorting and self-service locker systems are narrowing the gap between challengers and incumbents. The regulator is facilitating the development of challengers with programmes such as Federated Lockers.

Source: DBS Group Research

Digital Contribution to GDP

Singapore has much to gain from digital transformation. Singapore's emerging digital economy has the potential to add over US$10b to Singapore's GDP by 2021 and increase the growth rate by 0.6% per annum. With this, around 60% of Singapore's GDP is expected to be digitised by 2021, with growth in almost every industry driven by digitally enhanced offerings, operations and relationships.4

Financial Services

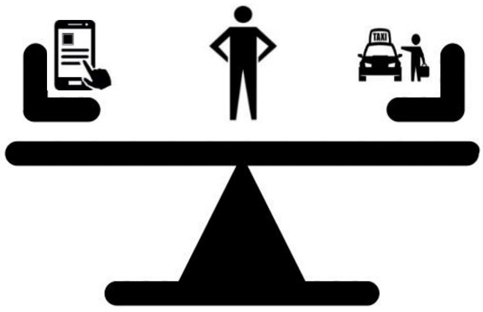
Singapore financial services' playing field

2015	Present	2021
Banks not allowed in non-banking sector	Banks allowed to enter non-banking sectors complementary to their core business Use of cloud services permitted from a regulatory respective for banks	National digital identity framework of the Smart Nation initiative to allow fully digital customer on-boarding for banks
Banks not permitted to use public cloud services	Unified mobile payment PayNow, unified QR code and unified POS terminal	Lower burden of cash management with drive toward cashless Singapore
No unified mobile payment and point of sale (POS) terminal	Sandbox approach allows FinTech experiments	Transition toward open banking, including ethical usage of data analytics and artificial intelligence and safeguarding of customer data
Lack of framework to regulate FinTech firms	Banks embracing API architecture to transform into financial platform	
	Banks encouraged to share data with FinTech and other non-bank firms	

Source: DBS Group Research

[4]https://news.microsoft.com/en-sg/2018/02/21/digital-transformation-contribute-us10-billion-singapore-gdp-2021/

2018



FinTech – FinTech companies can offer app-based financial and non-financial products and leverage customer data from various businesses.

Incumbent banks – Banks launching APIs for third parties to transform into a platform, leveraging their customer base to embed banking services into e-commerce transactions, using public cloud services.

2015

Regulations and technological changes to level the playing field – Banks are allowed to engage in permissible non-banking businesses, use public cloud services to cut costs and scale up, launch of unified standard for mobile payments, QR code and point of sale terminals.

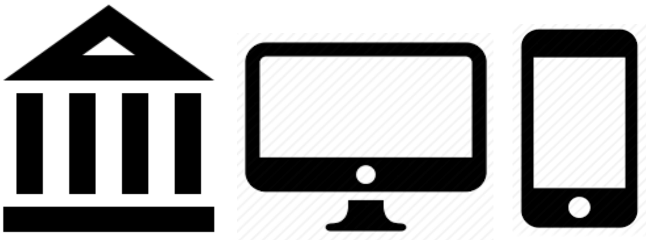
Source: DBS Group Research

The biggest obstacle for the FinTech revolution across the world has been the slow reaction of regulators, which have taken their time to come up with the necessary regulatory frameworks to provide a platform for tech disrupters while providing a level playing field to banks as well. However, this has not been the case with Singapore. As early as August 2015, the Financial Technology & Innovation Group (FTIG) was formed within the Monetary Authority of Singapore (MAS) to drive the various Smart Financial Centre initiatives shown in the appendix section of the report.

Future of banking

Mobile branch – **Majority of banking services offered via bank branches would be accessible through online and mobile platforms. Banks would see a significant reduction in the number of branches in operation.**

Invisible banking – **Banks would develop partnerships with industry players to create an eco-system of services surrounding the banking needs of customers. For example, banks would provide the necessary support for a customer looking to purchase a house, from searching for and comparing suitable properties to legal matters, as opposed to focusing on the sale of mortgage products.**



Integrated and instantaneous – **Banking services would be seamlessly integrated across physical, online and mobile platforms and allow customers to satisfy their banking needs instantaneously.**

Agile back-end operations supported by technology – **Back-end operations would leverage cloud and other advanced technologies to improve agility and responsiveness to customer demands.**

Source: DBS Group Research

It is estimated that over 80% of retail banking customers in Singapore now use online platforms[5] to interact with their banks and over 67%[6] of millennials in the country are actively using mobile platforms to connect with banks. Use of mobile banking in the country is on an upward trend as the mobile banking apps of the three Singapore banks continue to boost the variety of digital offerings for retail customers.

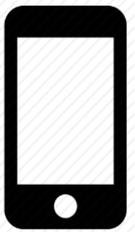
While the Singapore banking sector continues to undergo continual transformation from within, and collectively as an industry driven by MAS and the government in its Smart Nation initiatives (Refer to Appendix: Key government initiatives in the financial services sector), we posit that ongoing digitalisation efforts will impact the banks' profitability levels as well as how banks are being run in the future. We highlight the various digital transformation efforts at each of the banks below:

[5] Based on UOB's Singapore retail customers' online penetration rate of 82%

[6] https://www.bankitasia.com/bankitasia/mobile/only-67-percent-of-singapore-millennials-regularly-use-mobile-banking/

Digital transformation at Singapore Banks

Excellence in



- **Sophisticated mobile banking and mobile wallet apps offered by Singapore banks**
- **New and ongoing functionalities introduced**

Technology to support back-end

- **Continued investments in technology**
- **Re-engineering of processes from within**
- **Introduction of chatbots to deal with customer queries**
- **Integration of robotic programs to automate and/or speed up banking processes**

Results

- **Continued growth in digital customers, volumes and revenues**
- **Branch network, teller and call centre headcounts optimisation**
- **Potential improvement in cost-to-income ratio**

Source: DBS Group Research

Excellence in mobile. All in all, Singapore banks have been proactive in the mobile banking space over the last five years, with the introduction of various mobile banking, mobile wallet and other lifestyle apps, alongside improved functionality for both retail and corporate customers. We summarise the landscape of retail mobile banking apps offered by Singapore banks below:

Landscape of retail mobile banking apps offered by Singapore's banks

DBS	OCBC	UOB
DBS digibank Mobile Main mobile banking app: Check account balances, transfer money, pay bills	**OCBC SG Mobile Banking** Main mobile banking app: Check account balances, transfer money, pay bills	**UOB Mighty Singapore** Main mobile banking app, enables customers to manage finances, search and book restaurants, make contactless payments
DBS PayLah! Mobile wallet app: Send/receive money instantly and securely on phone	**OCBC Pay Anyone** Send money and make NETS QR purchases	
DBS Lifestyle Lifestyle app: Use DBS Points and POSB Daily $ for instant savings, deals and other rewards		
Home Connect Calculate monthly repayments, step-by-step loan guide, etc.		
DBS mTrading DBS mobile trading app for trading in multiple markets		

Source: DBS Group Research

Scorecard of digital banking offerings

Bank	Basic offerings				Account opening	
	Mobile App	Online Banking	Account Summary	Bill Payment	New account opening	Account opening for existing customers
Definition	Do they have their own mobile banking app?	Do they have an online banking platform?	Can customers check their account balance online?	Can customers pay their bills using the online banking platform?	Can new customers open an account from the online banking platform?	Can existing customers open a new account from the online banking platform?
DBS	✓	✓	✓	✓	✓	✓
OCBC	✓	✓	✓	✓	✓	✓
UOB	✓	✓	✓	✓	✓	✓

Bank	Fund transfer					
	Interaccount Transfer	Interbank fund transfer	Instant Interbank transfer	Fund transfer to mobile no.	Cardless withdrawal	Telegraphic Transfer
Definition	Can customers transfer funds to accounts within the same bank?	Can customers transfer funds to accounts of another bank?	Can the transfer be done instantaneously?	Can customers transfer funds if they provide mobile numbers alone?	Can customers or recipients of funds withdraw money from the bank's ATM without a card?	Can customers perform wire transfer from the online banking platform?
DBS	✓	✓	✓	✓		✓
OCBC	✓	✓	✓	✓		✓
UOB	✓	✓	✓	✓	✓	✓

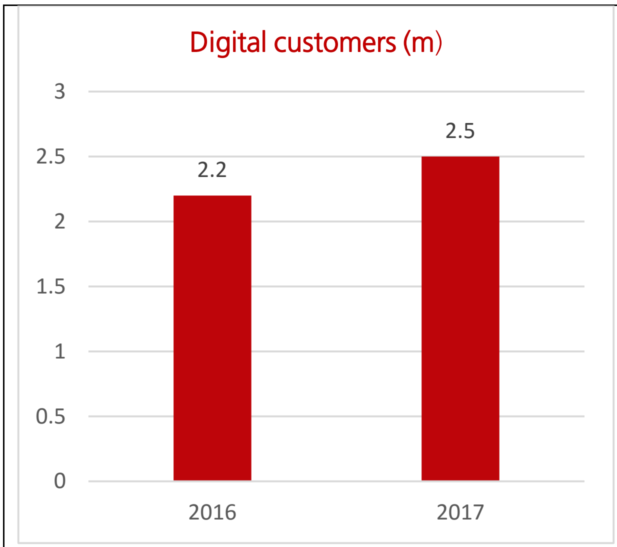
Bank	Security feature	Applications		Special features			
	One Time Password	Credit/Debit Card App	Loan App	Investment	Mobile wallet	Others	Comment on "Others"
Definition	Does the bank send the customers a one-time use only password for every transaction performed?	This refers to complete online application where there is no need to go to a branch for document submissions.	This refers to complete online application where there is no need to go to a branch for document submissions.	Does the internet banking platform support management of investments?	Does the bank support payment for goods and services using electronic money stored in mobile phones?		
DBS	✓	✓	✓	✓	✓		
OCBC	✓	✓	✓	✓		✓	Voice-powered, facial recognition for mobile banking
UOB	✓	✓	✓	✓			

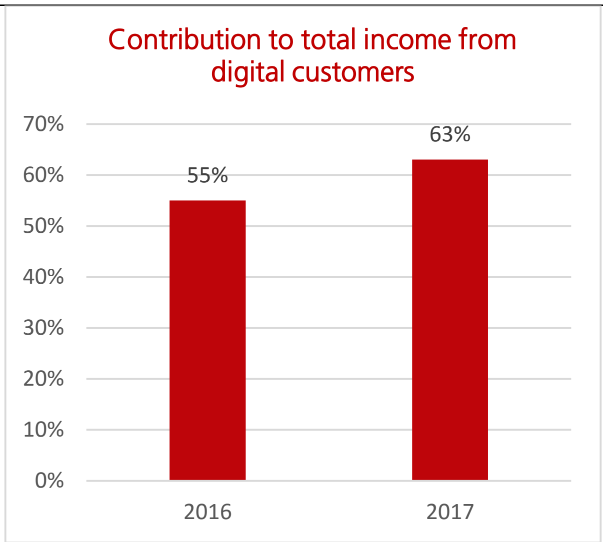
Source: Companies, DBS Group Research

Continued technology spend. Singapore banks have continuously invested in improving their respective digital capabilities and will continue to do so. DBS, in particular, has invested S$4.3b in technology in the last four years, of which S$1.7b relates to building for digital business (consumer and small and medium-sized enterprise, SME, business in Singapore and Hong Kong). On the other hand, OCBC invested 11.3% of total expenses in 2017 into technology, while UOB has spent S$1.2b in the last four years on improving their digital capabilities.

Growth in online customers and transactions to continue. Notably, the Singapore banks are at different stages in building their respective digital customer base as customers increasingly adopt digital transactions. We summarise their journeys thus far:

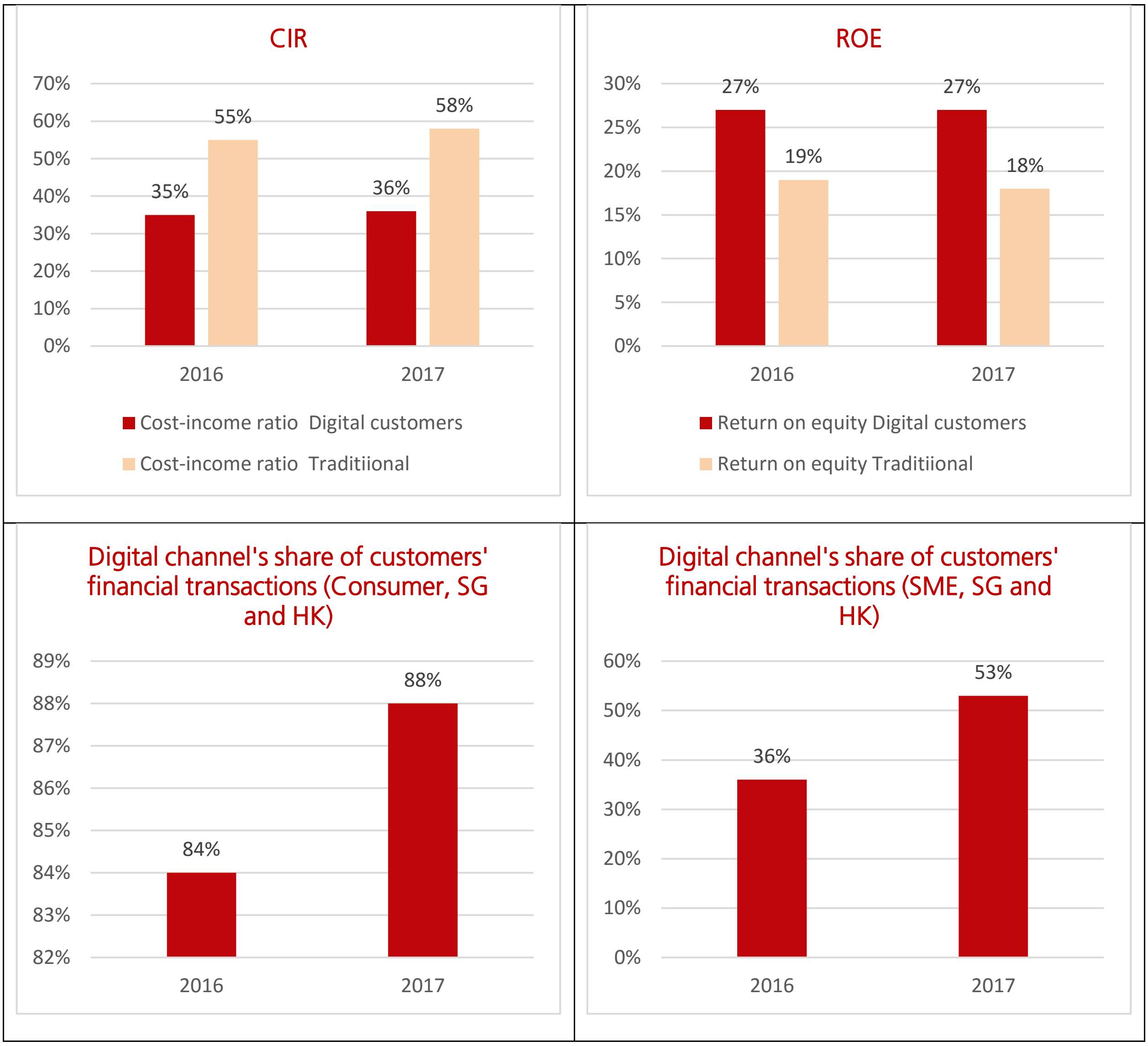
Deepening wallet share of digital customers. "Digital customers"7 refers to consumer and SME customers in Singapore and Hong Kong, comprising a total of 2.5m customers in 2017. Digital customers' income increased 21% on-year in 2017, and was twice that of a traditional customer, with a higher return on equity and lower cost-to-income ratio. DBS also aims to grow digital channel share for various products and transactions in a bid to reduce current efforts in targeted manual transacting processes.





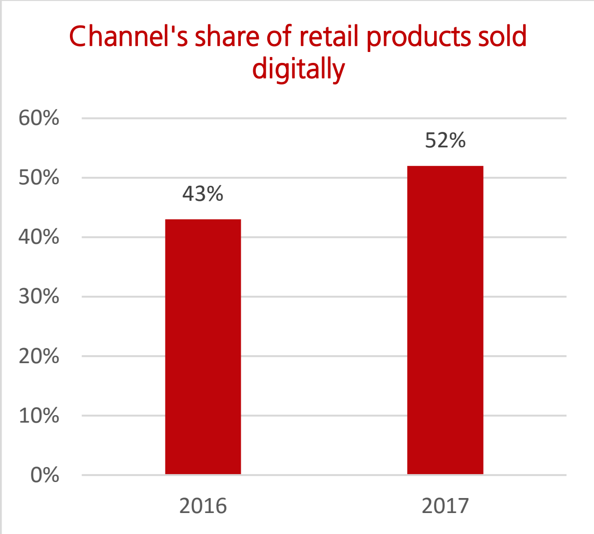
Source: DBS Group Research

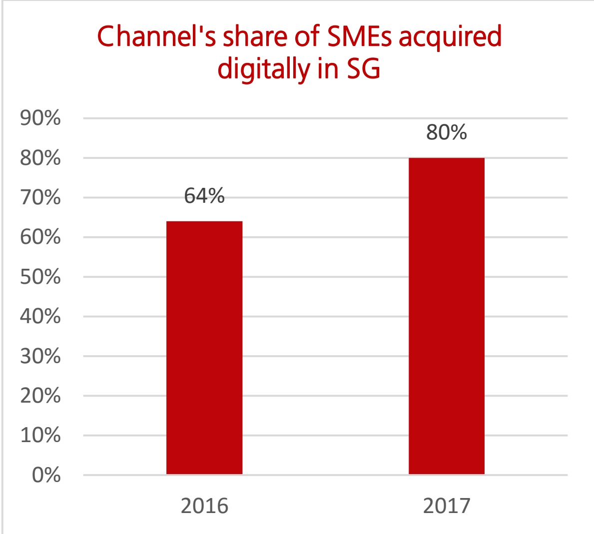
[7] A digital customer has (within the past 12 months) either: (i) made a product purchase or segment upgrade via a digital channel; (ii) done more than 50% of financial transactions via digital channels; (iii) done more than 50% of non-financial transactions via digital channels. (Consumer and SME, Singapore and Hong Kong)

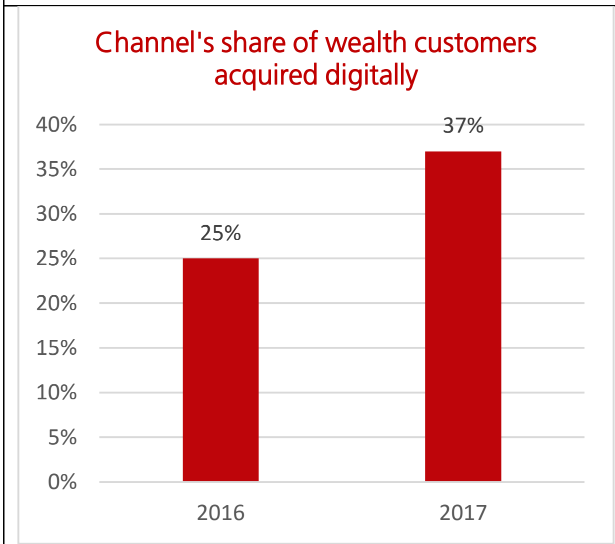


Source: DBS Annual Report 2017

Increasing digital penetration – acquiring new customers. As part of the digital transformation journey, DBS has also grown the digital acquisition of customers and increased digital channel share. Digibank India was also launched in 2016 as an extension of digital customer acquisition, and has acquired more than 1.8m customers since its launch.

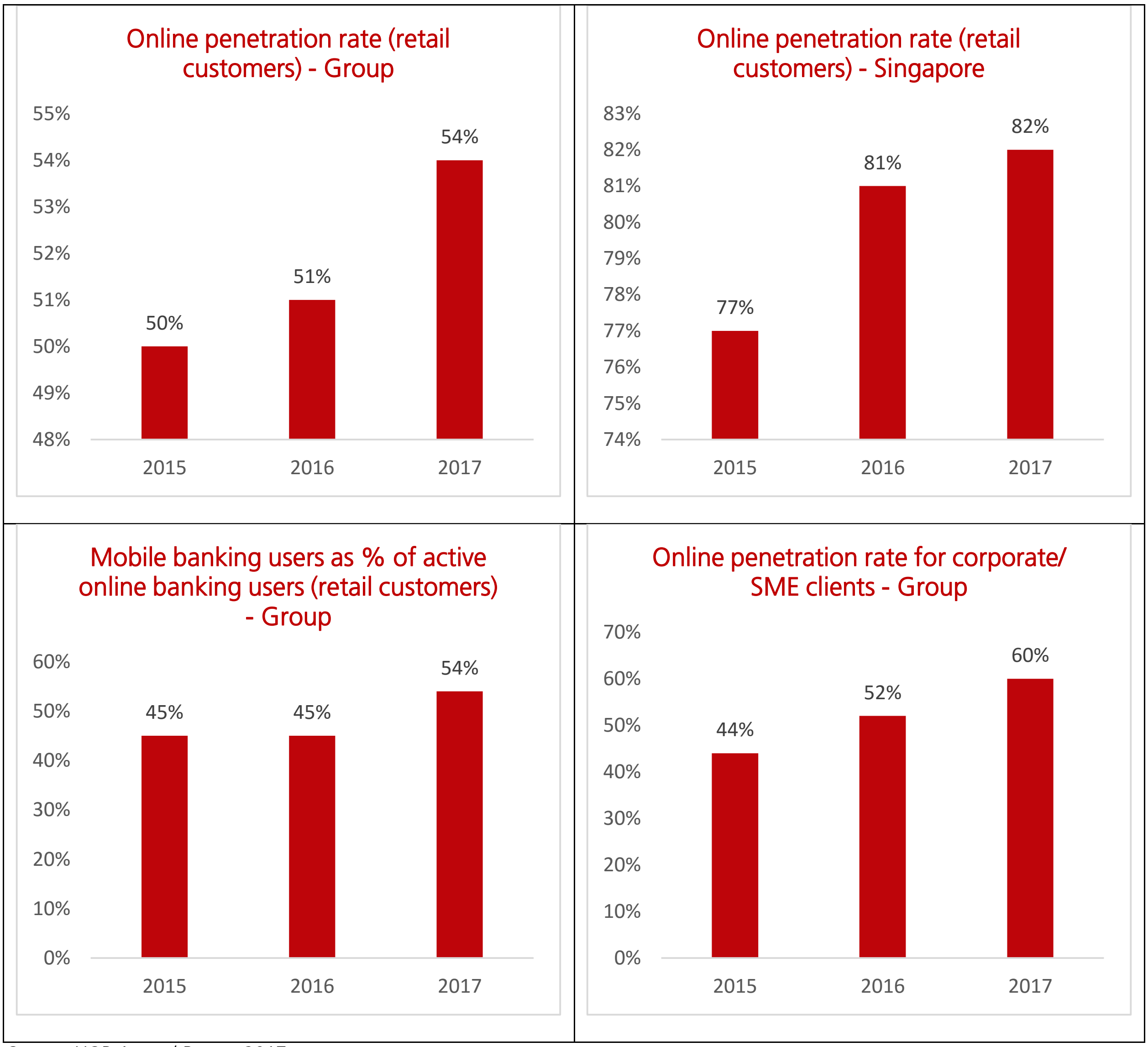






UOB

The online penetration rate for UOB Group's retail customers was 54% in 2017, with Singapore retail customers' online penetration at 82%. As at 31 December 2017, UOB has 1.6m (+9% y-o-y) digital customers (using personal internet banking), of which 0.8m are customers of UOB Mighty (+34% y-o-y), which debuted in November 2015. More than 50% of UOB Mighty customers actively use the app every month. UOB saw 40% y-o-y growth in digital financial transactions and 82% y-o-y growth for Mighty transactions.



Source: UOB Annual Report 2017

OCBC

Between 2012 and 2016, OCBC saw a threefold increase in active digital customers, with digital customers having increased profitability by 2.1 times. Digital sales growth was also three times that of branches. All in all, digital revenue growth increased 8.6 times. In 2017, OCBC saw a 73% increase in business mobile banking customers as well as 14% increase in digital sales and fees for wealth products in Singapore for the emerging affluent segment.

Source: OCBC Annual Report 2017, OCBC Sell-Side Analyst Day Presentation 2017

Conclusion

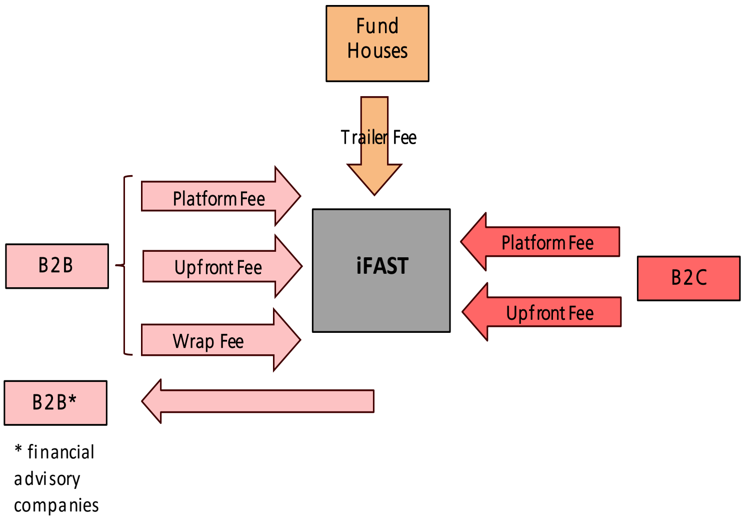
- Consumer perspective: Digital innovations bring about convenience, efficiencies, new ways of doing businesses for corporates in long-run
- Bank perspective: Optimisation/calibration of internal processes, possible cost-saving
- Being digital is not a matter of who does it first, but is something that must be done and will be the new normal for banking

iFAST – scaling up to be a key FinTech player

iFAST is an Internet-based investment products distribution platform with assets under administration of S$8.07 billion as at 31 March 2018. Starting out in 2000 in Singapore with Fundsupermart.com, a business-to-consumer (B2C) online unit trust distributor, iFAST has today evolved into a comprehensive wealth management platform with five key products – unit trusts, exchange-traded funds, bonds, stocks and insurance, catering to both business-to-business (B2B) and B2C customers. Its three biggest markets – Singapore, Hong Kong and Malaysia – are profitable and growing, while its China business is still in the initial years of the build-up phase, and India is growing though still loss-making. Revenue is mainly generated from fees (platform fee, upfront fee and wrap fee) collected from fund houses, B2B and B2C customers.

Efforts over the last two to three years to broaden the range of products and services are beginning to bear fruit. iFAST is now in the sweet spot as the wealth management industry will increasingly become dependent on FinTech capabilities for future growth, leveraging on the power of the internet which empowers consumers, and the evolving regulations which emphasize transparency.

iFAST business model



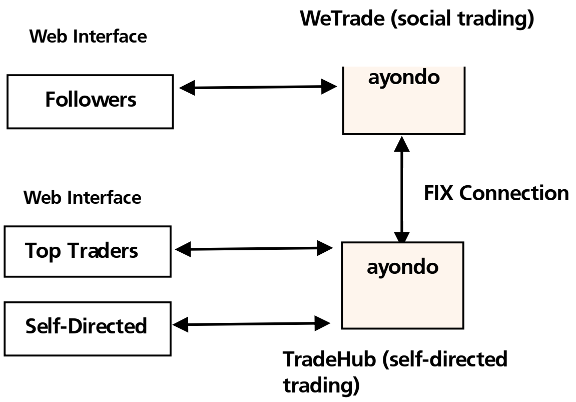
Source: DBS Group Research

ayondo – disruptor to traditional trading and asset management industry

ayondo provides social trading services and brokerage services to both B2C and B2B clients through its two proprietary platforms: a) WeTrade for social trading and b) TradeHub for self-directed trading. The two transactional systems are connected via a secure financial information exchange protocol (FIX) connection that is used to transmit market data, trades, orders and account status. ayondo's business model taps on new developments in the financial industry brought about by new technological advancements. The emergence of online brokerage services, especially social trading, a fast-growing innovation, and growing tech-savvy investors provide the backdrop for this highly scalable business to grow. Leveraging on the regulatory status of its white label partners to gain access to new markets enables the group to grow at a fast pace.

Its social trading arm is one of its key differentiators. Social trading, an emerging trend, combines new possibilities and technologies from the digital revolution. In addition, social trading addresses the market for self-directed investors searching for efficient ways to trade and share their experiences with friends and followers, as well as the market for investors looking for a modern investment alternative for actively managed funds.

ayondo's transactional systems



Source: DBS Group Research

Aviation Industry

Budget airlines, such as AirAsia and Jetstar Asia, use a direct online channel to increase or cross-sell ancillaries and related products and services, such as preferred seats, meals, baggage allowance, or in-flight communication services. The direct online channel is usually the lowest cost channel and an efficient way to gather customer data. Companies that have not yet begun their digitisation journey are facing a competitive disadvantage as their forward-looking competitors capitalise on new digital strategies and technology. The collection, storage and analysis of customer data, the adoption of IoT for predictive maintenance and the creation of an eco-system surrounding the travel needs of customers have jumped to the top on the list of priorities of major airline operators around the world. Aircraft maintenance and repairs are also shifting rapidly with the integration of technologies such as IoT, robotics and 3D printing.

Singapore Aviation Services Playing Field

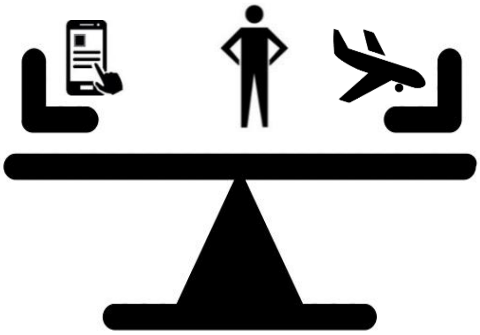
2015	2018	2021
Four commercial airlines (Singapore Airlines, SilkAir, Scoot, Jetstar Asia Airways) and one cargo airline (Singapore Airlines Cargo) in operation Budget carriers within and outside Southeast Asia operating under a 100% online distribution model and Middle Eastern airlines are eroding industry margins	e-freight@Singapore>> paperless freight documentation Industry-wide use of digital solutions>> IoT, robotics, big data and 3D printing in airline operations and maintenance	Personalised end-to-end travel experience for passengers and automated ground handling processes Air Transport Industry Transformation Map aims to achieve real value-added growth of 16% from 2015 to 2020 and boost productivity by 3-4% per annum, in addition to creating more than 8,000 new jobs in the sector by 2025[8] Fully digital and predictive maintenance, repair and overhaul (MRO) of aircraft

Source: Companies, DBS Group Research

[8] https://www.opengovasia.com/articles/towards-smart-nation-singapore-developments-in-2017-part-1

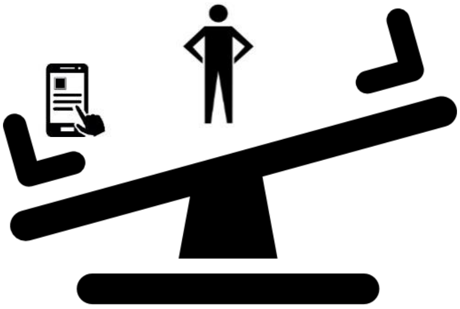
2018

Online distribution advantage – Low cost carriers enjoy advantage of lowest-cost direct online channel (around 100% of sales) and are also able to cross-sell more services.



Incumbent airlines – Adopting app-based service to complement traditional service, focusing on personalised end-to-end experience and productivity improvement.

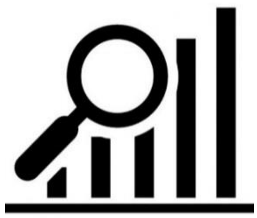
2015



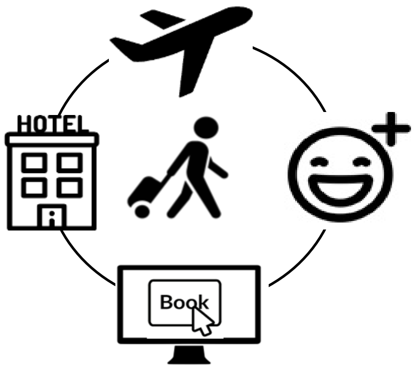
Government and technology changes are levelling the playing field – In 2017, the Singapore government unveiled its plan to boost sector productivity by 3-4% per annum over 2015 to 2010, accelerating digitisation efforts in the sector. Investments in data analytics and the internet of things (IoT) to differentiate service offering and reduce operational costs.

Digital transformation is rapidly changing the way airlines operate

IoT maximises operational efficiency - With IoT technology, data can be pulled in from various aircraft systems to create operational dashboards to maximise operational efficiency and predictive maintenance.



Data Analytics to personalise travel experiences – Customer data gathered through loyalty programmes and partner sites are used to personalise the customer's journey.



Travel eco-system – Shift in focus from simply taking customers to their destination to enhancing the overall travel experience of customers. Airlines will partner with other players in the travel industry to augment the overall travel experience of customers.

Robotics transforming the MRO industry – Facilitates automated airplane maintenance while reducing the need for labour.

3D printing revolutionised aviation MRO – 3D printed components are lighter in weight yet stronger.

Source: DBS Group Research

The next surge of digital transformation, led by IoT technology, has already begun. With IoT sensors, data can be pulled in from various aircraft systems to create operational dashboards that allows airlines to maximise fuel efficiency, optimise crew management, catering, load balancing and on-board provisioning. As an example, Delta Airlines has invested US$50m in radio-frequency identification (RFID) bag tracking technology that allows both travellers and the airline to move to real-time tracking. Rather than relying on periodic scans on a bag's journey, the technology locks in the precise location of a tagged bag.[9]

Data analytics driven by utilisation of advanced on-board systems. With access to reliable data, airlines are becoming more interested in data analytics for predictive maintenance. According to PwC, the cost of maintenance-related delays for airlines in the US in 2016 was around US$0.5b and predictive maintenance solutions are expected to predict 30-50% of maintenance-related delays and cancellations, leading up to a 0.3-0.5% improvement in on-time performance.[10] Singapore Airlines, in collaboration with Honeywell technologies, gathers data from equipment including weather radars, navigation systems and auxiliary power units to conduct predictive maintenance.[11]

Additive manufacturing technology revolutionising the aviation industry. The aviation industry is among the primary advocates and driving forces behind the developments in additive manufacturing technology (3D printing). Airlines depend on 3D printing to alleviate supply chain constraints, minimise interior cabin weight, limit space required in warehouses and reduce the wastage of materials that is prevalent in traditional manufacturing processes. Unlike traditional manufacturing processes, where material is removed to create a part, 3D printers create parts from the base up, layer-by-layer, translating to a reduction in the weight of components while making the final products much stronger.[12] BAE Systems received approval from the European Aviation Safety Agency for its additively manufactured window breather pipes used in regional jetliners, which are 60% cheaper than pipes made through traditional injection moulding.[13]

Using robotics for MRO tasks gaining ground. Over the past decade, the notion of using robots for aircraft inspections has increasingly become realistic, with engine specialists looking to find ways of using the technology not only to reach confined parts of an engine but also to reduce the need for workers. Air France Industries and KLM Engineering & Maintenance uses robotics to inspect hail damage on fuselages using a 3D scanner, which takes 30 minutes per square metre, versus four to five hours for manual scanning, while also being much more accurate. Another application of robotics – using drones –is also being explored as a potential way of performing aircraft inspections. Among the most prominent early adopters of the technology is UK-based low-cost carrier EasyJet, which began trials of inspections using drones on its Airbus A320 fleet in 2014 at its main base at Luton Airport in the UK.[14]

[9] https://news.delta.com/delta-introduces-innovative-baggage-tracking-process-0

[10] https://www.pwc.com/us/en/industries/transportation-logistics/airlines-airports/predictive-maintenance.html

[11] https://aerospace.honeywell.com/en/press-release-listing/2018/february/singapore-airlines-group-selects-honeywell-to-improve-operational-efficiency-and-reduce-downtime

[12] https://www.stratasysdirect.com/industries/aerospace/3d-printing-aircraft-interiors

[13] https://3dprintingindustry.com/news/7-key-improvements-3d-printing-brings-to-the-aerospace-industry-49823/

[14] https://www.flightglobal.com/news/articles/easyjet-to-roll-out-drone-inspections-from-2018-441652/

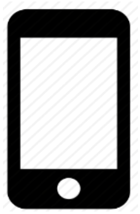
Digital winners in aviation

Singapore Airlines (SIA) started a three-year digital transformation programme in May 2017. Among the various initiatives that have been announced are a revenue management system, which uses algorithms to forecast demand for tickets, and a new digital wallet with virtual KrisFlyer miles.

SIA adopted a new more centralised revenue management and pricing structure in 2017, replacing an unusually decentralised system in which too much focus had been placed on local overseas offices. SIA also plans to launch the world's first blockchain-based digital wallet app for its KrisFlyer frequent flyer loyalty programme in 2018. The digital wallet will allow KrisFlyer members to use their digital KrisFlyer miles for transactions at participating retail merchants. SIA is currently signing up retail merchant partners in the Singapore market to start with. The digital wallet app will be enabled through blockchain technology, using an SIA-owned private blockchain involving only merchants and partners.

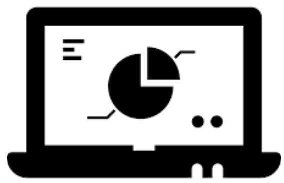
Digital transformation at Singapore Airlines

App-based value-added



- **Facilitates mobile-based flight booking and payment**
- **As an added service, cabs can be booked to/from the airport before departure or arrival**
- **Gives access to digital magazines and newspapers 48 hours before and 24 hours after the flight**
- **Allows passengers expedited access to the flight, allowing them to skip queues and board the flight using the QR code on the app**

Data analytics



- **Data analytics reduces maintenance costs and aircraft delays through predictive maintenance**
- **Facilitates personalised in-cabin experience for customers based on customers' habits, preferences and travel patterns**

Source: Company, DBS Group Research

Singapore Airlines has a long history of embracing technology to optimise operations. In 2015, the carrier entered in to an agreement with Rolls Royce to leverage Rolls Royce's data analytics capabilities to optimise fuel efficiency of a number of the airline's aircraft. The carrier also entered in to an agreement with Honeywell, the US based multinational, in 2016 to adopt predictive maintenance and connected aircraft technologies in a bid to drive maintenance costs lower.

Singapore Airlines has turned to technology to help differentiate its services. For example, the carrier is currently experimenting with the use of data analytics to offer a personalised in-cabin experience to customers, such as addressing customers by their names, wishing customers on their birthdays or making an apology for the delay of a previous flight.

Singapore Airlines' mobile app also strives to provide users with a seamless travel experience. Users can make flight bookings via the app and make payments via digital wallets such as Samsung and Apple Pay. Singapore Airlines partnership with Grab Taxi, one of the most popular ride-hailing apps in Singapore, also allows customers to hail a taxi to and from the airport directly via the Singapore Airlines mobile app. The app can also be used to check in for flights and create a mobile QR-based boarding pass.

Operational efficiencies generated through digitisation and the ability to offer an augmented and a personalised travel experience to customers could help Singapore Airlines further sharpen its competitive edge and maintain competitiveness in the hypercompetitive airline industry.

The carrier recently established partnerships with key industry stakeholders in Singapore, including the Agency for Science, Technology and Research (A*STAR), CAAS and the Economic Development Board, to conduct research and drive innovation in the airline industry. As part of the initiative, Singapore Airlines will partner with A*STAR to explore big data use cases in the airline industry and enhance the carrier's data analytics capabilities. The partnership would also involve research on the potential use cases of IoT, augmented reality (AV) and virtual reality (VR) in aspects such as aircraft maintenance.

Telecom Industry

The cannibalisation of high-margin voice and SMS revenues by over-the-top (OTT) services like WhatsApp, coupled with the emergence of new entrants, is hurting telcos. We estimate that, on average, around 35% of Singapore telcos' service revenues are at risk of declining with the contraction of legacy services. Also of concern is the entry into the market of TPG as the fourth mobile operator and MVNOs like Circles.Life, Zero Mobile and MyRepublic.

Telcos are facing the dual challenge of satisfying rising consumer expectations for seamless connectivity through fast, secure and reliable networks, while coping with competition from players inside and outside the industry. Against such a backdrop, telcos have increasingly looked to digital transformation for some respite.

Singapore Telecom Services Playing Field

2015	2018	2021
Three mobile operators (Singtel, M1, StarHub)	Entry of TPG as the fourth mobile operator>> more competition for incumbents Smart Nation Sensor Platform >> minor opportunities for incumbent telcos Cyber-security >> meaningful opportunities for incumbent telcos IoT solutions spanning across several industries >> gradual but meaningful opportunities for incumbent telcos	5G license and significant capex >> cause of concern for newer entrants with small balance sheet. 5G launch could be a trigger for consolidation in the industry, in our view

Source: Companies, DBS Group Research

New entrants not burdened by legacy revenues and networks – New entrants are not exposed to declining legacy revenue streams and are able to rollout network at a much lower capex.

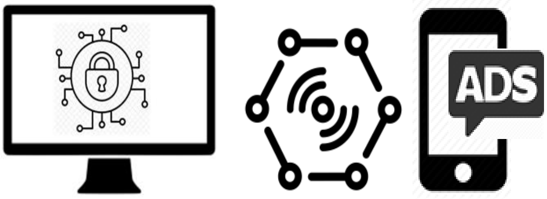
From telcos to smart communication providers – Existing telcos are repositioning as smart communication providers with investments in cloud technology, cyber-security, IoT etc.

Regulator awarded a fourth mobile operator license in 2016 – The regulator's granting of the fourth mobile operator license to TPG has ramped up competition for the incumbents.

Source: DBS Group Research

Future of telecom operators in Singapore

Internal

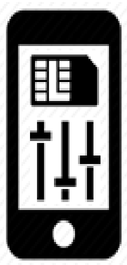


5G – **Telcos would transition from 4G to small cell-based 5G networks. This would facilitate the growth of IoT, AR/VR, autonomous vehicles, etc.**

Diversified streams of revenues – **Telcos would leverage their core competencies to diversify into segments such as cyber-security, IoT solutions, digital advertising, etc, to compensate for declines in network revenues.**

Heavy use of analytics – **Data analytics would play an integral role in telcos' operations, helping in network deployments, up-sell and cross-sell of products, pre-emptive care and churn prevention, etc.**

Customer



Digital touch points – **Customers would have little to no physical interactions with operators. Services including customer registration, SIM/device purchases and customer care would be available through mobile platforms.**

Customisable mobile plans – **The majority of mobile plans would offer customisation options to customers. E.g. customers would be able to choose their own data, voice and SMS quotas for a fixed price.**

Source: DBS Group Research

The telecom and technology industries are arguably also best placed to reap maximum benefits from the acceleration of digitisation in Singapore. Large-scale telecom and IT service providers are well placed to secure contracts from the Singapore government for Smart Nation projects and contracts from enterprises for digitisation projects.

Digital winners in the telecom sector

Singtel leading innovations in the telco sector. Singtel, Singapore's largest mobile network operator has clearly spelled out digital transformation as a priority. The telco announced its plans to invest in cyber-security, digital advertising and data analytics in 2013, much earlier than its peers. The carrier launched its My Singtel app as the first and only app in Singapore enabling subscribers to customise their mobile usage.

Digital transformation at Singtel[15]

Digitalised

- My Singtel app allows customers to customise their plans and monitor usage. Is the only customisable mobile plan in Singapore
- Online Singtel shops integrated with physical outlet give customers the ability to make orders online for pick-up at the store
- Launch of "Shirley", an automated chatbot to resolve consumer complaints, and live chat feature with customer care officers

Enhanced digital services

- Launch of SmartHome, SmartCar and Assured+ offeringsunder Singtel's Smart Living platform
- Providingcustomers with digital entertainment servicessuch as Singtel music, Singtel Newsstand and Singtel OTT streaming
- Initiatingmobile walletservice Singtel Dash which supports paymentsand money transfers

Digital revenue streams

- Digital advertising – Amobee, Singtel's global digital marketing arm offers marketers an end-to-end advertising and data management platform across all channels, formats and devices
- Cyber-security offerings by Singtel protect users from cyber-threats and risks such as hacking that arise in the converged IT landscape
- Data analytics – DataSpark, Singtel's advanced data analytics service provides consumer insights from geolocation data

Source: DBS Group Research

Cyber-security is a high-growth sector with the rollout of Singapore's Smart Nation project. Singtel has already established a global cyber-security platform with the acquisition of Trustwave, a leading US-based managed security services provider. Coupled with existing information and communications technology capabilities, the carrier will be able to offer comprehensive solutions to counter cyber-attacks on its users. Singapore's Smart Nation programme aims to connect every aspect of life including transportation, financial services, telecommunication, etc., with the help of IoT and big data. As a likely provider of network infrastructure facilitating the programme, Singtel is in a strong position to monitor and manage the programme's cyber-security assets.

[15]https://www.singtel.com/content/dam/singtel/investorRelations/factsheetsAndPresentation/2017/Singtel_Investor_Day_2017_-_Consumer_Singapore.pdf

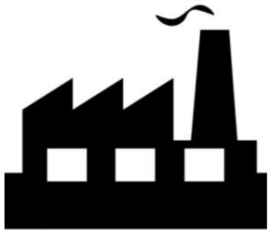
In 2016, Singtel launched Smart Living solutions designed to help further Singapore's ambitions to be a Smart Nation. Smart Living focuses on three main areas: (i) Home automation and safety – allowing seamless connectivity and control of locks, cameras and appliances in the homes of consumers; (ii) Health and elderly monitoring (Assured+) – measuring the activities of the elderly and tracking personal health data through connected health devices like blood pressure monitors and weighing scales; and (iii) Connected cars – providing driving analytics, basic maintenance/diagnostics information and receiving real-time information on traffic conditions.

NetLink providing the foundation for Singapore's Next Gen NBN initiative. NetLink (NetLink NBN Trust) provides the nationwide network for the Next Generation Nationwide Broadband Network (Next Gen NBN), over which ultra-high-speed internet access is delivered to residential homes and non-residential premises throughout Singapore. NetLink's network consists of around 76,000km of fibre cable and is the only fibre network with nationwide residential coverage in Singapore. The network supports around 1.3m residential end-user connections, approximately 38,500 non-residential end-user connections and 357 non-building address point (NBAP) connections across Singapore. In the NBAP segment, NetLink is a lead partner in the development of new fibre-based initiatives, including the Singapore government's Smart Nation programme.[16]

Residential

- **Only fibre network with nationwide residential coverage in Singapore**
- **Passed 1.4m residential homes (substantially all residential homes in Singapore)**
- **Reached 1.3m residential homes (89.2% of the residential homes in Singapore)**

Non-residential



- **Independent nationwide network provider for retail service providers who do not have an established network**
- **Deployed to 30,000 (substantially all non-residential buildings)**
- **38,500 non-residential end-user connections supported**

NBAP

- **Providing connections to any location in mainland Singapore that does not have a physical address or assigned postal code, e.g. roadside points, bus stops, multi-storey car parks and traffic lights**
- **357 NBAP connections throughout mainland Singapore**
- **NetLink provides fibre connections for Phase 1 of the Smart Nation Platform Project, for which around 100 new NBAP connections are expected to be required**

Source: DBS Group Research

[16] http://www.netlinknbn.com/who_we_are.html

Retail

The retail industry in Singapore includes around 22,000 establishments, contributing about 1.4% of Singapore's GDP and employing around 3% of the total workforce. The absence of GST on imported goods of S$400 or less is highly attractive to Singaporeans. In February 2018, e-commerce accounted for around 3.9% of retail sales in Singapore,[17] still lower than in many developed countries due to the easy access to malls for leisure activities and experiences like food & beverage (F&B), health and beauty in Singapore.

However, Singaporeans are increasingly turning to online sources on their smartphones to conduct pre-sale research on products. E-commerce platforms such as Lazada and Qoo10 have entered virtually all the retail spheres, from consumer electronics and fashion to home supplies and groceries. A survey by PWC revealed that around 60% of Singaporeans use social media to read reviews about products even while they are in physical stores. [18] Hence, retailers lacking an online presence or reviews will experience poor retail sales. Consumers expect retailers to carry out an ongoing dialogue covering the journey from pre- to post-purchase. This has become a fundamental part of the buying experience.

Singapore Retail Playing Field

2015	2018	2021
E-commerce only accounted for about 2.1% of retail sales in Singapore in 2015	According to the department of statistics, online purchases accounted for 3.9% of overall retail sales in February 2018 The government intends to grow the e-commerce share of retail receipts from around 3% in 2016 to 10% by 2020 Government's focus is on productivity improvement, omni-channel retailing and data analytics	Introduction of new GST from 2020 onwards on imported e-commerce services

Source: DBS Group Research

A key challenge to adopt online or omnichannel strategy is low profitability. Increasingly, larger chain store retailers from electronic products to fashion retailers, grocery retailers and department stores have either online or omnichannel strategy. Traditional electronic retailers include Courts, Challenger, Epicentre, Harvey Norman, Nubox, iStudio, Best Denki; fashion brand distributors and retailers include RSH Limited, FJ Benjamin; leading department stores include Robinson's, Metro, and Isetan; and key grocery retailers including Dairy Farm, NTUC FairPrice and Sheng Siong all have an alternate online store offering click and collect and delivery apart from operating physical stores.

However, as some products are naturally low priced and have low profitability, it becomes challenging for retailers who sell online to fulfil delivery for a profit. As such, most retailers (excluding large high priced electronic and electrical goods) tend to use their stores' profitability to subsidise their online business' fulfilment costs. Online to many traditional retailers remains a small part of their overall strategy due to difficulty to turn in a profit. Profitability for selling low ticket items online for now will still remain a challenge due to high fulfilment costs in Singapore, until such time when the market is comfortable with paying for fulfilment.

[17] https://www.singstat.gov.sg/docs/default-source/default-document-library/news/press_releases/mrsfeb2018.pdf

[18]https://www.pwc.com/sg/en/publications/assets/total-retail-sea-2016.pdf

Below are some of the key e-commerce players in Singapore:

Qoo10 – Owned by Giosis Pte Ltd, Qoo10 is the most visited online shopping platform in Singapore boasting about 13.4m monthly site visits during 1Q18[19], around 3m higher than its closest competitor Lazada. Qoo10 operates a B2C business model and has presence in Singapore, Malaysia and Indonesia. The company recently sold off its Japanese operations – which accounted for around 50% of Giosis's gross merchandise volume (GMV) – to ebay, reportedly for around US$700m.[20] With the sale, Qoo10 will increase its focus on developing its Singapore operations, for which the company is expected to set aside approximately 80% of its budget. The company reported a GMV of US$1.2b in 2017 (+15% y-o-y) around 40% of which was derived from Singapore (about US$480m).

Assuming the e-commerce market in Singapore was worth approximately S$1.4b in 2017, based on estimates and projections by Google and Temasek,[21] this works out to around a 34% market share for Qoo10. Qoo10 had a registered user base of approximately 3m and an active daily user base in Singapore of around 600,000 at the end of 2017.[22] Over 10m products are sold via the company's platform. Qoo10 imposes a commission on the price of goods sold from sellers, which ranges from 7-12%.[23] Assuming 6-10% commission on average, we estimate that Qoo10 may have generated around US$29-48m in revenues from Singapore in 2017. The company is reportedly looking to list in 2019.

Seller Grade	Item Price		
	Under S$200	Over S$200 ~ Under S$500	Over S$500
Power	9% of Total Transaction Amount	8% of Total Transaction Amount	7% of Total Transaction Amount
Good	10% of Total Transaction Amount	9% of Total Transaction Amount	8% of Total Transaction Amount
Normal	12% of Total Transaction Amount	11% of Total Transaction Amount	10% of Total Transaction Amount

* Total Transaction Amount = Selling Price + Optional Fee + Shipping Fee (Discounted fee is excluded)

Source: Qoo10

Lazada - Although second in Singapore, Lazada is the leader of e-commerce in Southeast Asia, present in Malaysia, Indonesia, Philippines, Thailand and Vietnam. Lazada was founded in 2011 by Rocket Internet, and Alibaba acquired a controlling stake in Lazada and its Southeast Asian operations in 2016. With over 300m items available for sale online, Lazada offers a wide range of products ranging from consumer electronics to household goods, toys, fashion, sports equipment and groceries. Lazada commenced operations based on an inventory model but started expanding its marketplace in 2014 and at present around 80% of its GMV comes from its marketplace. Lazada also operates an in-house logistics arm known as Lazada Express, which facilitates last-mile delivery in collaboration with 75 logistics partners. For sellers on its market place, Lazada encourages the

[19] https://iprice.sg/insights/mapofecommerce/

[20] http://www.businesstimes.com.sg/technology/qoo10-takes-e-commerce-fight-to-next-level-with-bulked-up-war-chest

[21] https://www.techinasia.com/talk/overview-singapore-2017-state-ecommerce

[22] http://www.asiaone.com/business/qoo10-is-ahead-in-its-game-rising-70-to-hit-average-of-144-million-traffic-in-q4-2017

[23] https://www.qoo10.sg/gmkt.inc/cs/GuideDefault_Tip.aspx

"Fulfilment by Lazada" model wherein sellers pre-stock their inventory at Lazada's warehouse. In 2017, the e-retailer generated a GMV of US$1.1b from 8m customers across the Southeast Asia region with around 60% of GMV generated via its mobile app.[24] Lazada boasts approximately 10m monthly visitors from Singapore.

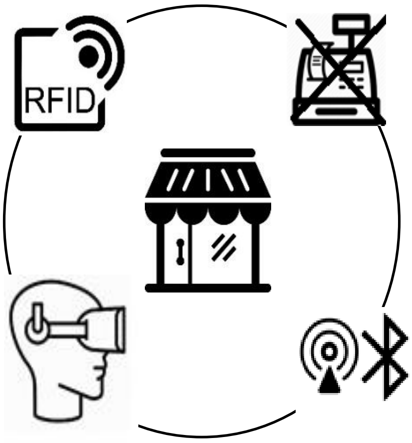
RedMart - Founded in 2011, RedMart is the leader in online grocery shopping in Singapore and was acquired by Alibaba's Lazada in 2016. RedMart's fulfilment and technology platform facilitates the largest grocery item selection in Singapore with an option for delivery within a two-hour period. Presently the platform carries over 100,000 products with over 1,000 vendors. RedMart generated S$97m (+18% y-o-y) in revenues in 2017, despite posting a loss of S$10.1m in 2017 (mainly due to accounting adjustments).[25] The company generated after-tax profit of S$47.7m in 2016, (a margin of approximately 57%). RedMart received around 1.4m monthly visitors during 1Q18.

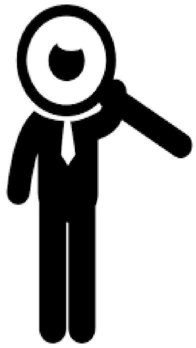
Source: DBS Group Research

[24] https://www.lazada.com.ph/lazada-statistics/

[25] https://www.businesstimes.com.sg/brunch/the-online-retail-gambit

What does the future of retail look like?[26]





Store of the future
Integrating technology with physical stores to improve productivity and augment the in-store shopping experience for customers. This could include technologies such as cashier-less exit, RFID tags, Bluetooth beacons, augmented/virtual reality etc.

Omni-channel presence and integration
Retailers would be required to establish presence across online, mobile and physical channels allowing customers to satisfy their needs almost instantaneously. Customers using multiple channels often spend around 4-9% more than customers using single channels, according to a study published in Harvard Business Review.

Leveraging data to personalise the shopping experience of customers
Established mechanisms to collect, store and analyse customer data gathered from multiple sources to offer personalised offers and discounts, experiences and tailored suggestions to customer

Source: DBS Group Research

Retail malls

Landlords' curation of a mall's content is crucial to ensure success. With the rise of online shopping and consumer preferences changing toward more "experiential" spending, we see content within retail malls continuing to evolve in order to chase the consumer dollar. While consumers are expected to increase spending, most of this money is pouring into "experiences" or services like F&B, health and beauty which have been doing well recently, while other retail trades are expected to remain resilient. Therefore, mall operators have, over time, added more of such elements into their malls to some success, but ongoing store closures and recent exits by retailers suggests that the worst is not over.

Therefore, in our discussion with various landlords and retailers, we found that most feel that an omni-channel strategy is key for retailers to tackle the current onslaught by online retailers, and we have seen cases where more retailers are jumping on the bandwagon to boost their online presence.

The winning formula in the next evolution of the retail mall. We see divergence in the performance of retail malls going forward. In addition to serving the immediate needs of the population catchment living in the vicinity, the x-

[26] https://hbr.org/2017/01/a-study-of-46000-shoppers-shows-that-omnichannel-retailing-works

factor will be the ability to capture a wider secondary market, meaning that malls have to be a "destination" in order to do well. While location attributes remain one of the most important factors that defines the success of a mall, we believe that malls with a sizable operational scale in excess of 400,000 square feet have the potential to capture a bigger share of the consumer wallet. Scale empowers landlords to curate the mall's content or the "magic" that attracts consumers.

Four tiers of malls in Singapore, according to size

Tier	Category	Net Lettable Area (NLA)	Target Audience	Number of stores	Example	Digital Disruption
1	The Mega Mall	> 800,000 sqft	Islandwide, travel time under 45 minutes	> 400	VivoCity, Suntec City, Changi Jewel (2019)	Minimal impact as mall operators have ability to curate content within the mall and its large operational scale already position them as "destination" in nature.
2	The Regional Mall	400,000 – 800,000 sqft	Regional, travel time under 20 minutes	250 – 350	Causeway Point, Northpoint City, Jurong Point, IMM, Nex, Raffles City	Marginal impact as these malls continue offer a good range of retailer types to attract shoppers.
3	The District Mall	200,000 – 400,000 sqft	Immediate neighbourhood, travel within walking distance	150 – 250	The Clementi Mall, AMK Hub, Bedok Mall, Changi City Point	Yes, operators potentially only have a limited scope to reposition mall to offer more experiential content.
4	The Miniature	< 200,000 sqft	Immediate neighbourhood, travel within walking distance	< 150	112 Katong, Leisure Park Kallang, Bukit Panjang Plaza, Yew Tee Mall, Bedok Point	Yes, limited scope for malls to attract past their primary catchment.

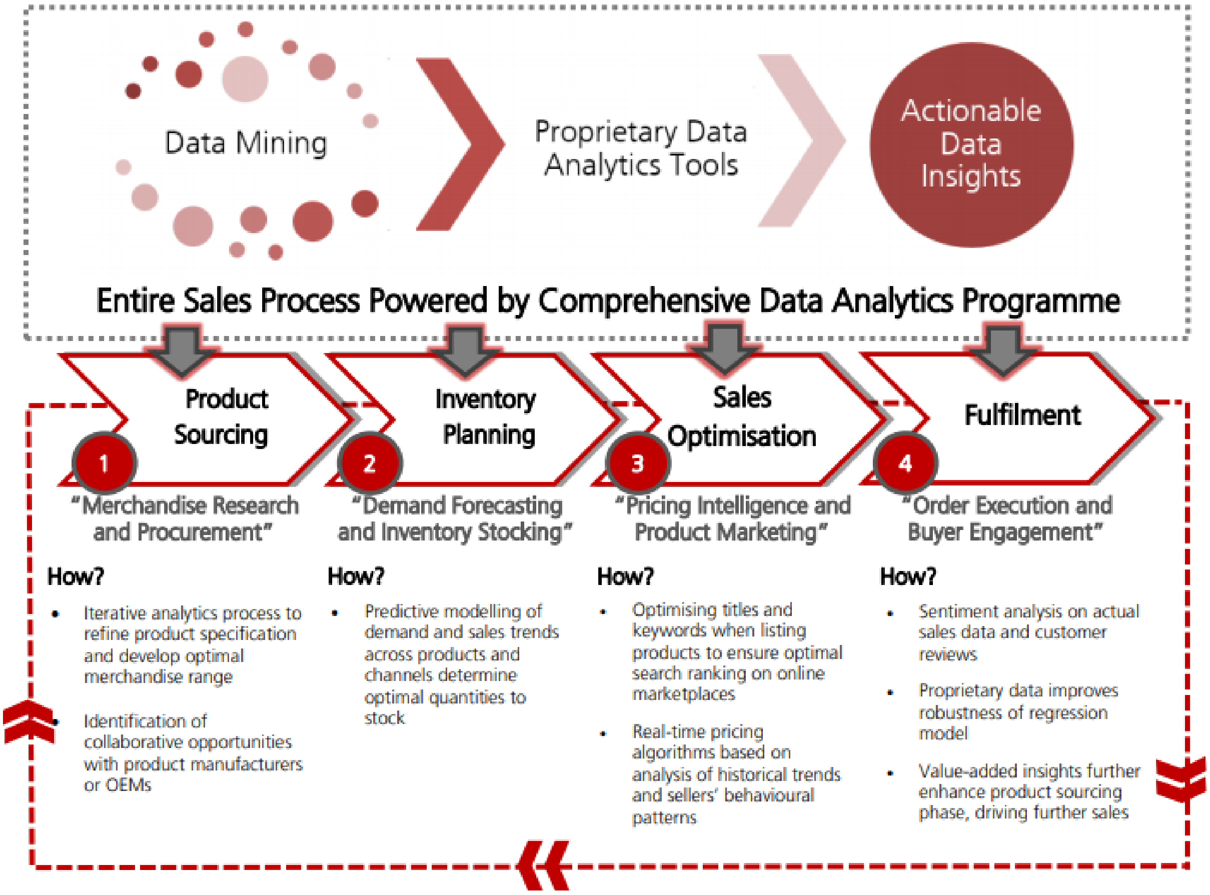
Source: Shopping mall websites, news press, DBS Group Research

Winners in the retail sector

Mapletree Commercial Trust (MCT) – *the* mega mall owner of Singapore. This real estate investment trust (REIT) is one of the few owners of "mega malls" in Singapore which we believe can hold its own despite the online retail onslaught. Both of its key assets – VivoCity (1,047,091 sqft of net lettable area) and Mapletree Business City Phase 1 – are rare gems given the lack of comparable assets in these market segments, namely mega malls and high-grade business parks. These two assets together account for around 80% of the REIT's top line and we believe these assets will remain resilient during periods of uncertainty.

Y Ventures uses proprietary data analytics capabilities to cement its position as a value-adding partner to traditional businesses. Incorporated in January 2013, Y Ventures distributes products from third-party brands over some of the largest e-commerce platforms (including Amazon and Lazada) across ten countries. Unlike traditional distributors and e-commerce platforms, Y Ventures stands out for its provision of value-added data analytics services to brand partners, allowing them to adapt their products to the market's needs. In return, the brands offer significant price discounts to Y Ventures. The launch of private labels in areas where Y Ventures is confident of achieving strong sell-through rates based on data analytics, as in the case of JustNile and Faire Leather Co, further augments margins.

Data Analytics is the Backbone of Y Ventures' Profitable E-Commerce Business



Source: Company, DBS Group Research

Through its data analytics programme, Y Ventures uncovered an opportunity within the consumer space. Research indicated that consumers tend to be relatively brand-agnostic for quality men's leather products within a given (undisclosed) price range. The company subsequently partnered with traditional leather goods company Tocco Toscano ("Toscano") to launch Faire Leather, leveraging on Y Ventures' unique specialisation in online distribution and Toscano's expertise in leather craftsmanship.

Launching of a cross-border e-commerce platform. With a population of around 650m, a growing middle class and rising internet penetration, Southeast Asia is often considered the next gold rush for e-commerce. In March 2018, Y Ventures signed a non-binding memorandum of understanding with Singapore Post to collaborate on developing a world-class e-commerce platform, named AORA, with reliable last mile delivery services. With the launch of AORA, Y Ventures plans to capitalise on the opportunities offered by the growing cross-border e-commerce market.

Transportation

Early investments in the development of public infrastructure have allowed Singapore to build one of the best transportation systems in the world. The smart mobility project will augment this status and help Singapore to develop an autonomous, demand-driven public rail and bus system. The government has also announced plans to invest over S$9b to upgrade public bus and rail systems, with another S$20b to extend the public transportation network from 2018 to 2023

[27]. The country's rail network, which spans 170km, is expected to grow to 360km by 203028 as a result, and by 2030, eight in 10 Singaporean households are expected to live within 10 minutes of a train station.

However, the entry of ride-hailing companies like Uber* and Grab has taken a toll on Singapore's taxi industry. Almost half of point-to-point trips in the country are now served by private car hires facilitated by Uber and Grab, the country's most prominent ride-hailing apps.

*As at time of this writing, Uber has entered into an agreement to sell its Southeast Asia operations, inclusive of Singapore, to Grab. The deal is currently under the review of the Competition Commission of Singapore (CCS).

Transportation Sector Playing Field

2015	2018	2021
MyTransport.sg and Datamall @MyTransport shares real-time traffic updates with the public and industry players. Rising adoption of app-based ride-hailing companies Grab and Uber, which entered Singapore in 2013. In 2016, The Land Transport Authority (LTA) told operators that their operating licence fee will rise from 0.1 % of gross revenue to 0.2 % in 2016, and then to 0.3 % in 2017. Uber and Grab do not pay any operating licence fees .	From 2017, drivers from ride-sourcing service operators such as Uber and Grab are required to obtain vocational licences with the grace period ending in/after June 2018. In March 2018, the government announced a review of private-hire car regulations, including the possible licensing of Grab and Uber. In December 2017, ComfortDelGro announced its intention to acquire a 51% stake in Uber's car rental subsidiary, Lion City Holdings. The deal is under review by the Competition Commission of Singapore (CCS). In January 2018, Uber and Comfort pooled their private-hire cars and taxis under a common booking service called UberFlash. In March 2018, Grab announced its acquisition of Uber's business in Southeast Asia, subject to regulatory approval. Meanwhile, there is speculation that Go-Jek, a key ride-hailing app in Indonesia may enter Singapore[29]. The GrabShuttle app is launched, powered by Beeline, a platform developed by the Government Technology Agency (GovTech) in collaboration with LTA. Based on crowd-sourcing, GrabShuttle allows the prebooking of seats (on 13, 23 or 40-seaters) along a list of fixed routes. In February 2018, LTA awarded two contracts for trial public bus services based on real-time commuter demand and along dynamic routes, to American company Via Transportation Inc. (Via) and local start-up Ministry of Movement (SWAT).	According to the LTA, autonomous scheduled buses and autonomous on-demand shuttles will serve commuters in Punggol, Tengah and the Jurong Innovation District in Singapore from 2022.

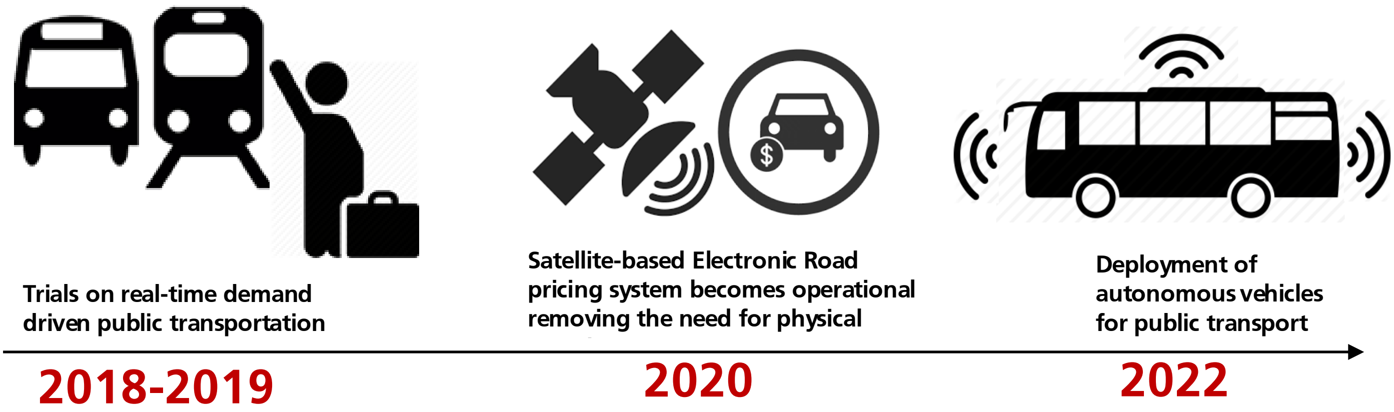
Source: Companies, DBS Group Research

[27]https://www.businesstimes.com.sg/transport/singapore-budget-2018-fares-likely-to-rise-as-government-spends-more-to-improve-public

[28]https://www.lta.gov.sg/content/ltaweb/en/public-transport/mrt-and-lrt-trains.html

[29]http://www.straitstimes.com/singapore/transport/south-east-asian-rivals-go-jek-and-grab-to-face-off-in-singapore-as-uber-exits

Future of public transportation



Source: DBS Group Research, Land Transport Authority, Smart Nation and Digital Government Office

Logistics Industry

The logistics industry has long been a critical component of the Singaporean economy, contributing ~7.4% to the gross domestic product (GDP) in 2015. Singapore's port is one of the world's busiest, making Singapore a key logistics hub in Asia. The country was ranked the 5th best logistics hub in the world in a World Bank study of 160 countries. Singapore has garnered the attention of major e-commerce players such as Alibaba and Amazon as a central hub for e-commerce logistics in Southeast Asia, one of the fastest growing e-commerce regions in the world. In particular, last-mile deliveries, which remain challenging and costly (last-mile deliveries account for ~28% of the total logistics cost), have garnered the interests of many operators amid growing e-commerce activity and the failure of incumbents to meet customer expectations. Players such as Ninja Van, aCommerce and UrbanFox have entered to fill in gaps in last-mile deliveries in Singapore and the rest of Southeast Asia.

Ninja Van offers last-mile delivery services to online merchants such as Lazada, Groupon and Qoo10, has built a strong presence in Singapore since its founding in 2014. The start-up managed to secure series C funding of ~US$ 87m to expand in the region and generated sales of US$9.1m in 2016, more than twice of what it generated in 2015.

aCommerce, a Bangkok based e-commerce service provider entered Singapore in 2016 and in November 2017 raised US$ 65m in series B funding. The start-up provides a range of services from digital marketing, e-commerce platform development, channel management, order fulfilment & warehousing to delivery & logistics services. As at November 2017, aCommerce has on boarded 262 clients (Ex: L'Oreal, HP, LINE, and Groupon). The company has recorded ~15,000 order dispatches per day with 3.8m orders shipped out during the 12 months ended 30 November 2017.

Regulators in Singapore are facilitating the growth of challengers, for instance with its federated lockers programme, which calls for the development of ~760 lockers around the country to facilitate parcel collection. This should help start-ups operating in the last-mile delivery space to further expand operations.

Singapore Logistics Sector Playing Field

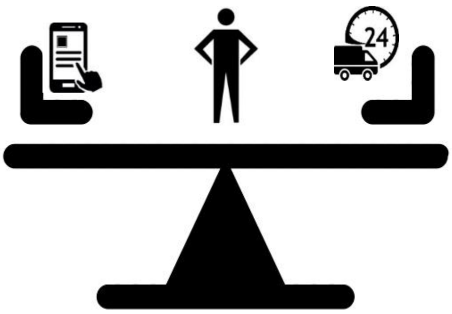
The logistics sector contributed ~7.4% to Singapore's GDP and employed over 8% of the total workforce in 2015[30].	The Infocomm Media Development Authority (IMDA) tests its In-mall distribution (IMD) initiative, which aims to raise the efficiency of delivery trucks while enabling malls to extend their hours of delivery/acceptance. IMDA to put federated lockers on trial to raise the efficiency of last-mile deliveries for parcel. IMDA to launch "Airbnb for Cargo" to lower the cost of freight charges for shippers. IMDA conducts a trial for Offsite Consolidation Centre (OCC) users and operators to better track their cargo across the supply chain.	Cargo owners and logistics service providers to have increased track-and-trace power across the entire supply chain to better identify problems. They can intervene in near real-time to address fulfilment delays, prevent damage during shipment and remove the need to hold excessive inventory. With monitored shipments, insurance costs for companies should fall due to a lower shipment failure risk. The industry transformation is expected to achieve a value addition of SS$8.3bn and introduce 2,000 new professional, manager, executive and technician jobs by 2020[31].

Source: Companies, DBS Group Research

Start-ups exploiting opportunities in last mile delivery– New entrants Ninja Van uses proprietary algorithms to plan its routes and manage its vehicle fleets. UrbanFox, another startup, has introduced an Uber-like network of drivers with ratings to bid for last mile deliveries

2015

2018



Technological advances leveling the playing field – Technological advancements such as automated parcel sorting and self-service locker systems are narrowing the gap between challengers and incumbents. The regulator is facilitating the development of challengers with programs such as Federated Lockers.

Incumbent logistics players have built regional scale – Alibaba has taken a stake in Singpost who has invested in (a) automated parcel sorting machine for rising volumes, (b) a network of lockers for pickups in Singapore, (c) regional warehouse and fulfillment capabilities in Asia, (d) US companies with digital solutions and is bringing those solutions to Asia.

Source: DBS Group Research

[30] https://www.imda.gov.sg/-/media/imda/files/about/media-releases/2017/annex-a---icm-innovations-help-logistics-sector-push-new-boundaries-and-synergise-across-ecosystem.pdf?la=en

[31] https://www.mti.gov.sg/MTIInsights/SiteAssets/Pages/ITM-TransportandLogistics/Logistics.pdf

Future of logistics

Integration and automation– Integration among transport methods and warehousing coupled with automation of last-mile deliveries

Consolidation– Centralised consolidation centres to avoid unemployment of warehouses and trucks

Source: Infocomm Media Development Authority (IMDA)

Digital winners in logistics

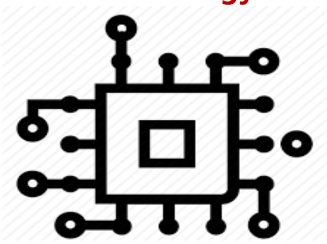
SingPost leverages on technology and partnerships to stay ahead. SingPost has evolved to become a key logistics service provider for e-commerce deliveries in the region. SingPost, which generates ~60% of revenues from e-commerce related services, invested S$182m in the development of a regional e-commerce logistics hub in November 2016, comprising warehousing space and a fully automated parcel sorting system capable of handling up to 100,000 parcels daily. The parcel sorting facility automates the process of clustering parcels based on postal codes, which was previously handled manually, yielding significant improvements in delivery efficiencies. In addition to the e-commerce logistics hub, SingPost also operates POPStations (Pick Own Parcel Station) a system of lockers that allows customers to collect, post and return parcels around the clock, at ~153 locations in Singapore.

SingPost has also established strong alliances with Alibaba, which has cumulatively invested ~S$500m in SingPost and holds a 14.4% stake. Collaboration with Alibaba places SingPost on a strong footing to capitalise on the growing demand for e-commerce logistics. For instance, SingPost recorded a 38% growth in international mail volumes in 3Q18, surpassing S$100m for the first time, owing to higher volumes from the double eleven shopping event, the biggest shopping festival in the world. SingPost has also established a partnership with the Singapore-based Y Ventures to jointly develop an e-commerce buying platform focused on carrying out cross-border purchases on behalf of consumers, consolidating deliveries and logistics-related technology to enhance efficiency across the vertical logistics chain.

SingPost is also keen to grow its clout as an Asian logistics service provider. SingPost's investments in Quantium Solutions, a logistics service provider in Asia Pacific, and Couriers Please, a last-mile delivery player in Australia, allows SingPost to operate across the APAC region. SingPost's acquisition of the US-based Jagged Peak in 2015 also gave it access to proprietary technology enabling logistics for high velocity consumer products, which are gaining traction in Asia. We believe that SingPost's technological and regional expertise, growing strengths in last-mile delivery and its partnerships with key industry players will help it to capitalise on the growing e-commerce logistics opportunities in the region.

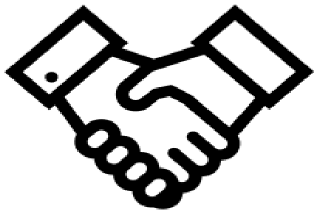
SingPost leverages on technology and partnerships to stay ahead

Technology



- Automated Parcel Sorting technology capable of handling 100,000 packages daily
- POPStations to develop last-mile delivery
- Acquisition of proprietary logistics technology for high velocity consumer products via Jagged Peak

Partnerships & Investments



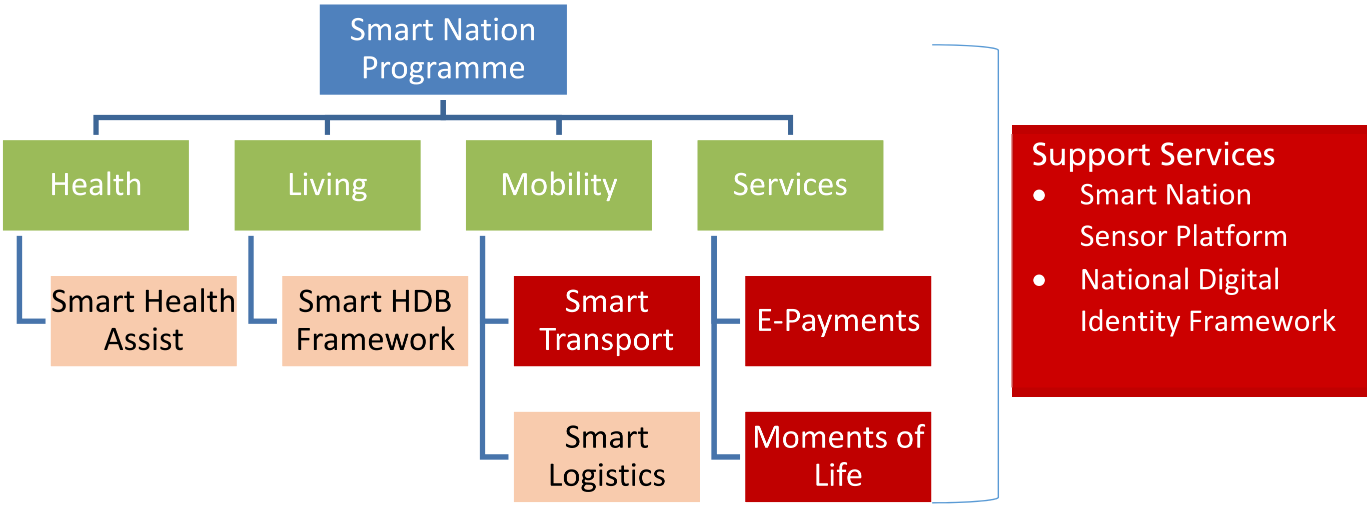
- Collaboration with Alibaba for e-commerce deliveries
- Partnership with Y Ventures to develop a cross border ecommerce platform
- Investments in Quantium Solutions and Couriers Please facilitating logistics operations in the APAC region

Source: DBS Group Research

Singapore Smart Nation

Singapore launched its Smart Nation programme in 2014 to integrate technology into daily lives and businesses to enhance productivity and raise Singaporeans' overall living standard. The programme centres on four key aspects.

Key Smart Nation projects*



** Projects classified as Strategic government projects which are of higher priority and urgency are highlighted in red.*
Source: Smart Natiion and Digital Government Office, DBS Group Research

Strategic Government Projects

1. National Digital Identity (NDI) framework

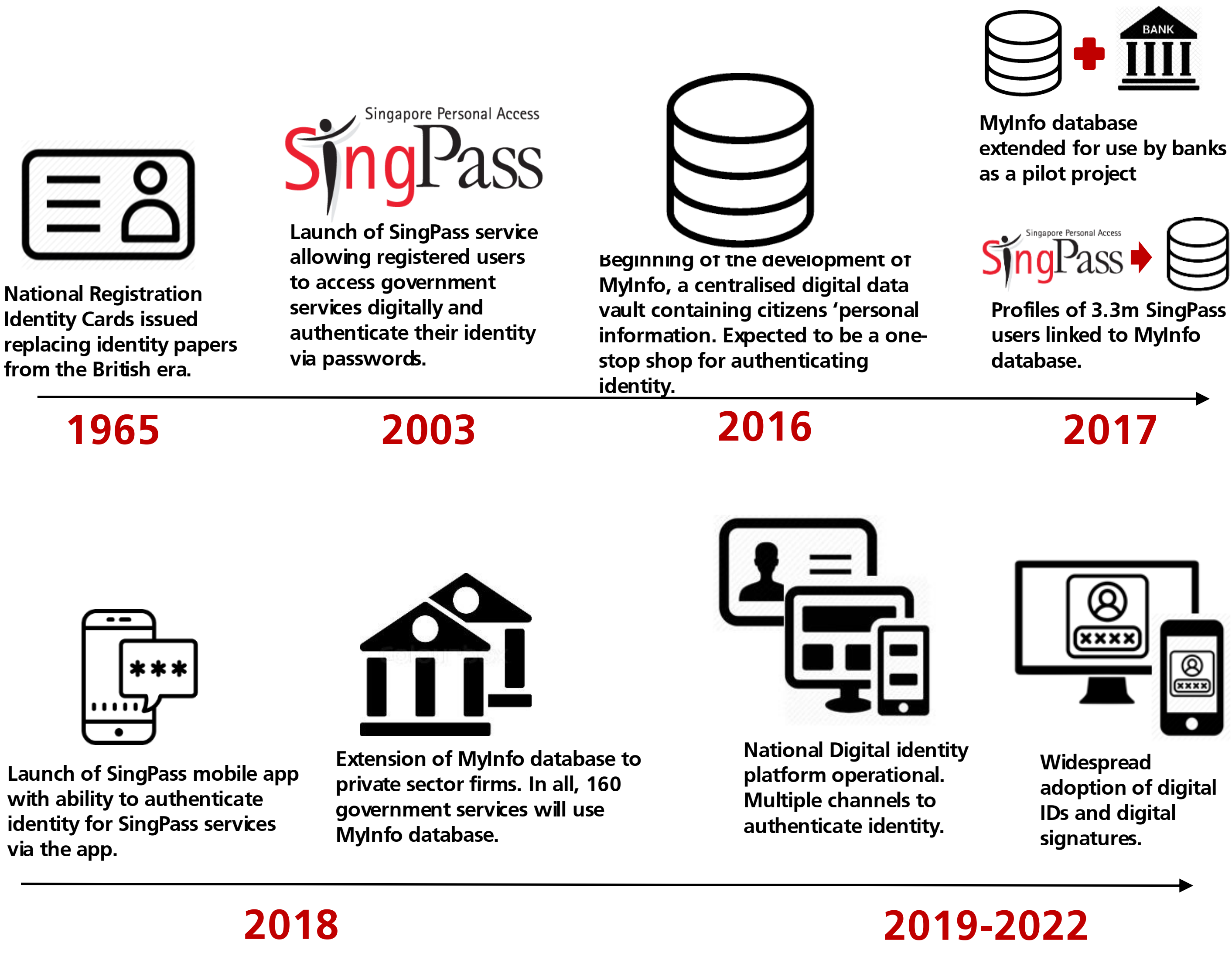
The NDI framework aims to equip every citizen in Singapore with a digital identity, moving away from the current analog, card-based National Registration Identity Card (NRIC) system. The system is expected to be in place by 2020 and would allow citizens, businesses and the government to transact online in a secure and a convenient manner. The system would leverage on the existing SingPass (or Singapore Personal Access) system, which currently has ~3.3m users. Several pilot projects are underway.

- MyInfo– The digital data vault will contain the personal information of all Singaporean citizens, serving as a one-stop shop when validating the identity of a Singaporean citizen. Details of all SingPass users are to be migrated on to the MyInfo vault, which would improve efficiencies by allowing users to pre-fill government forms, among other things. Currently, ~24 e-government services are linked to the database and all 160 government services are expected to be linked by the end of 2018. MyInfo data is also expected to be extended for private-sector use. As a pilot project, the government has allowed several banks including DBS, OCBC, United Overseas Bank (UOB), and Standard Chartered Bank to auto-fill forms of registered users for ~30 digital services via this service.

- SingPass Mobile – The mobile phone application is expected to be rolled out towards the second half of 2018. The application would allow users to access many government e-services via their mobile phones and eliminate the need for physical tokens or one-time passwords generated via text messages to access SingPass services. Users would also be able to use their biometrics, such as on fingerprint and iris scanners, to authenticate their identity via the app.

- Digital Signatures– GovTech is said to be conducting trials on the use of digital signatures and authentication of documents in a paperless environment.

Evolution of Singapore's identity system



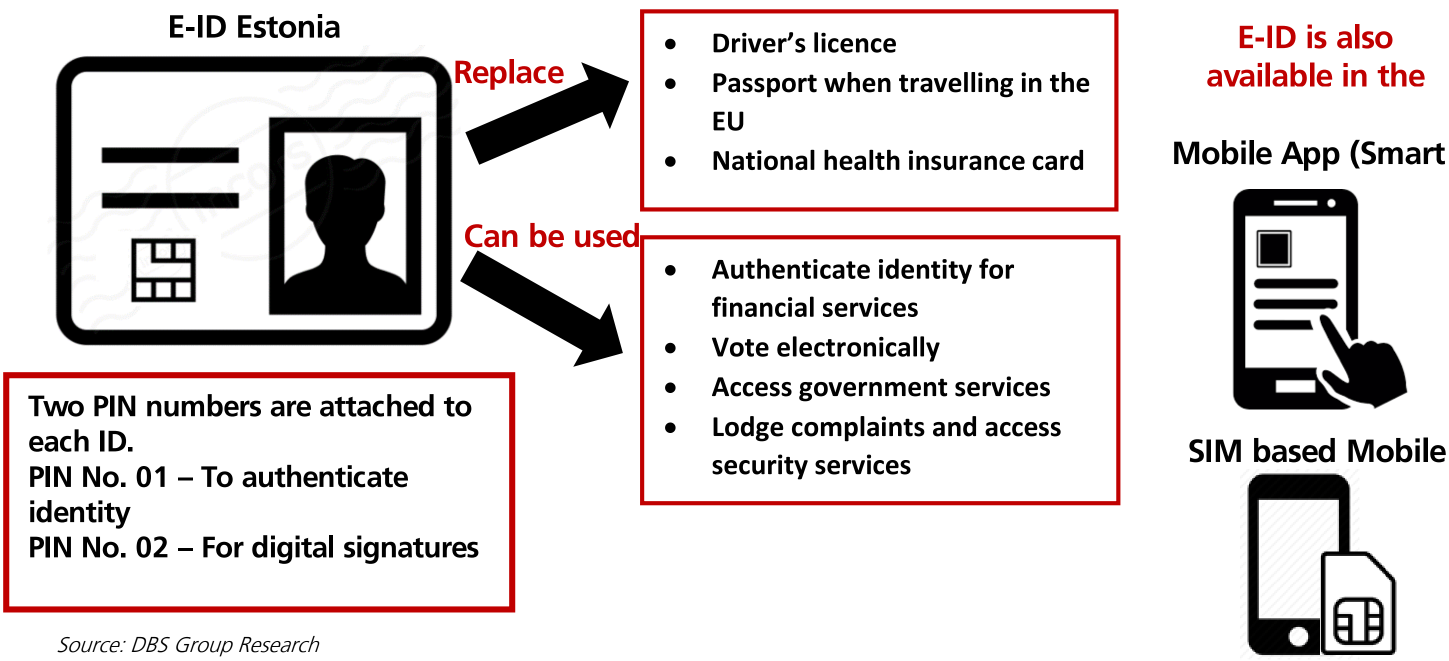
Source: DBS Group Research, Smart Nation and Digital Government Office

Digital Identity schemes across the world

Singapore's NDI framework is likely to take cues from existing digital identity schemes, one of the most advanced of which is in Estonia. The Estonia ID card (e-ID) is a cryptographically secure (supported by a backend technology similar to the blockchain), and allows Estonians to access a range of services including public, financial, healthcare and emergency services. The digital ID card functions as a driver's licence, national health insurance card, identity confirmation for banking and healthcare services, and as a passport when travelling within the European Union (EU), among other things. With the digital identification, citizens are provided with two Personal Identification Numbers (PIN) one of which can be used to authenticate a person's identity and the other to digitally sign legal documents. According to the Estonian government, ~98% of Estonians have obtained e-IDs and have placed over 350m digital signatures cumulatively, greater than any country in the EU region.

Estonia has also extended the e-ID system to mobile platforms via Mobile ID and Smart ID services. Mobile ID requires the user to obtain a special SIM card embedded with the e-ID chip thereby converting the user's mobile phone to an electronic ID. The more convenient Smart ID service, presented in the form of a mobile app, allows users to authenticate their identity and sign documents digitally simply by typing their PIN codes through the mobile application after a one-time registration process.

Estonia is home to one of the most advanced digital ID schemes in the world



Source: DBS Group Research

The digital ID scheme has allowed Estonia to digitise many of its public services including filing taxes, voting, and documentation of its public healthcare system. For example, with the help of e-IDs, the country has adopted an e-court system, where citizens can lodge an initial case via a public portal, within an hour of which an initial hearing can be arranged. Estonia has also extended the digital ID scheme to citizens around the world, allowing anyone who wishes to establish an online business in Estonia to apply for e-residency. With e-resident status, the individual is allowed to register and operate an online business in Estonia remotely, manage company fillings including the payment of taxes online and enter into contractual obligations by placing digital signatures. According to the government, more than 20,000 people in 138 countries have applied to gain e-residency status in Estonia.

Another case in point is India's Aadhaar card system, the largest digital ID scheme in the world with ~1.19b participants. Citizens are required to register their biometrics and provide personal information to register with the system. Once registered, citizens are provided with a 12-digit identification number which can be used to access a number of public and private services including tax filing, social welfare payments and personal banking services. Other less sophisticated digital identity verification systems include UK's gov.uk Verify service, where citizens can register with private institutions that will verify the authenticity of the user's online identity for the use of public and private services.

Potential beneficiaries of the NDI framework

Banks and financial institutions likely be biggest beneficiaries. The establishment of digital identities and a centralised database with banking users' personal information will allow banks to adopt paperless documentation and fully digitise banking services including the opening of accounts. For example, India's banks are capturing new customers through the Aadhaar digital identity system, which allows savings accounts to be opened via mobile devices. DBS India has managed to capture ~2m customers in the country despite having only 12 branches, by allowing users to register for bank accounts through their mobile phones.

Telcos, IT service providers to benefit from need for cyber-security, enterprise solutions. Telcos and IT service providers with strong cyber-security capabilities are likely to benefit from NDI's requirement for robust cyber-security measures. The digital identity scheme would require both government agencies and private sector organisations gaining access to the digital identity databases to maintain strong cyber-security measures, driving demand for cyber-security solutions. IT service providers may also benefit from potential opportunities arising from the development of new digital enterprise solutions integrated with the NDI framework.

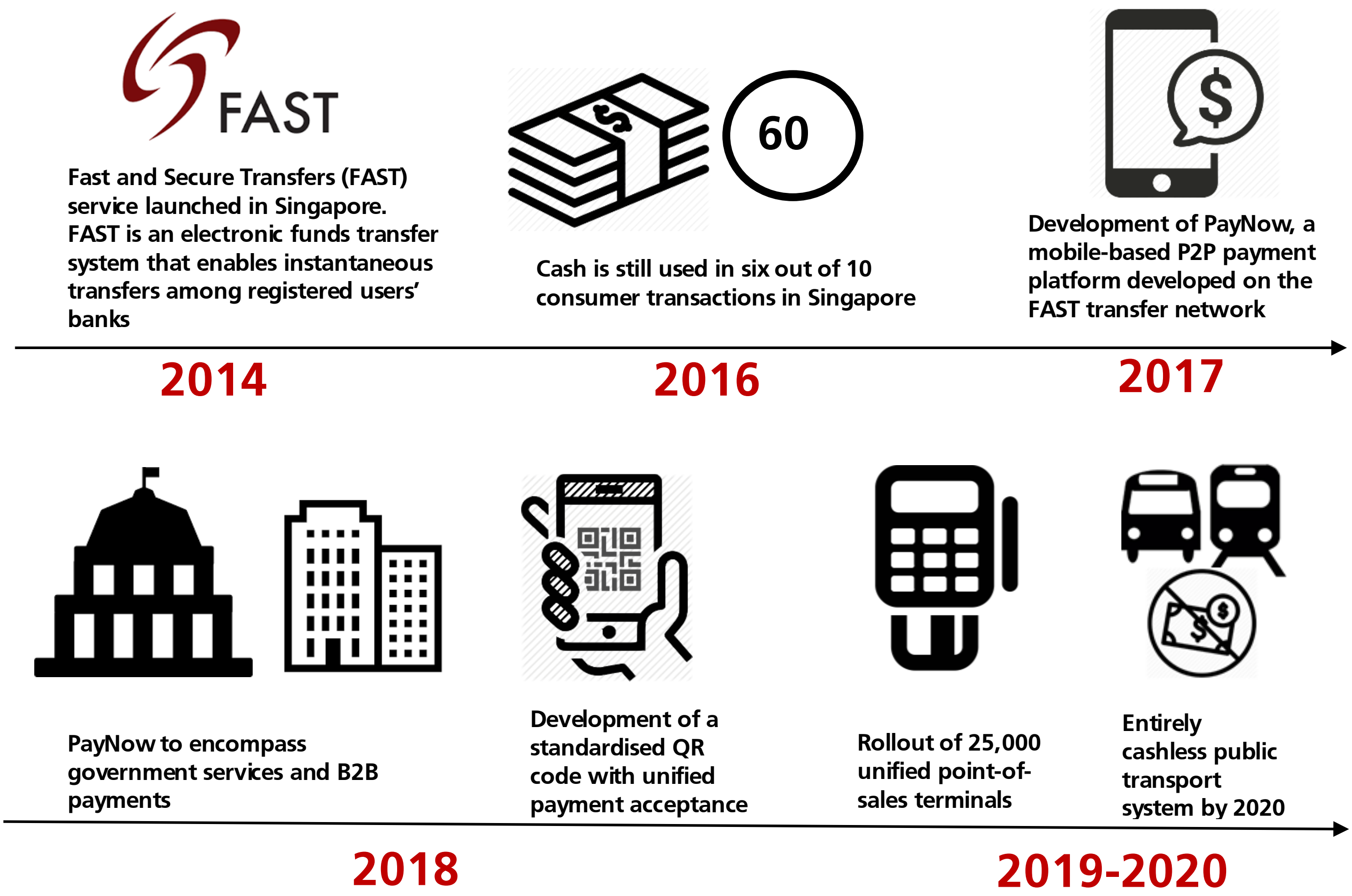
2. E-payments

The government is expected to develop a nationwide electronic payments system offering security and convenience to users. Adoption of e-payments would allow citizens and businesses to transact via online and mobile platforms easily and securely, reducing the usage of cash in Singapore society. Some projects underway:

- **Pay Now** – A mobile-based peer-to-peer funds transfer service allowing citizens to make payments to registered users with just the mobile number or NRIC number of the recipient. The service is available to the registered internet and mobile banking customers of seven banks in Singapore. The government expects all government agencies including the Central Provident Fund (CPF) to start using the service in 2018. The service has secured more than a million registrations since its launch in July 2017. The service is also expected to be extended to corporations, allowing businesses to link their bank accounts to their unique entity numbers to make B2B payments.
- **Development of a universal QR code** – The Monetary Authority of Singapore (MAS) has formed a task force to develop a standardised QR specification for both domestic and international payment schemes. The common QR code would facilitate payments for different payment schemes, e-wallets and banks, and will primarily target small shops and hawker centres.
- The government also plans to roll out, by 2019, 25,000 unified point-of-sale terminals, which will accept all major cards, including those that are contactless and embedded in smartphones.
- The LTA expects to adopt a fully cashless payment system for public transportation system by 2020. Accordingly, all public bus and train rides will be paid with travel cards and top-ups performed without the use of physical cash.

- MAS is also in the process of developing a set of e-payment guidelines to protect small businesses and consumers.

National e-payment platform to be widely adopted by 2020



Source: DBS Group Research, KPMG, Smart Nation and Digital Government Office

National e-payment platforms across the world

Thailand recently introduced PromptPay in line with the national e-payment initiative, which aims to reduce the use of cash for government-related transactions such as tax payments and social welfare benefit claims. Much like Singapore's PayNow, PromptPay is a mobile based peer-to-peer fund transfer service, that allows payments to registered users with just the recipient's mobile number or identification number. The government also expects to install more than 550,000 electronic data capture and mobile point-of-sale terminals to boost the use of electronic cards.

India is also revamping its national payment infrastructure with the introduction of services such as the Unified Payment Interface (UPI), Aadhaarpay and Bharat QR code. UPI is an instant real-time payment system allowing users to transfer money using their Aadhaar unique identity number, mobile phone number or virtual payment address. The platform has gained immense popularity since its introduction in 2016, having recorded over 171.4m transactions by February 2018 according to the government[32]. Aadhaarpay also enables users to make cashless money transactions using Aadhaar Card and their fingerprints for biometric authentication. Bharat QR, launched in 2017, offers a universal QR code for inter-operable payment acceptance and supports all major payment solution providers including Visa, MasterCard, Amex, RuPay cards and UPI.

Potential beneficiaries of e-payments

Banks could benefit from higher fees with widespread e-payment adoption. Banks and financial service providers could benefit from greater transaction volumes and fees resulting from the widespread adoption of e-payment schemes. The increasing popularity of e-payments could also motivate small and medium-sized enterprises (SMEs), which predominantly use cash, to adopt banking services, bringing in more clients and revenue sources for banks. Banks would also be able to capitalise on fees with the expansion of the e-payment infrastructure for B2B payments.

Small retailers to benefit from P2P payments and universal QR codes Adoption of P2P mobile payments and universal QR codes could drive up the volume of cashless transactions for retailers, eliminating inefficiencies in dealing with cash such as theft, holding costs and security.

1. Smart Nation Sensor Platform

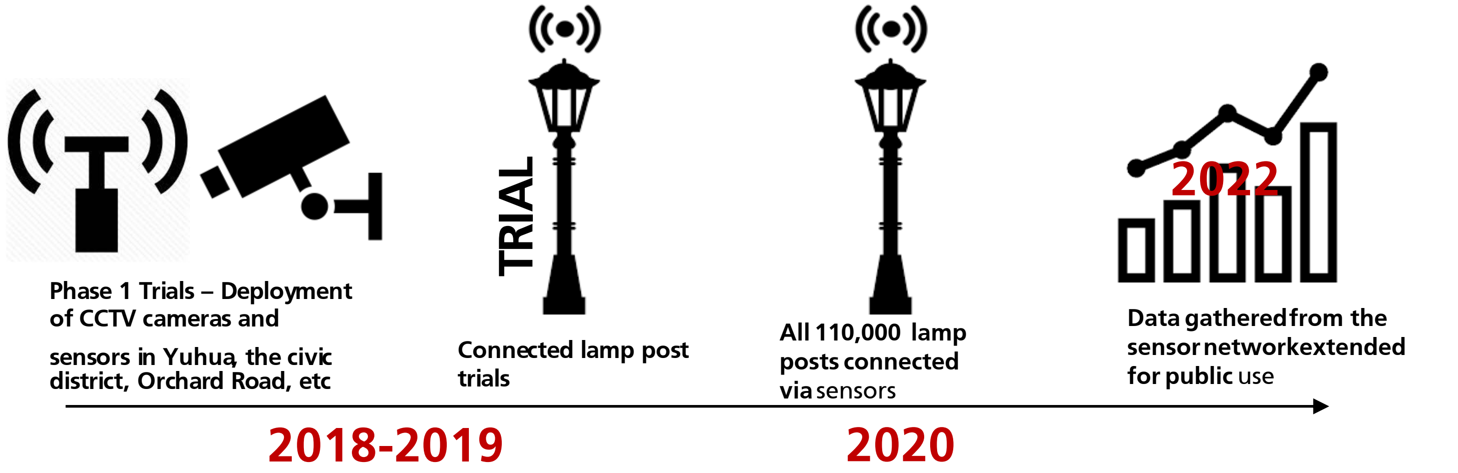
The Smart Nation Sensor Platform (SNSP) refers to the nationwide deployment of sensors and other Internet of things (IoT) devices to collect, store and analyse data in order tooptimise government services and security. All 110,000 lamp posts in Singapore are expected to carry sensors and form a nationwide sensor network by 2020. By 2022, the government expects to extend the sensor data collected via the nationwide sensor platform for the use of the public and businesses. Data from the sensors will be used for urban and operational planning and also for maintenance and to facilitate a prompt response to incidents where needed.

The programme would also include a range of initiatives from smart metering in residential areas to provide consumers with timely information of their utilities consumption, to the using of a video analytics platform to count vehicles on the road to better plan public transportation.

GovTech, the government agency responsible for the deployment of sensors, will build in standard connectivity and power sources into the lamp posts, after which the lamp posts would be equipped with different devices as required. The devices could be CCTVs or environmental or motion sensors. Under phase 1 of this programme, CCTV systems have been set up in public areas, while environmental sensors and connectivity infrastructure have been set up in Yuhua, the civic district, Orchard Road and a few other areas. GovTech is also working with private agencies to develop video analytics capabilities based on footage from CCTV cameras around the country.

[32]https://gadgets.ndtv.com/apps/news/paytm-claims-the-lead-on-upi-payments-but-its-too-soon-to-call-a-winner-1819191

Smart Nation sensor platform would connect all 110,000 lamp posts in Singapore



Source: DBS Group Research, Smart Nation and Digital Government Office

Smart sensor platforms elsewhere

Barcelona, a global pioneer in the adoption of smart city initiatives, uses IoT and sensors to maximise cost efficiencies in a range of public services. Over 1,100 lampposts in the city are equipped with LED lighting and sensors that activate only when movement is detected nearby. The lamp posts are also part of the city's WiFi network, providing consistent, free Internet access throughout the city. Moreover, the sensors collect environmental data such as humidity, temperature and air quality, and relay this to city agencies and the public. According to the government, the smart lighting system has cut its energy bill by about ~US$37m annually.

Barcelona also boasts one of the most advanced waste collection systems in the world, with sensors on waste bins sending alerts to collection trucks when they are ready for collection. Data from waste bins is analyzed to provide drivers with the optimal route for collection. The city has also integrated IoT technology with its parks to remotely sense and control park irrigation and water levels in public fountains. Using sensors to monitor rain and humidity, park workers can determine how much irrigation each area needs. A system of electro-valves is then remotely deployed. The programme, implemented in 68% of public parks, has helped the city achieve a 25% increase in water conservation, and savings of approximately US$555,000 per year.

Barcelona's integrated sensor network is relayed through Sentilo, a platform developed specifically for the city, and which is now open-source and available for use by other governments. Data captured through the sensors located across the city is managed and shared with citizens and city workers through this platform.

A number of cities in the US such as Boston and Chicago have also experimented with sensors on a range of public infrastructure including lamp posts and public benches. The sensors are primarily used to collect environmental data. The cities are also equipped with a network of CCTV cameras helping authorities to monitor and respond to incidences swiftly.

Potential beneficiaries

Telcos, IT service providers to benefit from analytics demand. Telecom operators, as the key providers of connectivity infrastructure for the programme, are integral to the success of the sensor platform. Telcos and IT service providers will benefit from potential demand for cloud services for the collection of data generated from the sensors and demand for data analytics solutions by government agencies and private enterprises. Deployment of a network of CCTV cameras is also likely to benefit IT service providers and start-ups with capabilities in video analytics.

Makers of electronic devices, sensors could benefit from equipment demand. Importers and manufacturers of electronic devices such as CCTV cameras, sensory equipment and connectivity equipment are likely to benefit from potential government contracts for the deployment and maintenance of the sensor platform.

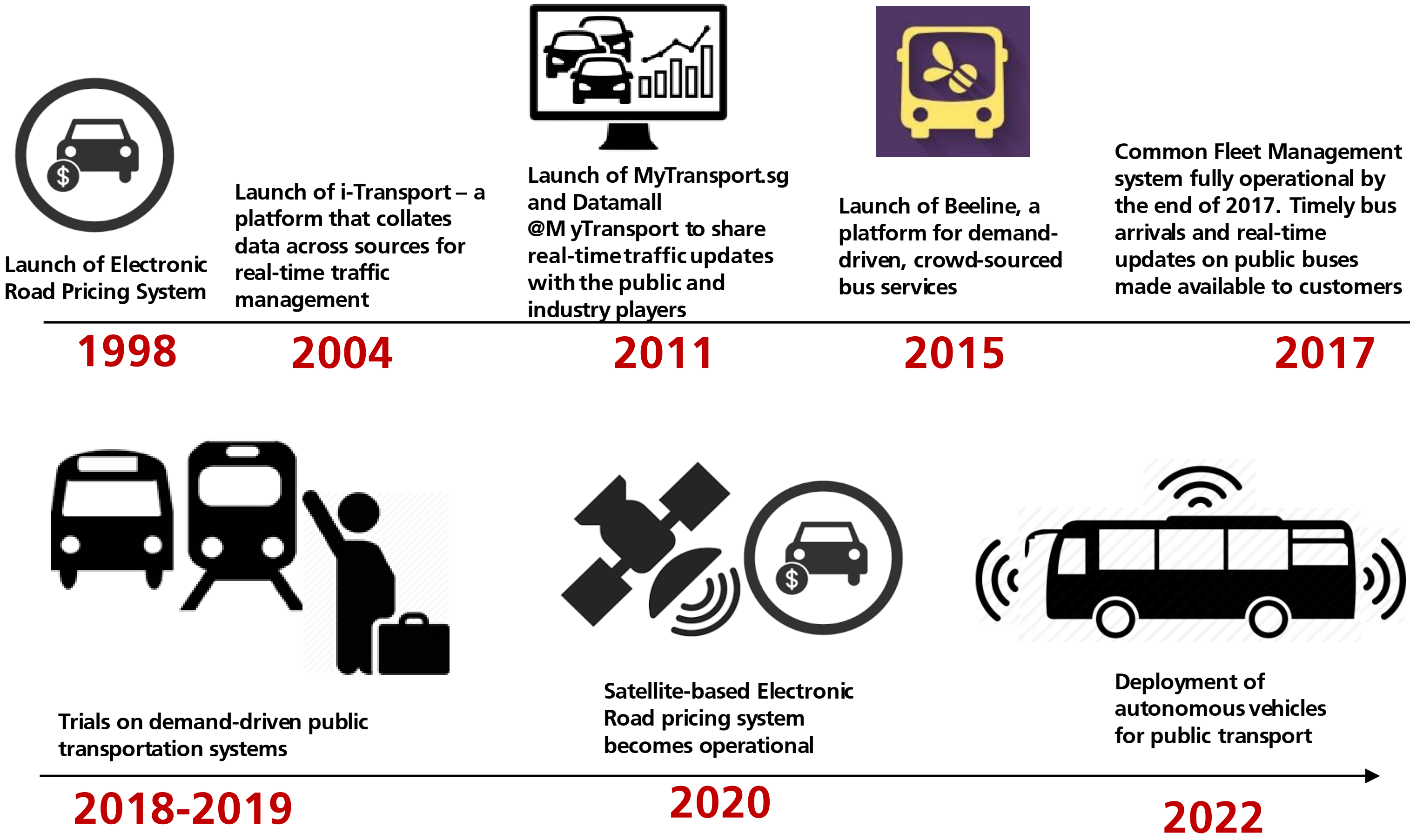
2. **Smart Urban Mobility**

With smart urban mobility initiatives, the government aims to create a data-driven public transportation system that responds to real-time demand and traffic data. Under the programme, LTA will roll out autonomous scheduling of public transportation based on real-time demand data and experiment on and develop guidelines for autonomous vehicles.

Trials are underway to establish a dynamically routed bus system that responds to real-time traffic needs. According to the LTA, customers can ask for pickups and drop-offs from designated bus stops within the operating area of the trials and buses will be routed based on demand data. LTA has also handed out two contracts to private companies VIA and SWAT to develop a dynamic matching and routing algorithm to deploy buses in response to real-time commuter demand. LTA is conducting trials on autonomous vehicles on a test circuit at CleanTech Park and expects to utilise autonomous public transportation modes by 2022.

The development of a smart traffic congestion management system is also a key smart-mobility initiative. The government plans to upgrade the current Electronic Road Pricing System to a satellite-based model where motorists may have to pay based on the distance travelled in a congested zone rather than the current flat fee. A S$556m contract has been granted to a consortium comprising NCS Group and Mitsubishi Heavy Industries to develop the system, which is expected to be operational by 2020.

Evolution of Singapore's smart transportation system



Source: DBS Group Research, Land Transport Authority, Smart Nation, and Digital Government Office

Smart mobility initiatives around the world

Helsinki, the capital of Finland, boasts one of the best public transportation systems in the world. The city council has long been a pioneer in the smart mobility space, experimenting with an on-demand public transportation system as early as 2013. The city introduced the Kutsuplus service in 2013, a public mini-bus service that lets riders choose the start and end points, and select if they wish to share the ride with another passenger. If the user wished to share a ride, an algorithm was used to determine the most direct route to get to the destination of every user. The service was priced at a premium to other means of public transport but at a discount to private taxis. After the initial research, the service was shut down due to the rising cost of employing an adequate number of mini-buses to cater to surging demand.

In 2016, Helsinki's city council and private firm MaaS introduced an app called Whim which seamlessly integrated all forms of public transportation in the city. Anyone with the app can enter a destination and a starting point and be presented with an array of public transport methods to reach the user's destination. For example, this may involve a combination of the use of a public bike-sharing service, a public tram and a public bus system. Once confirmed, the app would pre-book all public transportation modes. The service also offers monthly transportation packages to suit the needs of users.

Research on autonomous driving and experiments on the use of autonomous public transportation systems is also on the rise. Estonia, for example, has made it legal to test self-driven vehicles on all national and local roads in the country. Work is underway to create a full legal and cyber-risk management framework for using fully autonomous vehicles in regular road and traffic conditions. Oslo, Norway, is seeking suppliers to experiment with the use of autonomous vehicles to deliver on-demand transportation services to citizens.

Potential beneficiaries

Transportation providers likely to be among biggest beneficiaries. Demand-driven transportation schemes will ensure the efficient utilisation of vehicle fleets maintained by transportation service providers while optimising passenger loads per trip. Smart congestion management systems would also help transportation providers to minimise waiting times and improve fuel efficiencies. Government agencies' support for autonomous vehicle testing can also help transportation service providers accelerate trials and development of autonomous fleets.

Transport tech providers likely to benefit from government contracts. Companies in the development and provision of transportation technologies are also likely to benefit from potential government contracts pertaining to the deployment transportation technologies. For example, a contract of S$556m was granted to a consortium comprising of NCS and Mitsubishi Heavy Industries in 2016 for the deployment of a satellite-based electronic road pricing system. In 2014, ST Electronics and Trapeze Switzerland secured a S$68m government contract for the deployment of the common fleet management system. Companies with exposure to demand-driven transportation technologies and autonomous vehicles are likely to benefit from similar government contracts in the future.

2. **Moments of Life**

The Moments of Life (MOL) initiative refers to the bundling of relevant government services, across different agencies, to support citizens at key moments of their lives such as marriage, child birth and the death of loved ones. As an initial step, GovTech is expected to launch an MOL app in mid-2018 to allow parents to register child births that happen at three designated government hospitals. Parents with young children can use the app to find pre-school facilities nearby, view information such as school fees and estimated vacancies, and even, indicate if they want to be waitlisted.

A number of governments around the world have successfully created mobile platforms to integrate key government services into the lives of citizens. In Hong Kong for example, the government maintains its own app store with more than 100 mobile applications for access to key public services such as for healthcare, defence and consumer rights.In Australia, the Queensland government has launched more than 20 mobile apps to provide easy access to essential government services. India also expects to launch a unified mobile application to provide citizens with access to major government services at the national and state levels, using Aadhaar-based authentication techniques to verify identity.

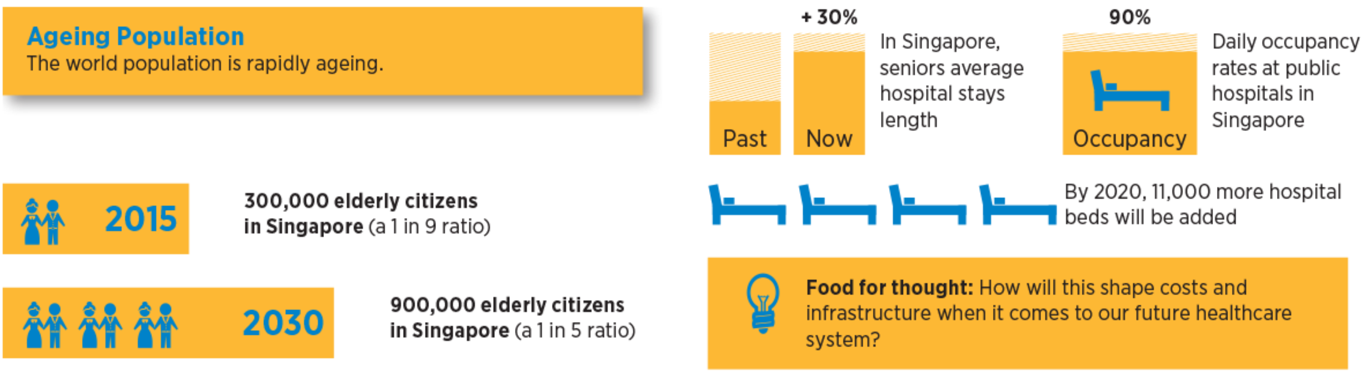
Other Ongoing Smart Nation Projects

1. **Smart Health-Assist</bold>**

Hospitals are already operating at close to full capacity in Singapore. Medical tourism and a rapidly ageing population will also continue to squeeze the country's capacity for health care.

By 2030, there will be an estimated 900,000 elderly citizens in Singapore, or about one in five Singaporeans. The Pioneer Generation Package covers about 450,000 Singaporeans whereas there are c.1m Singaporeans between the ages of 45 and 64 who will reach retirement age in 10 to 20 years.

The challenge of Singapore's ageing population



Source: Smart Nation-Forbes

Singapore plans to use telehealth to tackle its healthcare challenges. Telehealth would allow everyone to manage their medical conditions, especially chronic ones such as cardiovascular disease, diabetes, respiratory diseases, in the comfort of their own homes. Any health deterioration can be detected faster than if the patient was left to keep up visits to a medical professional.

One initiative is the use of Smart Elderly Alert Systems to monitor the safety of elderly relatives. Sensors placed at home can help to monitor movements and alert caregivers in case of unusual behaviour. This in turn should reduce traffic in hospitals' emergency departments and inpatient admissions.

Integrated Health Information Systems, the agency in charge of developing smart health solutions, has already made progress in aspects such as telehealth and elderly monitoring systems. Trials on real-life families to gauge the intrusiveness and functionality of the elderly monitoring system is underway, while the use of video consultations for a limited set of illnesses and rehabilitation programmes has also been made available at some hospitals. HealthHub a web portal and mobile application released in 2016, is slated to be Singapore's first one-stop online health information and service portal. The portal allows registered users to access their hospital and other medical reports, and view healthcare and lifestyle facilities available around them.

Smart Logistics

Present-day track-and trace-technologies are often used by large logistics service providers for premium cargo, but many lack real-time information. Verifications are also disjointed with the change of custody across different service providers, given that as many as 25 parties are required to process one export shipment, with each using different standards.

Smart logistics is a centralised platform allowing different players - cargo owners, freight forwarders and ground handlers - to use sensory networks in airports and seaports to track and manage their cargo in near real-time. The government will fund the building of the infrastructure and allow small players to access it at an affordable price. According to the Infocomm Development Authority of Singapore (IDA), smaller players in particular, will benefit from this more affordable system, which will enable a more timely response to unforeseen events, the automation of labour-intensive processes and the reduction of inventory.

TradeNet, the e-government platform for the local trade and logistics industry launched 25 years ago, will undergo a facelift. The plan is to combine the backend systems of TradeNet, TradeXchange and Customs into one system, tentatively named the National Trade Infrastructure, with the expiration of the contract in 2017. The government hopes that this keystone project will boost Singapore's productivity and competitiveness through a digitalised, integrated supply chain.

Smart HDB Town Framework

The Smart HDB Town Framework maps out the introduction of smart technologies in HDB towns and estates by focusing on four key areas: Smart Planning, Smart Environment, Smart Estate and Smart Living Smart

Planning. It refers to the use of computer simulations and data analytics to enable HDB to effectively plan and design its estates. This, for example, when assessing the effectiveness of various initiatives (e.g. LED lighting, solar energy, vertical greenery, rainwater harvesting, recycling, pneumatic waste collection), and making a decision on the best combination to achieve sustainability goals in a cost-effective way.

Smart Environment refers to the use of environmental data such as temperature or humidity captured through sensors to create a more pleasant environment. For example, fans in common areas can be triggered when certain thresholds of temperature and humidity are reached. The fan speed can be regulated to maximise comfort, while reducing energy consumption.

Smart Estate initiatives aims to analyse data to optimise maintenance cycles and pre-empt problems. This would allow maintenance staff to better understand the usage patterns of common amenities and resolve problems. For example, motion-detected lighting systems could reduce energy consumption by as much as 30% while sensors installed on the lamp posts could trigger warnings about replacements.

Smart Living refers to the integration of smart technology into daily living in housing estates. This includes smart meters to allow people to monitor their energy consumption on a real-time basis and control their electrical appliances remotely. Trials of smart-home solutions are being conducted at ~3,200 HDB homes in the Yuhua estate. HDB's Northshore Residencies I and II, expected to be completed by 2020, will be fully equipped with the infrastructure needed to support such smart homes.

Potential beneficiaries of Smart Nation

ST Engineering is riding on the digitisation trend to grow its smart city business. ST Engineering (Singapore Technologies Engineering Ltd) is an integrated defence and engineering group with a global presence, specialising in the aerospace, electronics, land systems and marine sectors[33]. In recent years, the company has increasingly positioned itself to capitalise on growth from smart city and robotics markets, including the hospitality, healthcare, transportation and security industries. Digitisation of processes within these industries will be complementary to the adoption of ST Engineering's smart city products. In terms of size, in 2017, the company's revenues from smart-city markets were S$1bn, and it aims to more than double this by 2022. Leveraging on its track record in Singapore, ST Engineering is now targeting the global smart-city market.

[33]https://www.stengg.com/en/newsroom/news-releases/st-engineering-to-showcase-diverse-and-smart-solutions-at-singapore-airshow-2018/

ST Engineering's Smart City Global Presence

Source: Company

Examples of ST Engineering's smart-city developments:

i) In July 2017, ST Engineering acquired Aethon, a provider of autonomous mobile robots (AMRs) which has deployed its AMRs in more than 200 sites globally, including in 140 hospitals in the US. The acquisition has allowed ST Engineering to develop new applications based on a proven robotic solution for indoor applications for the healthcare, industrial and hospitality sectors[34]. For example, by deploying the Aethon Tug robot to hotels, the laundry process can be reduced from a seven-step manual process to a three-step automated one, with the use of radio-frequency identification tagging.

ii) With the acquisition of a 51% stake in SP Telecommunications, ST Engineering now has access to an extensive network of fibre optic backhaul infrastructure and facilities in Singapore, enabling the company to move up the information and communications technology (ICT) value chain to provide connectivity and other bundled enterprise ICT services for smart city initiatives.[35]

iii) ST Engineering has assumed a strategic role towards achieving Singapore's Smart Mobility 2030 vision of a smart transportation network. The company has been developing its autonomous vehicle (AV) capabilities and technologies for commercial smart mobility applications from as early as 2015, when it deployed the Autonomous People Mover in Singapore's Gardens by the Bay. LTA and ST Engineering are also jointly developing autonomous buses and mobility on demand vehicles (MODVs) for Sentosa Island. The autonomous buses will go on trial on Jurong Island at end-2018 and will undergo public road

[34]http://www.businesstimes.com.sg/companies-markets/st-engineering-to-acquire-us-robotics-firm-aethon-for-us36m

[35]https://www.stengg.com/en/newsroom/news-releases/st-engineerings-electronics-arm-acquires-51-equity-stake-in-sp-telecommunications-pte-ltd/

trials by mid-2020[36] while MODVs are expected to be deployed in 1Q19[37].

iv) ST Engineering has also ventured into the satellite business. After the success of its first satellite TeLEOS-1, ST Engineering started building TeLEOS-2 (targeted for launch in 2022), Singapore's first synthetic aperture radar-based imaging satellite, which will provide round-the-clock, all-weather imaging to a wide range of industrial clients[38].

v) ST Engineering is deploying the company's expertise in wireless smart sensor technology to power smart street lighting and efficient utilities management in cities across China, Europe, India and the US with the installation of 18m wireless smart sensors[39].

vi) In 2017, ST Engineering launched Innosparks, an engineering-based incubator programme enabling individuals or startups to accelerate technology innovation from idea to market within 18 months or less. Once the individual or startup reaches the commercial scaling stage, Innosparks will connect with to ST Engineering's Corporate Venture Capital unit (a US$150m open-ended fund)[40].The unit made its first investment in Janus Technologies, a US-based endpoint cyber-security provider, which helped ST Electronics launch its Black Computer, an industry-first, hardware-based cyber-security solution.[41].

[36] https://www.stengg.com/en/newsroom/news-releases/st-engineering-drives-development-of-autonomous-vehicles-for-urban-mobility/

[37] https://www.stengg.com/en/newsroom/news-releases/on-demand-self-driving-shuttles-in-sentosa-at-the-touch-of-a-smartphone/

[38] https://www.channelnewsasia.com/news/singapore/st-electronics-to-build-2nd-singapore-made-earth-observation-sat-7608664

[39] http://sbr.com.sg/building-engineering/news/st-electronics-bags-smart-sensor-network-deal-worth-98m

[40] http://www.businesstimes.com.sg/companies-markets/st-engineering-sets-up-us150m-corporate-venture-capital-unit-opens-innovation-lab

[41] http://sbr.com.sg/building-engineering/news/st-engineering-invests-78m-in-cybersecurity-firm-janus-technologies

Appendix

Key government initiatives in the financial services sector

Initiative	Description	How does each initiative help the financial sector	Example
Application Programming Interface (API) architecture	MAS' drive towards an open API architecture, in line with the government's Smart Nation objective, started as early as in 2016. An API is a set of formalised commands that allow software applications to talk to each other seamlessly.	APIs will enable banks to integrate their systems internally, and pave the way for seamless interaction with third parties to develop better products.	Since 2016, Citibank, DBS, OCBC, Standard Chartered, NETS as well as MAS have launched their own API developer portals.
Unified Point-of-Sale terminal (Unified POS)	This allows merchants to accept all payment modes including NETS, NETS FlashPay, Apple Pay, Android Pay, Samsung Pay, UOB Mighty Pay, EZ-Link, credit and debit cards, UOB Delight card and Passion card. This is in line with the government's Smart Nation drive to accelerate the retail sector's transition to electronic platforms.	According to the Dairy Farm, unified POS can reduce the time required at checkout counters by 20-30% (or 9-11 seconds) by integrating multiple payment modes into one system.	Pilot projects started in 2016. The Dairy Farm Singapore Group has partnered NETS and UOB to install 2,000 Unified POS payment terminals across the retailer's 650 stores.
Singapore Regulatory Sandbox	In June 2016, MAS started the FinTech Regulatory Sandbox. Subsequently, the FinTech and Innovation Group released guidelines for a regulatory sandbox to encourage more experimentation in financial technology.	Enables product testing in a well-defined space and duration, with appropriate safeguards to contain the consequences of failure and maintain the overall safety and soundness of the financial system.	MAS has allowed initial coin offerings to be tested in the sandbox. The first start-up to graduate from the MAS sandbox is PolicyPal in August 2017; it raised US$20m and has launched an insurance mobile app. Another example is Electrify, which helps electricity consumers find the best rates for themselves, and which raised US$30m in March 2018.
Cloud services for financial institutions	In July 2016, MAS issued new guidelines for financial institutions on outsourcing in general, including the use of cloud services.	A secure cloud infrastructure enables many fintech innovations, including banking-as-a-service (BaaS) platforms. This should better equip banks to compete with non-traditional players such as Google, Apple, PayPal and AliPay.	An early adopter of cloud technology is DBS, which established a cloud partnership with Amazon Web Services back in 2016 and plans to shift 50% of its computing workload to the public cloud by 2018.
MAS Looking Glass: its own fintech innovation lab	Looking Glass@MAS was set up in August 2016 within the MAS Building.	It aims to spur collaboration among MAS, financial institutions, start-ups and technologists.	
Blockchain technology for clearing and	Project Ubin is a collaborative project with the industry to explore Distributed Ledger	DLT has demonstrated potential in making transactions and processes	Software prototypes for decentralised inter-bank payment and settlements with liquidity savings mechanisms were developed in

Initiative	Description	How does each initiative help the financial sector	Example
settlement of payments and securities	Technology (DLT). MAS' eventual goal is to develop simpler to use and more efficient alternatives to today's systems based on digital central-bank issued tokens.	more transparent, resilient and cheaper.	October 2017, in a project involving MAS, the Association of Banks in Singapore (ABS), five technology partners and 11 financial institutions. Spin-off projects will focus on fixed income securities trading and settlement cycle through DLT and cross-border payments using central-bank digital currency.
Banks allowed to enter non-banking services	Since June 2017, banks have been allowed to conduct non-financial businesses that are related and complementary to their core financial businesses. This is subject to a cap of 10% of the bank's capital funds to limit exposure.	Banks can leverage on their customer base to embed banking services in e-commerce transactions and cross-sell more services.	DBS launched an online marketplace for car buyers and sellers in August 2017 that also allows buyers to schedule loans and calculate car budgets. In March 2018, UOB launched an online travel marketplace using Agoda and Expedia's API, to target online travel spend.
PayNow - central addressing scheme for payments	In July 2017, ABS announced the launch of PayNow. PayNow allows payments using the recipient's mobile number, national ID number, e-mail address, or any other social media address, without the need for the recipient's bank or bank account number.	Banks can use PayNow to promote mobile payments services, facilitating convenience and efficiency of funds transfers. PayNow Corporate is expected to be available to businesses by 2H2018, to facilitate B2C transactions.	Initially available at seven retail banks, namely Citibank, DBS/POSB, HSBC, Maybank, OCBC, Standard Chartered Bank and UOB, from April 2018, the list now also includes Bank of China and Industrial Bank of China.

Source: MAS, respective banks' press releases, DBS Group Research

Key government initiatives in the aviation sector

Initiative	Description	How does each initiative affect the aviation sector	Example
e-freight@Singapore	A joint programme between IDA and the Civil Aviation Authority of Singapore (CAAS), e-freight aims to encourage the industry to adopt paperless freight documentation.	Industry players can expect greater data accuracy and productivity, and shorter processing and clearance timings for shipments.	CAAS and Changi Airport Group (CAG) have signed an MoU with Schiphol Nederland, which operates Amsterdam AirportSchiphol, to drive the adoption of e-freight for air cargo between the two airports.
The Air Transport Industry Transformation Map	In 2017, CAAS unveiled plans to transform the aviation sector through innovation, productivity enhancement, employee skills and enterprise	It aims to achieve real value-added growth of 16% from 2015 to 2020, and boost productivity by 3-4% per annum, in addition to creating more than 8,000 new jobs in the sector by 2025[42].	Productivity improvements through autonomous systems to move passengers, baggage and cargo and state of the art air traffic control rooms. Singapore Airlines partnering with Agency for Science, Technology and Research to explore big data use cases in the airline industry.

Source: CAAS, DBS Group Research

Key government initiatives in the telecommunication sector

Initiative	Description	How does each initiative help the telecom sector	Example
New Entrant Spectrum Auction (Nesa)	The Nesa, open only to new mobile network operators, offered 60MHz of spectrum at a discounted starting bid price. The auction concluded in December 2016 with TPG Telecom's winning bid of S$105m.	The entry of TPG as Singapore's fourth telco is expected to increase the competitiveness of sector.	TPG will be joining the three other telecom service providers from mid-2018. We expect TPG to grab ~6-7% of the mobile revenue share by 2022.
ICE71, Singapore's first cybersecurity start-up hub	ICE71 aims to support and develop cyber-security entrepreneurs and startups. It was announced in March 2018 by Singtel Innov8 (Singtel's venture capital fund for tech start-ups) and the National University of Singapore, with the support of IMDA and the Cyber-security Agency of Singapore (CSA).	Beyond providing support services such as access to working space, funding, subject matter experts and networking events, ICE71 also provides start-ups with enterprise-grade cyber-security resources such as Singtel's cyber-range to test and build proof-of-concept solutions in a virtual environment.	ICE71 begins its first call for the inaugural cohort in April 2018.

Source: IMDA, DBS Group Research

[42]https://www.opengovasia.com/articles/towards-smart-nation-singapore-developments-in-2017-part-1

Key government initiatives in the retail sector

Initiative	Description	How does each initiative help the retail sector	Example
Budget 2018	Introduction of GST from 2020 onwards on imported e-commerce services.	An e-commerce tax could ease the competition for offline brick-and-mortar retailers due to the rising popularity of online shopping from China and other countries	
Retail Industry Roadmap	The roadmap focuses on productivity improvement measures such as storefront self-checkout and cash management, as well as the digitisation of backend operations.	The government projects a 1% average annual productivity growth rate for the retail industry from 2016-2021.	At supermarket chain Sheng Siong, hybrid self-checkout systems 27 out of its 47 stores are estimated to save 40% of its manpower costs. NTUC Fairprice has also revamped its online shopping app to enhance shoppers' experience, and is using a new automated storage and retrieval system capable of handling four times more orders per day.
Retail Industry Digital Plan	Launched in 2017 by IMDA and Spring Singapore, the plan aims to help retailers adopt multi-channel strategies, so shoppers can enjoy faster delivery lead-times from shops they are familiar with within a precinct.	The plan exploits new and advanced digital platforms like omni-channel retailing and digital marketing, allowing retailers to enhance their customer reach and the shopping experience. The aim is to grow the e-commerce share of total retail receipts from the current 3% to 10% by 2020.	

Source: IMDA, DBS Group Research

Key government initiatives in the land transportation sector

Initiative	Description	How does each initiative help the transport sector	Example
Regulatory Framework and Standards for Intelligent Transport Systems (ITS)	ITS is a sophisticated traffic control system to maximise road network by monitoring traffic flow in Singapore. In February 2017, IDA allocated the 5.9 GHz frequency band for ITS.	ITS enables LTA in its development and deployment of initiatives such as self-driving or autonomous vehicles.	LTA is setting up two test centres to test autonomous vehicles in Jurong and one-north. It also has partnerships with: - the Energy Research Institute at Nanyang Technological University (ERI@NTU) to develop and try out autonomous bus technology - ST Kinetics to develop and try out driverless bus systems - Delphi and nuTonomy to conduct autonomous mobility-on-demand trials.
Expressway Monitoring Advisory System (Emas) by LTA	Emas is a computerised system that monitors traffic on Singapore's expressways.	It allows authorities to detect accidents and notifies motorists of adverse traffic conditions.	This promotes the adoption of emerging technologies such as robot assistants and RFID inventory management tools.
Green Link Determining (Glide) System	The system controls all traffic signals in Singapore as traffic flow changes. Responds by adjusting the green-light timings accordingly.	It allocates green-light timings for motorists and pedestrians based on demand.	
Parking Guidance System (PGS) by LTA	It provides motorists with real-time parking availability information.	This allows motorists make better informed parking choices.	Examples include roadside electronic information panels positioned at key locations in Marina Centre, Orchard and HarbourFront, the Motoring Portal website and apps such as MyTransport.SG.

Source: LTA, DBS Group Research

[43]https://www.channelnewsasia.com/news/singapore/4-more-malls-to-adopt-new-model-of-delivery-management-7680930

Key government initiatives in the logistics sector

Initiative	Description	How does each initiative help the logistics sector	Example
In-mall distribution (IMD)	This allows logistics service providers to book time slots to make deliveries. In-Mall Logistics Operators (IMO) stationed within the mall unloading bay receive deliveries from suppliers before making the last-mile delivery to retailers within the mall. The solution adopts a dock scheduling and queue management system developed by local firm Gurusoft.	It has reduced vehicle delivery parking time from an average of 24 minutes to just seven minutes[43]. It allows internal users to place purchase orders any time via the application and also lets mall personnel co-ordinate delivery timeslots with approved vendors. The system also analyses data, develop reports and sends alerts to IMOs, suppliers and retailers.	IMD is being extended to malls across the island after successful trials Tampines Mall and Bedok Mall in 2016 by IMDA and CapitaLand Mall Trust.
Federated lockers	A delivery network of parcel lockers not tied to any single operator and which all couriers can use to deliver to customers. The pilot with 75 lockers is slated to go live in the second half of 2018.The plan is to have some 760 lockers around Singapore eventually.	It should improve the efficiency of last-mile delivery as duplication of efforts can be avoided if the recipient is not at home. It should potentially benefit over 7,600 logistics service providers in Singapore.	SingPost'sPOPStations operate in a similar fashion to the federated lockers scheme although they are not open to other vendors yet. SingPost delivers the parcel to the POPStation and alerts the customer via text messages and e-mail.
Airbnb for cargo space	Large shippers can sell unused cargo space at a discount to smaller shippers. IMDA has signed a memorandum of intent with locally based e-freight platform provider vCargo Cloud to create this platform.	The scheme potentially lowers the cost of freight charges for small shippers.	
Offsite Consolidation Centres (OCC)	OCCS are places for mall delivery trucks that are not yet fully loaded to consolidate and sort their goods.	OCCs reduce the number of trucks going to the same destination and improves truck load utilization.	

Source: IMDA, DBS Group Research

COMPANY GUIDES

Singapore Company Guide

iFAST Corporation

Version 11 | Bloomberg: IFAST SP | Reuters: IFAS.SI

Refer to important disclosures at the end of this report

DBS Group Research . Equity

30 Apr 2018

BUY

Last Traded Price (27 Apr 2018): S$0.90 (**STI :** 3,577.21)
Price Target 12-mth: S$1.26 (40% upside)

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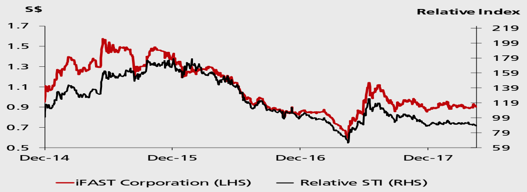
What's New

- Improved revenue and profitability in 1Q18
- Seventh consecutive quarter of record AUA to S$8.07bn; +24.8% y-o-y
- More room for AUA growth; focus on gaining scale as a platform
- Maintain BUY and TP: S$1.26

Price Relative



Forecasts and Valuation

FY Dec (S$m)	2016A	2017A	2018F	2019F
Revenue	80.6	101	118	125
EBITDA	8.33	13.6	16.7	19.3
Pre-tax Profit	6.09	10.1	11.7	13.6
Net Profit	5.33	8.83	10.3	11.9
Net Pft (Pre Ex.)	5.33	8.83	10.3	11.9
Net Pft Gth (Pre-ex) (%)	(55.9)	65.6	16.1	16.4
EPS (S cts)	2.03	3.34	3.86	4.49
EPS Pre Ex. (S cts)	2.03	3.34	3.86	4.49
EPS Gth Pre Ex (%)	(56)	64	16	16
Diluted EPS (S cts)	2.03	3.34	3.86	4.49
Net DPS (S cts)	2.79	3.01	2.31	2.69
BV Per Share (S cts)	29.9	30.0	31.4	33.2
PE (X)	44.3	27.0	23.3	20.1
PE Pre Ex. (X)	44.3	27.0	23.3	20.1
P/Cash Flow (X)	41.9	21.2	17.3	13.9
EV/EBITDA (X)	25.7	16.1	13.1	11.1
Net Div Yield (%)	3.1	3.3	2.6	3.0
P/Book Value (X)	3.0	3.0	2.9	2.7
Net Debt/Equity (X)	CASH	CASH	CASH	CASH
ROAE (%)	6.9	11.2	12.6	13.9
Earnings Rev (%):			0	0
Consensus EPS (S cts):			4.10	4.90
Other Broker Recs:		B: 2	S: 0	H: 0

Source of all data on this page: Company, DBS Bank, Bloomberg Finance L.P

Wealth management Fintech player

Focus on building scale. iFAST has made significant progress in the last 2-3 years by broadening the range of investment products and services on its platforms, and laying the infrastructure to kick-start its business in China, a market it believes will be key in the future. The group is now a more integrated wealth management platform, with five key product group – unit trusts, ETFs, bonds, stocks and insurance. This would strengthen its position as a key wealth management Fintech player.

More room for AUA growth. Despite a seventh consecutive quarter of record Assets under Administration (AUA) to S$8.07bn (+24.8% y-o-y) as at 31 March 2018, there is still room for growth as the current AUA level remains small relative to the size of the wealth management industry in Singapore and the other Asian markets it operates in.

Improved revenue and profitability in 1Q18, mainly due to an increase in AUA for both B2B business and B2C business in the period, which benefited from new inflows of investments from customers as well as relatively positive market sentiment in the period.

Valuation:

Maintain forecast and BUY call, TP: S$1.26. No change to our AUA growth assumption of 8% for FY18F and another 5% for FY19F. Maintain BUY; TP of S$1.26 based on Dividend Discount Model (DDM) valuation methodology, given that it is a cash-led business, supplemented by a relatively high dividend payout ratio of about 60%.

Key Risks to Our View:

The securities and financial services industry is highly regulated and iFAST is subject to a variety of laws and regulations across the regions it operates in. iFAST's operations are also vulnerable to market sentiment.

At A Glance

Issued Capital (m shrs)	266
Mkt. Cap (Sm/USm)	239 / 181
Major Shareholders (%)	
Chung Chun Lim	22.3
Singapore Press Holdings Ltd	15.3
Wee Kian Lim	7.6
Free Float (%)	54.8
3m Avg. Daily Val (US$m)	0.12
ICB Industry : Financials / General Financial	

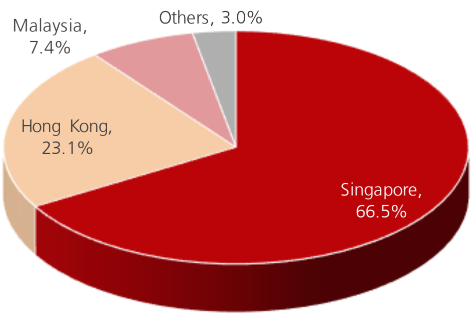
WHAT'S NEW

Record S$8.07bn AUA drove 53.6 % y-o-y increase in 1Q18 net profit

Improved revenue and profitability in 1Q18. 1Q18 results in line. Both revenue and net profit in 1Q18 accounted for 26% of our FY18F forecasts. On a y-o-y basis, revenue surged 40.1% to S$31.0m while net profit rose 53.6% to S$2.7m. China is still loss-making. Excluding China, the group would have registered net profit of S$3.9m. The improvement in revenue and profitability was mainly due to an increase in Assets under Administration (AUA) for both B2B business and B2C business in the period, which benefited from new inflows of investments from customers as well as relatively positive market sentiment in the period. A higher first interim dividend of 0.75Scts (vs 0.68Scts in 1Q17) for 1Q18 was declared.

7th seventh consecutive quarter of record AUA. The group's AUA grew 24.8% y-o-y to reach a new record of $8.07bn as at 31 March 2018, on its continuing efforts to widen the range of investment products and services and strengthen the financial technology (Fintech) capabilities of its platforms in the various markets in recent years.

AUA geographical breakdown



1Q18 net revenue geographical breakdown

	Net Revenue *		AUA y-o-y
	S$m	y-o-y chg	growth (%)
Singapore	9.8	+21.5	+17.6
Hong Kong	3.4	+41.9	+32.6
Malaysia	1.1	+51.1	+44.3
China	0.17	+216.4	+561.2
TOTAL	14.4	+28.7	

**Net revenue represents revenue earned by the group after commission and fee paid or payable to third party financial advisers.*

Singapore operation is still the major contributor to group revenue. The net revenue from the Singapore operation was up 21.5% y-o-y in 1Q18, mainly contributed by significant increases in investment subscription amounts in unit trusts (UTs), exchange-traded funds (ETFs) and stocks in the period.

Hong Kong operation continued its efforts to broaden the range and depth of its investment products and services on its platforms, with the launch of Fintech solutions division in October 2017 and the launch of multi-products FSMOne platform in November 2017 to include multiple products and services such as UTs, bonds, stocks, ETFs and managed portfolios (robo-advisory portfolios) via one account.

In Malaysia, the significant growth of UT business and AUA contributed to an increase in net revenue of 51.1% y-o-y in 1Q18. The bond business and the robo-advisory portfolio service launched in the second quarter of 2017 also contributed to the increase in revenue in Malaysia, although not significantly in the quarter.

China business still remains in the early stages of building the iFAST brand among potential clients and investment practitioners in China's wealth management industry. For the China onshore business, the China operation is working to expand its network with existing B2B partners in the market. For the China offshore business, it continues to help investors in China invest internationally, especially through the group's presence in Hong Kong and Singapore.

More room for AUA growth; focus on gaining scale as a platform. In the medium to long term, iFAST believes that there is still a lot of room for growth in its AUA as the amount remains small relative to the size of the wealth management industry in Singapore and Asia. Going forward, increasing focus will be channelled towards gaining scale as a platform.

Maintain forecast and BUY call, TP: S$1.26. We maintain our AUA growth assumption of 8% for FY18F and another 5% for FY19F. The expected growth is on the back of the broadening range and depth of investment products and services. Maintain BUY, TP of S$1.26 based on Dividend Discount Model (DDM) valuation methodology, given that it is a cash-led business, supplemented by a relatively high dividend payout ratio of about 60%.

Quarterly / Interim Income Statement (S$m)

FY Dec	1Q2017*	4Q2017	1Q2018	% chg yoy	% chg qoq
Revenue	22.1	28.2	31.0	40.1	9.9
Cost of Goods Sold	(10.9)	(14.9)	(16.6)	51.8	11.5
Gross Profit	11.2	13.3	14.4	28.7	8.1
Other Oper. (Exp)/Inc	(9.0)	(11.0)	(11.6)	28.9	5.8
Operating Profit	2.17	2.35	2.78	28.1	18.7
Other Non Opg (Exp)/Inc	0.0	0.0	0.0	-	-
Associates & JV Inc	(0.1)	0.0	0.0	nm	-
Net Interest (Exp)/Inc	0.20	0.20	0.23	12.8	15.1
Exceptional Gain/(Loss)	0.0	0.0	0.0	-	-
Pre-tax Profit	2.04	2.53	2.99	46.4	18.2
Tax	(0.3)	(0.1)	(0.3)	1.8	286.7
Minority Interest	0.0	0.0	0.0	-	-
Net Profit	1.75	2.45	2.70	53.6	10.0
Net profit bef Except.	1.75	2.45	2.70	53.6	10.0
Margins (%)					
Gross Margins	50.7	47.2	46.4		
Opg Profit Margins	9.8	8.3	9.0		
Net Profit Margins	7.9	8.7	8.7		

**restated*
Source of all data: Company, DBS Bank

CRITICAL DATA POINTS TO WATCH

Critical Factors

Growth in AUA

AUA growth is the key driver to revenue. iFAST derives revenue from Trailer Fees (paid by fund houses), Platform Fees (paid by customers) and Wrap Fees (paid by advisor-assisted investors), which are calculated at up to 0.9%, 0.5% and 0.2% per annum of its average AUA respectively. AUA grew at a CAGR of 11.8% from FY11-17. We are expecting AUA to increase 8% for FY18F and 5% for FY19F. As such, we are expecting revenue growth of 16.5%/5.7% for FY18F/FY19F, on the back of the broadening range and depth of investment products and services.

Fruition of China operation

The China business was soft launched in March 2016 and has been loss-making due to high operating expenses. As iFAST is still in the early stages of building its brand among potential clients and investment practitioners in China's wealth management industry, the outlook could be promising once iFAST starts to reap the fruits of its labour in China.

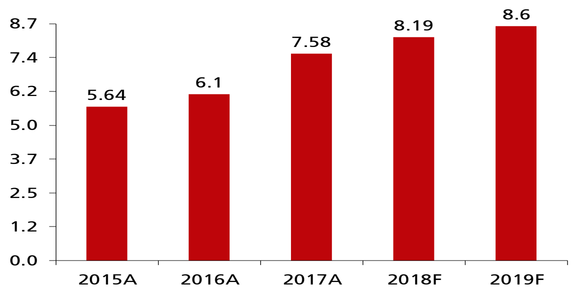
Beneficiary of disruptive technology

iFAST's business model offers 1) Integrated wealth management platform, enabling investors to invest seamlessly in a variety of investment products; 2) Internet-based model that is unconstrained by a high-cost structure. iFAST is able to pass on significant savings to consumers in the form of lower commissions; and 3) Removal of contra-loss risk as its stockbroking service works on a pre-funded basis. The launch of FSMOne, which allows investment in multiple products including bonds, unit trust, stocks and Exchange Traded Funds (ETFs) via one account, further boosted its competitive edge, and could be a threat to existing stockbrokers.

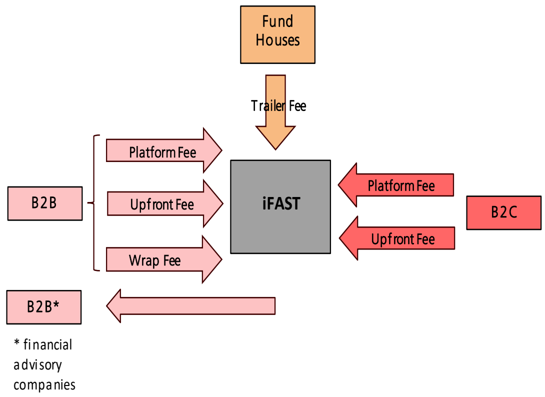
Scalability of business

iFAST's scalable platform business model enables the group to scale up without a proportionate increase in cost, once it reaches a substantial scale. Recurring net revenue-to-AUA exceeded operating expense-to-AUA in the last few years, indicating that iFAST's business has reached a substantial scale. However, with its entry into China, we expect a reversal in trend, at least in the next 1-2 years. Thereafter, recurring net revenue-to-AUA should continue to exceed operating expense-to-AUA. iFAST's business would be on a much stronger footing once its China operation is up.

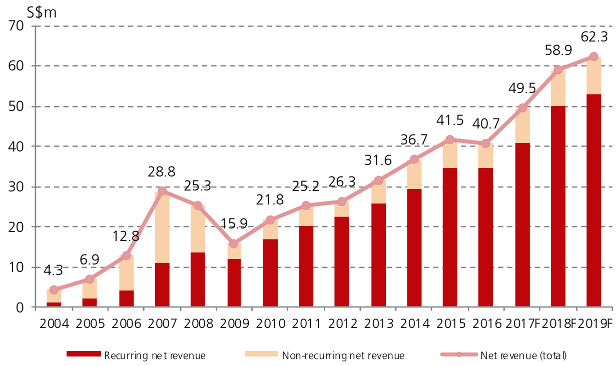
Average AUA (S$bn)



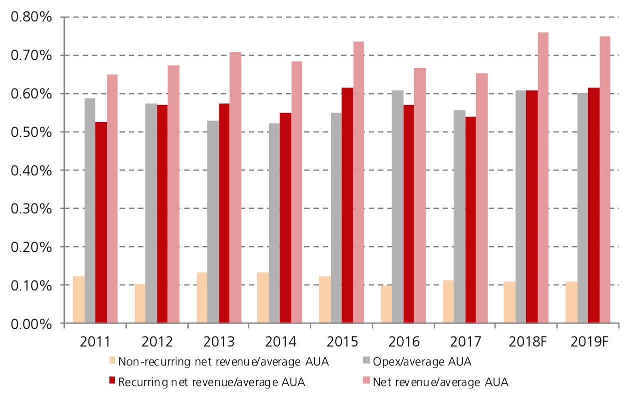
Business model



Recurring and non-recurring net revenue (S$m)

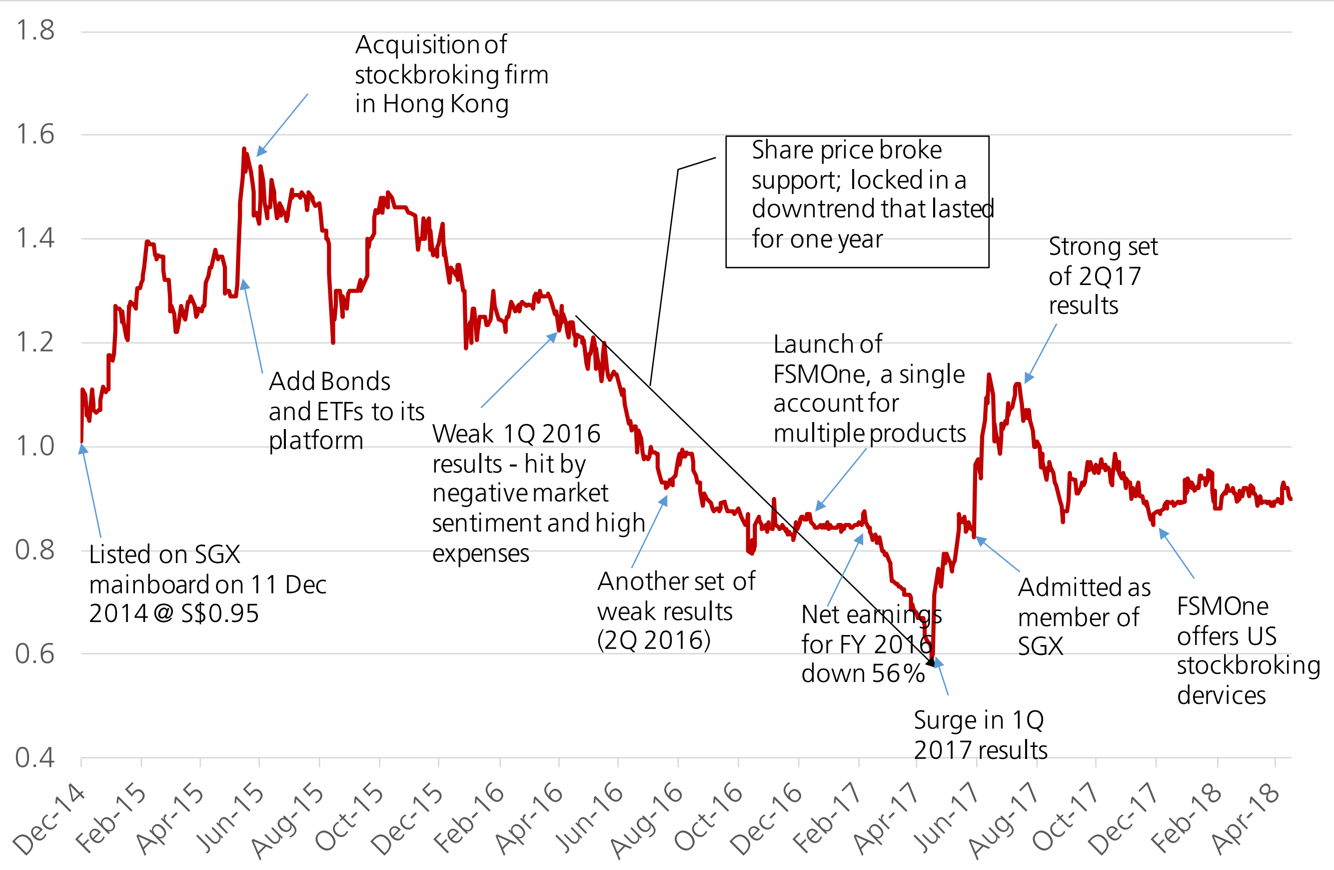


Net revenue and operating expenses as a ratio of average AUA



Source: Company, DBS Bank

Appendix 1: A look at Company's listed history – what drives its share price?



Balance Sheet:

Clean balance sheet. iFAST was debt-free as of December 2017, and should remain in this position so long as the group does not engage in any major M&A activities which require a certain amount of gearing. Cash balance stood at S$30.9m as at December 2017. We understand that iFAST continues to be on the lookout for M&A opportunities to expand its business regionally. Cash flows from operations are expected to remain healthy but this will be partly offset by capex over FY18F-19F.

Share Price Drivers:

Obtaining operating leverage. Operating expense is high as the group continues to push towards broadening the range and depth of its products and services, especially in China. Operating expense-to-AUA exceeds recurring net revenue-to-AUA now but we expect this trend to reverse in the next 1-2 years.

Market dynamics. Any unfavourable factors or changes in the economic, political and social conditions and/or the policies may affect business. This could cause volatility in its revenues.

Inorganic growth is a wildcard. A clear route for inorganic growth is via M&A. Potential targets would include wealth/fund management houses that no longer wish to carry out direct distribution of their own products as it usually involves cumbersome administrative work.

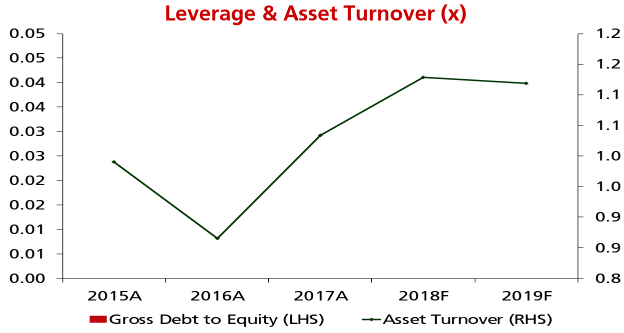
Key Risks:

Highly regulated industry. The securities and financial services industry is highly regulated and iFAST is subject to a variety of laws and regulations across the regions it operates in. Security breaches are also a risk that could result in adverse publicity and damage to reputation. iFAST's operations are also vulnerable to market sentiment.

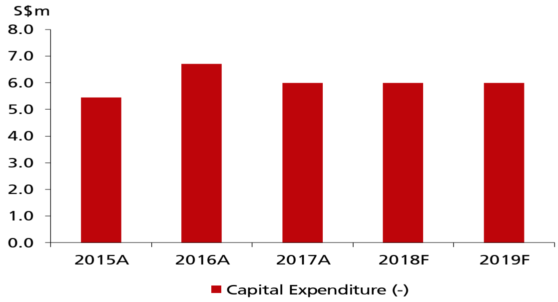
Company Background

iFAST is an internet-based investment product distribution platform which provides a comprehensive range of investment products and services, to financial advisory firms, banks, financial institutions, multinational companies, as well as retail and high-net-worth investors in Asia. The group offers access to over 7,700 investment products including funds, bonds and Singapore Government Securities, stocks, Exchange Traded Funds (ETFs), as well as insurance products, and services including robo-advisory portfolio management services, research and investment seminars, financial technology (fintech) solutions, and investment administration and transaction services.

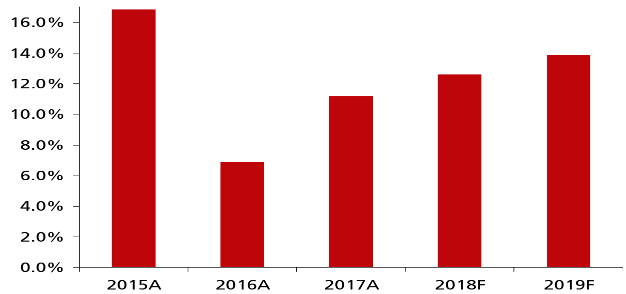
Leverage & Asset Turnover (x)



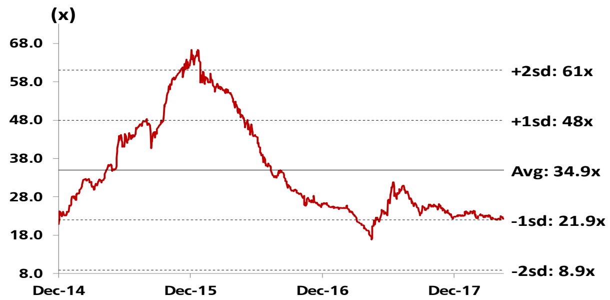
Capital Expenditure



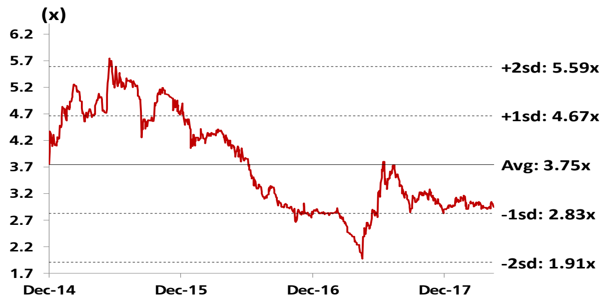
ROE (%)



Forward PE Band (x)



PB Band (x)



Source: Company, DBS Bank

Key Assumptions

FY Dec	2015A	2016A	2017A	2018F	2019F
Average AUA (S$bn)	5.64	6.10	7.58	8.19	8.60
Trailer fees (% of AUA)	n.a.	0.59	0.59	0.59	0.59
Platform fees (% of AUA)	n.a.	0.31	0.31	0.31	0.31
Wrap fees (% of AUA)	n.a.	0.10	0.10	0.10	0.10

Expect 8% growth in AUA for FY18F and 5% for FY19F

Segmental Breakdown

FY Dec	2015A	2016A	2017A	2018F	2019F
Net Revenues (S$m)					
B2B business	28.6	28.4	34.0	41.3	43.6
B2C business	12.9	12.3	15.5	17.7	18.7
Total	41.5	41.5	41.5	41.5	41.5
Net Revenues (S$m)					
Recurring revenue	34.7	34.7	41.0	47.2	49.9
Non-recurring revenue	6.88	5.98	8.50	11.8	12.5
Total	41.5	41.5	41.5	41.5	41.5
Geographical breakdown (S$m)					
Singapore	30.0	29.5	34.8	34.2	36.1
Hong Kong	9.6	8.7	10.8	19.5	20.6
Malaysia	1.9	2.3	3.5	3.5	3.7
China	0.0	0.2	0.4	1.8	1.9
Total	41.5	41.5	41.5	41.5	41.5

Income Statement (S$m)

FY Dec	2015A	2016A	2017A	2018F	2019F
Revenue	85.3	80.6	101	118	125
Cost of Goods Sold	(43.8)	(39.9)	(51.7)	(58.9)	(62.3)
Gross Profit	**41.5**	**40.7**	**49.5**	**58.9**	**62.3**
Other Opng (Exp)/Inc	(29.6)	(35.3)	(39.8)	(47.0)	(48.4)
Operating Profit	**12.0**	**5.42**	**9.67**	**12.0**	**13.9**
Other Non Opg (Exp)/Inc	0.0	0.0	0.0	0.0	0.0
Associates & JV Inc	0.0	(0.2)	(0.3)	(0.3)	(0.3)
Net Interest (Exp)/Inc	0.80	0.84	0.74	0.05	0.05
Exceptional Gain/(Loss)	0.0	0.0	0.0	0.0	0.0
Pre-tax Profit	**12.8**	**6.09**	**10.1**	**11.7**	**13.6**
Tax	(0.7)	(0.8)	(1.3)	(1.5)	(1.7)
Minority Interest	0.0	0.0	0.0	0.0	0.0
Preference Dividend	0.0	0.0	0.0	0.0	0.0
Net Profit	**12.1**	**5.33**	**8.83**	**10.3**	**11.9**
Net Profit before Except.	12.1	5.33	8.83	10.3	11.9
EBITDA	13.4	8.33	13.6	16.7	19.3
Growth					
Revenue Gth (%)	8.9	(5.6)	25.5	16.5	5.7
EBITDA Gth (%)	36.9	(38.0)	63.2	22.6	15.5
Opg Profit Gth (%)	35.5	(54.8)	78.6	24.0	15.9
Net Profit Gth (Pre-ex) (%)	41.9	(55.9)	65.6	16.1	16.4
Margins & Ratio					
Gross Margins (%)	48.7	50.5	48.9	50.0	50.0
Opg Profit Margin (%)	14.0	6.7	9.6	10.2	11.2
Net Profit Margin (%)	14.2	6.6	8.7	8.7	9.6
ROAE (%)	16.9	6.9	11.2	12.6	13.9
ROA (%)	14.0	5.7	9.0	9.8	10.7
ROCE (%)	17.9	7.9	12.0	12.6	13.9
Div Payout Ratio (%)	60.0	137.2	90.2	60.0	60.0
Net Interest Cover (x)	NM	NM	NM	NM	NM

2017 earnings boosted by broadened investment products and services, besides benefitting from improved market sentiment

Dividend payout ratio for FY17 of at least 60% (excluding China operation and exceptional items), as guided by management. We have assumed a sustainable 60% payout for subsequent years

Source: Company, DBS Bank

Quarterly / Interim Income Statement (S$m)

FY Dec	1Q2017	2Q2017	3Q2017	4Q2017	1Q2018
Revenue	22.1	24.7	26.2	28.2	31.0
Cost of Goods Sold	(10.9)	(12.7)	(13.2)	(14.9)	(16.6)
Gross Profit	**11.2**	**12.0**	**13.0**	**13.3**	**14.4**
Other Oper. (Exp)/Inc	(9.0)	(9.4)	(10.4)	(11.0)	(11.6)
Operating Profit	**2.17**	**2.55**	**2.61**	**2.35**	**2.78**
Other Non Opg (Exp)/Inc	0.0	0.0	0.0	0.0	0.0
Associates & JV Inc	(0.1)	(0.1)	(0.1)	0.0	0.0
Net Interest (Exp)/Inc	0.20	0.16	0.18	0.20	0.23
Exceptional Gain/(Loss)	0.0	0.0	0.0	0.0	0.0
Pre-tax Profit	**2.25**	**2.59**	**2.73**	**2.53**	**2.99**
Tax	(0.3)	(0.4)	(0.5)	(0.1)	(0.3)
Minority Interest	0.0	0.0	0.0	0.0	0.0
Net Profit	**1.96**	**2.15**	**2.27**	**2.45**	**2.70**
Net profit bef Except.	1.96	2.15	2.27	2.45	2.70
EBITDA	2.93	3.38	3.68	3.60	4.06
Growth					
Revenue Gth (%)	2.6	11.6	6.4	7.4	9.9
EBITDA Gth (%)	39.2	15.4	8.6	(2.1)	12.8
Opg Profit Gth (%)	71.1	17.2	2.5	(10.1)	18.7
Net Profit Gth (Pre-ex) (%)	79.0	9.9	5.2	8.1	10.0
Margins					
Gross Margins (%)	50.6	48.5	49.6	47.2	46.4
Opg Profit Margins (%)	9.8	10.3	9.9	8.3	9.0
Net Profit Margins (%)	8.9	8.7	8.6	8.7	8.7

Balance Sheet (S$m)

FY Dec	2015A	2016A	2017A	2018F	2019F
Net Fixed Assets	2.44	2.19	6.82	10.3	13.5
Invts in Associates & JVs	0.36	1.83	1.50	1.18	0.85
Other LT Assets	5.68	10.7	8.56	6.27	3.67
Cash & ST Invts	29.5	22.5	19.7	21.4	25.4
Inventory	32.0	32.1	32.1	32.1	32.1
Debtors	19.9	24.1	30.2	35.2	37.3
Other Current Assets	1.44	1.74	1.74	1.74	1.74
Total Assets	**91.3**	**95.1**	**101**	**108**	**115**
ST Debt	0.0	0.0	0.0	0.0	0.0
Creditor	13.8	15.5	19.5	22.7	24.0
Other Current Liab	0.65	0.51	1.26	1.46	1.70
LT Debt	0.0	0.0	0.0	0.0	0.0
Other LT Liabilities	0.24	0.50	0.50	0.50	0.50
Shareholder's Equity	76.6	78.5	79.3	83.4	88.2
Minority Interests	0.0	0.15	0.15	0.15	0.15
Total Cap. & Liab.	**91.3**	**95.1**	**101**	**108**	**115**
Non-Cash Wkg. Capital	38.8	41.9	43.4	44.9	45.4
Net Cash/(Debt)	29.5	22.5	19.7	21.4	25.4
Debtors Turn (avg days)	82.8	99.6	98.0	101.4	106.1
Creditors Turn (avg days)	118.1	145.5	134.6	142.7	150.5
Inventory Turn (avg days)	232.8	317.5	247.0	217.4	207.0
Asset Turnover (x)	1.0	0.9	1.0	1.1	1.1
Current Ratio (x)	5.7	5.0	4.0	3.7	3.8
Quick Ratio (x)	3.4	2.9	2.4	2.3	2.4
Net Debt/Equity (X)	CASH	CASH	CASH	CASH	CASH
Net Debt/Equity ex MI (X)	CASH	CASH	CASH	CASH	CASH
Capex to Debt (%)	N/A	N/A	N/A	N/A	N/A
Z-Score (X)	0.0	0.0	0.0	0.0	0.0

Source: Company, DBS Bank

Cash Flow Statement (S$m)

FY Dec	2015A	2016A	2017A	2018F	2019F
Pre-Tax Profit	12.8	6.09	10.1	11.7	13.6
Dep. & Amort.	1.48	3.07	4.24	4.99	5.67
Tax Paid	(0.7)	(0.5)	(1.3)	(1.5)	(1.7)
Assoc. & JV Inc/(loss)	0.02	0.16	0.33	0.33	0.33
Chg in Wkg.Cap.	(11.4)	(3.0)	(2.2)	(1.8)	(0.7)
Other Operating CF	11.9	(0.2)	0.0	0.0	0.0
Net Operating CF	14.2	5.63	11.2	13.8	17.2
Capital Exp.(net)	(5.5)	(6.7)	(6.0)	(6.0)	(6.0)
Other Invts.(net)	0.0	2.54	0.0	0.0	0.0
Invts in Assoc. & JV	0.0	(2.7)	0.0	0.0	0.0
Div from Assoc & JV	0.0	0.0	0.0	0.0	0.0
Other Investing CF	0.0	0.06	0.0	0.0	0.0
Net Investing CF	(5.5)	(6.8)	(6.0)	(6.0)	(6.0)
Div Paid	(7.1)	(7.3)	(8.0)	(6.2)	(7.2)
Chg in Gross Debt	0.0	0.0	0.0	0.0	0.0
Capital Issues	2.97	2.41	0.0	0.0	0.0
Other Financing CF	0.0	(0.9)	0.0	0.0	0.0
Net Financing CF	(4.1)	(5.8)	(8.0)	(6.2)	(7.2)
Currency Adjustments	(0.1)	0.0	0.0	0.0	0.0
Chg in Cash	4.54	(7.1)	(2.8)	1.64	4.05
Opg CFPS (S cts)	9.79	3.29	5.06	5.86	6.74
Free CFPS (S cts)	3.34	(0.4)	1.97	2.93	4.22

Source: Company, DBS Bank

Target Price & Ratings History

S.No.	Date of Report	Closing Price	12-mth Target Price	Rating
1:	28 Apr 17	0.72	0.94	BUY
2:	31 Jul 17	1.07	1.26	BUY
3:	30 Oct 17	0.99	1.26	BUY
4:	15 Feb 18	0.91	1.26	BUY

***Note** : Share price and Target price are adjusted for corporate actions.*

Source: DBS Bank
Analyst: Lee Keng LING
Sue Lin LIM

DBS Bank recommendations are based an Absolute Total Return* Rating system, defined as follows:
STRONG BUY (>20% total return over the next 3 months, with identifiable share price catalysts within this time frame)
BUY (>15% total return over the next 12 months for small caps, >10% for large caps)
HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)
FULLY VALUED (negative total return i.e. > -10% over the next 12 months)
SELL (negative total return of > -20% over the next 3 months, with identifiable catalysts within this time frame)

Share price appreciation + dividends

Completed Date: 30 Apr 2018 08:28:19 (SGT)
Dissemination Date: 30 Apr 2018 09:21:51 (SGT)

Sources for all charts and tables are DBS Bank unless otherwise specified.

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Mapletree Commercial Trust

Version 10 | Bloomberg: MCT SP | Reuters: MACT.SI

Refer to important disclosures at the end of this report

DBS Group Research . Equity

25 Apr 2018

BUY

Last Traded Price (24 Apr 2018): S$1.60 (**STI :** 3,584.56)
Price Target 12-mth: S$1.80 (13% upside and 5.8% yield) (Prev S$1.75)

Analyst
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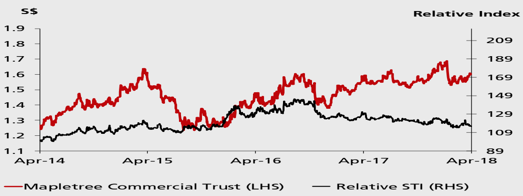
What's New

- 4Q18 DPU of 2.27 Scts above expectations
- VivoCity and MBC I continue to provide steady growth with 4Q18 NPI for both assets rising 2% y-o-y
- Completion of AEIs, inbuilt rental escalations at MBC I and additional bonus GFA for VivoCity to drive DPU forward

Price Relative



Forecasts and Valuation

FY Mar (S$m)	2017A	2018A	2019F	2020F
Gross Revenue	378	434	442	455
Net Property Inc	292	339	346	357
Total Return	211	568	248	255
Distribution Inc	227	260	266	273
EPU (S cts)	7.33	8.45	8.58	8.80
EPU Gth (%)	(2)	15	2	3
DPU (S cts)	8.62	9.04	9.21	9.44
DPU Gth (%)	6	5	2	3
NAV per shr (S cts)	138	149	148	148
PE (X)	21.8	18.9	18.7	18.2
Distribution Yield (%)	5.4	5.7	5.8	5.9
P/NAV (x)	1.2	1.1	1.1	1.1
Aggregate Leverage (%)	36.4	34.6	34.7	34.9
ROAE (%)	6.3	5.9	5.8	6.0

DPU Chng (%):			5	4
Consensus DPU (S cts):			9.00	9.10
Other Broker Recs:		B: 7	S: 1	H: 8

Source of all data on this page: Company, DBS Bank, Bloomberg Finance L.P

Still a winner

Confounding the critics. We maintain our BUY call on Mapletree Commercial Trust (MCT) with a revised TP of S$1.80. MCT's detractors believe MCT is due for a derating given the threat from e-commerce affecting earnings at its key asset VivoCity. However, this ignores the capability of management to undertake asset enhancement initiatives (AEIs) to partially future proof the mall against competition from other malls and the online space. Evidence of this value-add is 10-29% ROI that will be achieved from recent/upcoming refurbishments as well as the bonus 24,000 sqft of GFA MCT has obtained by adding a library to the mall. We believe these proactive decisions will underpin the 2% DPU CAGR over the coming two years.

Where we differ: Best in class. Consensus is in agreement that MCT owns best in class retail/business park assets. However, consensus' TP of c.S$1.66 implies a P/Bk of 1.1x which we believe is too low considering VivoCity is only valued at a cap rate of 4.75%, higher than recent transactions at 2.6-4.2% for arguably less dominant malls. We believe as MCT demonstrates its ability to deliver consistent DPU growth, highlighting the quality of its assets, the market will reward MCT with a P/Bk of around 1.2x as implied by our TP of S$1.80.

Improving office and retail market. While investors near term may be distracted by the rise in interest rates, we believe improving Singapore office rents and retail sentiment/sales should allay fears that MCT does not have levers to counter the impact of higher interest rates. As investors acknowledge this fact, we believe MCT's share price can outperform.

Valuation:

On the back of better than expected 4Q18 results, we raised our DCF-based TP to S$1.80 from S$1.75.

Key Risks to Our View:

A key risk to our positive view is a slowdown in retail sales affecting VivoCity's ability to increase rents and slower than expected pick up in office/business park rents.

At A Glance

Issued Capital (m shrs)	2,880
Mkt. Cap (Sm/USm)	4,608 / 3,485
Major Shareholders (%)	
Temasek Holdings Private Ltd	33.7
Schroders Plc	9.0
AIA Group Ltd	4.9
Free Float (%)	52.4
3m Avg. Daily Val (US$m)	7.5
ICB Industry : Financials / Real Estate Investment Trust	

WHAT'S NEW

Surprises on the upside

(+) 4Q18 results exceed expectations

- MCT reported 4Q18 DPU of 2.27 Scts which was up 0.4% y-o-y. However, on a full year basis, DPU came in at 9.04 Scts (+5% y-o-y) which exceeded our estimate of 8.78 Scts.
- The outperformance was largely due to the fact we had overestimated MCT's overheads and units on issue.

(+/-) Steady uplift in revenue and NPI

- Underlying 4Q18 revenue and NPI was largely in line, rising by 1% y-o-y. The modest y-o-y growth was due to the drag from PSA Building and Mapletree Anson which reported 6% and 2% y-o-y declines in NPI. Both buildings were impacted by higher vacancies with occupancy at PSA Building dipping to 96.1% versus 98.3% in 4Q17 while Mapletree Anson saw occupancies fall to 86.6% from 100% in 4Q17. Nevertheless, the outlook for PSA Building and Mapletree Anson remains bright with committed occupancies at the 98.7% and 100% level respectively.
- Meanwhile, NPI for MCT's two key assets, VivoCity and MBC I, both rose 2% y-o-y. VivoCity continues to benefit from prior positive rental reversions. However, we understand the property's NPI could have been higher if not for the disruption caused by the AEI currently undertaken and some incoming tenants' fit out period. For MBC I, earnings remain underpinned by the c.3% average annual rental escalations for the majority of its leases.
- VivoCity's committed occupancy was healthy at 99.8%. However, actual occupancy only came in at 93.1% which is mainly due to MCT now including the extra 24,000 bonus GFA it received for adding a library to the mall. MBC I is close to fully occupancy (99.4% versus 99% in 4Q17).
- Bank of America Merrill Lynch HarbourFront (MLHF) had a strong quarter, with 4Q18 NPI jumping 16% y-o-y. This improvement is largely due to tenants physically moving in with occupancy now at 100% versus 79.2% in 4Q17, when a major tenant gave back some space.
- Overall committed portfolio occupancy is at a healthy 99.5% which bodes well to future earnings, given actual occupancy only stands at 96.1% at end 4Q18.

(+/-) Headline negative rental reversions belies the underlying resilience

- During 4Q18, MCT delivered modest rental reversions at VivoCity, with changes in fixed rents for the full year higher by 1.5%, down from 2.3% for the first nine months of FY18.
- For the office/business park segment, 8.7% negative rental reversions were recorded for FY18 with the office portfolio excluding MBC I being down 4.2%. MBC itself would have recorded -11.4% rental reversion for FY18. However, including the replacement tenant for a pre-terminated lease, MBC would have delivered positive 0.7% increase in rents, with overall portfolio rental reversions swinging from -2.1% to +0.6%.
- Furthermore, we note the negative rental reversions at MBC I should not be a major concern given this only represents a relatively small part of the overall portfolio and a larger proportion of MBC's earnings would continue to benefit from the inbuilt annual rental escalations.
- Heading into FY19, we understand 12.6% and 6% of leases by gross rental income which are related to the retail and office component respectively are due to expire. Given VivoCity's strong track record, we expect majority of the leases to be renewed with potential upside to rents for the office segment given the upturn in office rents.

(-) Soft foot traffic and tenant sales

- 4Q18 foot traffic fell 2.2% y-o-y with the number of visitors dipped 1.4% y-o-y to 55m for the whole of FY18 due to the reduced number of events as VivoCity in the prior year had events coinciding with its 10-year anniversary.
- Tenant sales for FY18 rose 0.7% y-o-y, commendable considering the soft retail backdrop. However, tenant sales for the quarter ended on a weak note, falling 0.9% y-o-y in 4Q18 due to the disruptions in the mall from AEIs and tenant fit outs.
- Occupancy costs was steady at around 20%.

(+) Compression in cap rates

- MCT reported a 5% increase in property values largely due to the compression of cap rates across the portfolio.
- VivoCity's cap rate now stands at 4.75%, down from 5.15% previously. For MBC I, the office and business park components are valued using 4.10% and 5.35%

cap rate, compared to 4.25% and 5.50% at end 31 March 2017.

- MCT's other office properties saw 15-25 bps compression in cap rates.
- On the back of higher property values, gearing fell to 34.5% from 36.3% at end December 2017 while net asset value per unit rose to S$1.49 from S$1.38 at end 4Q17.
- Average all in cost of debt was steady at 2.75% although up from 2.66% a year earlier.
- Approximately 79% of MCT's debt are on fixed rates.

(+) Full benefits from high committed occupancies yet to flow through with added boost from AEI's at VivoCity

- Over the coming two years, we expect MCT to deliver 2% per annum growth in DPU.
- The steady increase in DPU ahead is underpinned by the high 99.5% committed occupancy compared to actual occupancy of 96.1% currently.
- Furthermore, we expect VivoCity to benefit from the recently completed AEI which converted 9,200 sqft of lower to higher yielding space on levels 1 and 2. ROI on this AEI on a stabilised basis is 29%. This is on top of the ongoing AEI which entails the addition of a public library on level 3. We expect this to further drive foot traffic to the mall. Finally, MCT is in the process of extending Basement 1 by adding over 24,000 sqft of contiguous retail space which should deliver a ROI of around 10%. This additional GFA was given the Singapore authorities in conjunction with VivoCity providing a public library at the mall.

(+) Raising DPU estimates by 3-5%

- On the back of better than expected 4Q18 results, we raised our FY19-21F DPU by 3-5%.
- This also lifted our DCF-based TP to S$1.80 from S$1.75.

Maintain BUY with revised TP of S$1.80

- Owing to more than 18% expected return over the coming 12 months, we maintain our BUY call with a revised TP of S$1.80.
- MCT remains one of our core long term S-REITs picks given its ability to deliver steady growth in DPU as it holds two best in class properties, VivoCity and MBC I.

Quarterly / Interim Income Statement (S$m)

FY Mar	4Q2017	3Q2018	4Q2018	% chg yoy	% chg qoq
Gross revenue	108	110	109	1.3	(0.7)
Property expenses	(24.3)	(23.7)	(24.6)	1.3	3.7
Net Property Income	83.3	86.0	84.3	1.2	(1.9)
Other Operating expenses	(7.8)	(8.0)	(7.9)	1.8	(0.9)
Other Non Opg (Exp)/Inc	(1.0)	(0.6)	0.30	nm	nm
Net Interest (Exp)/Inc	(15.4)	(16.3)	(16.2)	5.3	(0.5)
Exceptional Gain/(Loss)	0.0	0.0	0.0	-	-
Net Income	**59.1**	**61.1**	**60.5**	**2.3**	**(1.0)**
Tax	0.0	0.0	0.0	-	-
Minority Interest	0.0	0.0	0.0	-	-
Net Income after Tax	**59.1**	**61.1**	**60.5**	**2.3**	**(1.0)**
Total Return	194	61.1	385	97.8	529.8
Non-tax deductible Items	(130)	5.38	(319)	145.5	nm
Net Inc available for Dist.	64.6	66.5	65.8	2.0	(0.9)
Ratio (%)					
Net Prop Inc Margin	77.4	78.4	77.4		
Dist. Payout Ratio	100.0	100.0	100.0		

Source of all data: Company, DBS Bank

CRITICAL DATA POINTS TO WATCH

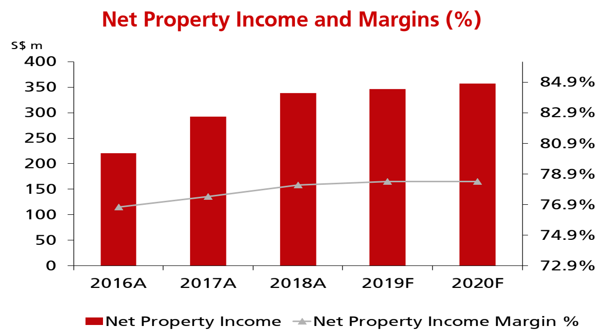
Critical Factors

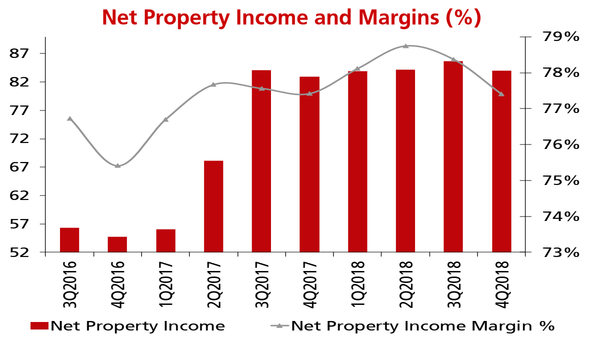
VivoCity one of the top performing malls in Singapore. VivoCity which contributes around 45% of MCT's NPI is one of the top performing malls in Singapore owing to its unique attribute of being the only major mall in the southern half of Singapore, a gateway to Sentosa Island, and having excellent connectivity via highways and the subway. With around 55m visitors each year and consistent delivery of tenant sales growth, Vivocity is one of the go-to malls for prospective retailers. Having just passed its 10-year anniversary, the mall has matured and is no longer delivering double digit earnings growth. However, we believe MCT's plans to "future and ecommerce proof" via the addition of services, entertainment and lifestyle options and continue tenant remixing should result in VivoCity delivering low single digit rental reversions. Over the coming 12-24 months, the mall should also benefit from the opening of the library which should drive foot traffic, addition of over 24,000 sqft of GFA and higher rents post the completion of various AEIs.

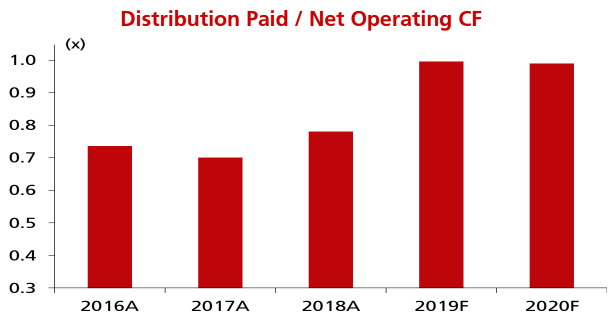
MBC I another crown jewel with inbuilt step-ups. Another key asset for MCT is MBC I, a best in class office/business park property which is only 10-15 minutes drive from Singapore's CBD. MBC I contributes c.30% to MCT's NPI. An attractive feature of the property is the fact that the majority of the leases have annual rental escalations of around 3%. This provides the REIT with an inbuilt organic earnings growth profile. Furthermore, due to its choice location, nearby amenities and the property offering discounted rents with Grade A office specifications, we believe MBC I will remain a top choice for prospective tenants seeking a decentralised location. This ensures that occupancy for the property will remain high and provides earnings resiliency to the REIT.

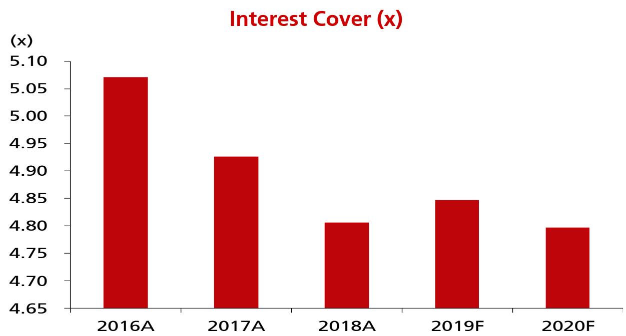
Recovery in spot office rents. Spot office rents have increased 8% from the lows in 1H17, reaching S$9.70 psf/mth at the end of 1Q18, according to CBRE estimates. The increase is faster than expected and if the pace continues, it is likely to exceed our estimate of S$10.00 psf/mth by end 2018. Given over 50% of MCT's earnings are derived from its office/business park properties, we believe MCT is well placed to benefit from the expected multi-year upturn in office rents as new supply is expected to be muted over the coming 3-4 years.

Potential acquisitions from the Sponsor. In the medium term, there is potential for MCT to expand its portfolio by leveraging on its Sponsor Mapletree Group. In particular, its Sponsor has extended the first right of refusal over several properties including MBC 2 and HarbourFront. Should MCT acquire these properties and subject to the price paid, we believe MCT's share price will be re-rated given the enhancement to the quality of the REIT's portfolio and improved trading liquidity as any acquisition will likely coincide with an equity raising.









Source: Company, DBS Bank

Balance Sheet:

Gearing between 34-35% level. Following the recent uplift in property valuations, MCT's gearing has now settled at 34.5% as at end 31 March 2018. This is within management's comfortable range of below 40% and the 45% regulatory cap.

Share Price Drivers:

Continued delivery of steady DPU growth. The market has been concerned about MCT delivering consistent and steady DPU ahead given the maturing of VivoCity and headwinds in the retail sector such as ecommerce and large retail supply growth. While acknowledging that VivoCity is unlikely to deliver double digit increases in earnings, we believe MCT's recent AEI and addition of a library and resultant bonus 24,000 sqft of GFA should not only build a moat around its current earnings but drive foot traffic/tenant sales resulting in higher rents ahead. Furthermore, the timely acquisition of MBC 1 in 2016, has not only reduced VivoCity's NPI contribution from around 65% to 45% but more importantly provided increased exposure to the recoverying office/business park market. Thus, we believe MCT's best days are still ahead, and with steady DPU delivery, should result in a re-rating.

Pure play Singapore REIT. With other large cap REITs potentially expanding outside Singapore, MCT which is expected to remain focused solely in Singapore for the foreseeable future. This may attract investors who have a preference for S-REITs with 100% exposure to Singapore.

Key Risks:

Weaker operational performance from VivoCity. The mall is gradually phasing into a mature stage, with potential slowdown in growth ahead. The timely acquisition of MBC I, still a segment in high demand, plus management's continuous efforts to revamp VivoCity's offerings, should mitigate the slowdown at the portfolio level.

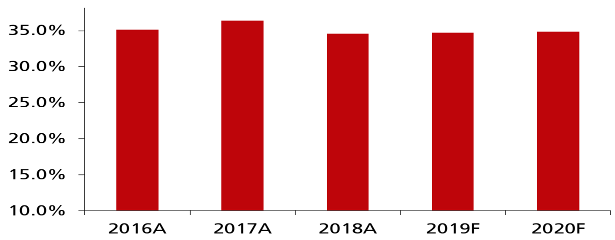
Competition from other landlords. While office rents/business park rents are on an uptrend and MCT's office and business/park portoflio are close to fully occupied, there remains competition from other buildings for MCT's tenants.

Interest rate risk. Any increase in interest rates will result in higher interest payments that the REIT has to make annually to service its loans. Nevertheless, the risk is partially mitigated by the fact that c.79% of MCT's debts are on fixed rates.

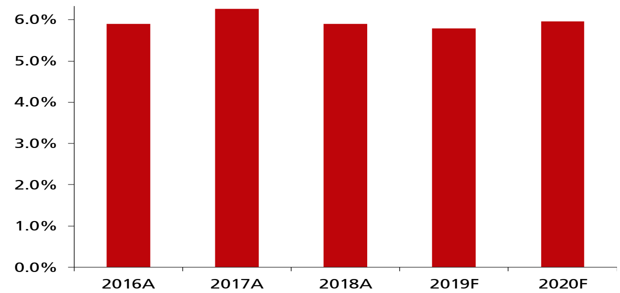
Company Background

Mapletree Commercial Trust (MCT) is a real estate investment trust that invests in income-producing office, business parks and retail properties in Singapore. The majority of its earnings are derived from VivoCity, one of the largest retail mall in Singapore. In addition, the REIT has four other office and business park properties including Mapletree Business City a premier decentralised office/business park.

Aggregate Leverage (%)

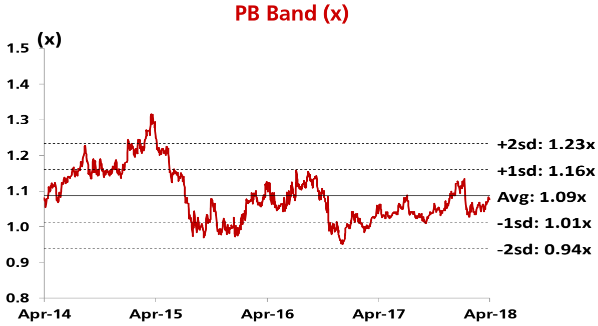


ROE (%)



Distribution Yield (%)

PB Band (x)



Source: Company, DBS Bank

Income Statement (S$m)

FY Mar	2016A	2017A	2018A	2019F	2020F
Gross revenue	288	378	434	442	455
Property expenses	(67.1)	(85.4)	(94.7)	(95.5)	(98.4)
Net Property Income	**221**	**292**	**339**	**346**	**357**
Other Operating expenses	(21.6)	(27.7)	(31.6)	(34.0)	(34.3)
Other Non Opg (Exp)/Inc	(4.7)	(4.5)	1.62	0.0	0.0
Net Interest (Exp)/Inc	(39.3)	(53.7)	(63.9)	(64.4)	(67.3)
Exceptional Gain/(Loss)	3.63	4.21	(1.6)	0.0	0.0
Net Income	**159**	**211**	**243**	**248**	**255**
Tax	0.0	0.0	0.0	0.0	0.0
Minority Interest	0.0	0.0	0.0	0.0	0.0
Preference Dividend	0.0	0.0	0.0	0.0	0.0
Net Income After Tax	**159**	**211**	**243**	**248**	**255**
Total Return	299	211	568	248	255
Non-tax deductible Items	(126)	(119)	(307)	17.9	18.2
Net Inc available for Dist.	173	227	260	266	273
Growth & Ratio					
Revenue Gth (%)	1.9	31.3	14.8	1.9	3.0
N Property Inc Gth (%)	4.3	32.4	15.9	2.2	3.0
Net Inc Gth (%)	1.9	32.6	15.6	1.9	3.0
Dist. Payout Ratio (%)	100.0	100.0	100.0	100.0	100.0
Net Prop Inc Margins (%)	76.7	77.4	78.2	78.4	78.4
Net Income Margins (%)	55.2	55.7	56.1	56.1	56.1
Dist to revenue (%)	59.9	60.2	60.1	60.2	60.1
Managers & Trustee's fees	7.5	7.3	7.3	7.7	7.5
ROAE (%)	5.9	6.3	5.9	5.8	6.0
ROA (%)	3.7	3.9	3.7	3.7	3.8
ROCE (%)	4.7	4.9	4.7	4.7	4.8
Int. Cover (x)	5.1	4.9	4.8	4.8	4.8

Source: Company, DBS Bank

Increase in earnings due to improved occupancies, additional GFA at VivoCity, recovery of the Singapore office market.

Quarterly / Interim Income Statement (S$m)

FY Mar	4Q2017	1Q2018	2Q2018	3Q2018	4Q2018
Gross revenue	108	108	107	110	109
Property expenses	(24.3)	(23.6)	(22.8)	(23.7)	(24.6)
Net Property Income	83.3	84.2	84.4	86.0	84.3
Other Operating expenses	(7.8)	(7.9)	(7.9)	(8.0)	(7.9)
Other Non Opg (Exp)/Inc	(1.0)	(0.6)	0.95	(0.6)	0.30
Net Interest (Exp)/Inc	(15.4)	(15.5)	(15.9)	(16.3)	(16.2)
Exceptional Gain/(Loss)	0.0	0.0	0.0	0.0	0.0
Net Income	**59.1**	**60.3**	**61.6**	**61.1**	**60.5**
Tax	0.0	0.0	0.0	0.0	0.0
Minority Interest	0.0	0.0	0.0	0.0	0.0
Net Income after Tax	**59.1**	**60.3**	**61.6**	**61.1**	**60.5**
Total Return	194	60.3	61.6	61.1	385
Non-tax deductible Items	(130)	4.11	3.13	5.38	(319)
Net Inc available for Dist.	64.6	64.4	64.7	66.5	65.8
Growth & Ratio					
Revenue Gth (%)	(1)	0	(1)	2	(1)
N Property Inc Gth (%)	(1)	1	0	2	(2)
Net Inc Gth (%)	(4)	2	2	(1)	(1)
Net Prop Inc Margin (%)	77.4	78.1	78.7	78.4	77.4
Dist. Payout Ratio (%)	100.0	100.0	100.0	100.0	100.0

Balance Sheet (S$m)

FY Mar	2016A	2017A	2018A	2019F	2020F
Investment Properties	4,342	6,337	6,682	6,701	6,715
Other LT Assets	3.52	11.2	10.2	10.2	10.2
Cash & ST Invts	63.6	53.9	45.1	45.8	48.2
Inventory	0.0	0.0	0.0	0.0	0.0
Debtors	5.04	2.97	2.95	3.00	3.09
Other Current Assets	1.08	0.42	0.42	0.42	0.42
Total Assets	**4,415**	**6,406**	**6,741**	**6,761**	**6,777**
ST Debt	355	0.0	144	144	144
Creditor	51.8	71.5	83.2	84.0	86.5
Other Current Liab	5.15	0.39	0.15	0.15	0.15
LT Debt	1,197	2,330	2,186	2,205	2,218
Other LT Liabilities	42.8	46.6	44.7	44.7	44.7
Unit holders' funds	2,764	3,957	4,283	4,283	4,283
Minority Interests	0.0	0.0	0.0	0.0	0.0
Total Funds & Liabilities	**4,415**	**6,406**	**6,741**	**6,761**	**6,777**
Non-Cash Wkg. Capital	(50.8)	(68.5)	(80.0)	(80.7)	(83.1)
Net Cash/(Debt)	(1,488)	(2,276)	(2,284)	(2,303)	(2,314)
Ratio					
Current Ratio (x)	0.2	0.8	0.2	0.2	0.2
Quick Ratio (x)	0.2	0.8	0.2	0.2	0.2
Aggregate Leverage (%)	35.1	36.4	34.6	34.7	34.9
Z-Score (X)	1.3	1.3	1.4	1.4	1.4

Source: Company, DBS Bank

Decline in gearing due to asset revaluation gains

Cash Flow Statement (S$m)

FY Mar	2016A	2017A	2018A	2019F	2020F
Pre-Tax Income	159	211	243	248	255
Dep. & Amort.	0.0	0.0	0.0	0.0	0.0
Tax Paid	0.0	0.0	0.0	0.0	0.0
Associates &JV Inc/(Loss)	0.0	0.0	0.0	0.0	0.0
Chg in Wkg.Cap.	3.81	15.3	10.0	0.70	2.40
Other Operating CF	50.1	61.8	78.9	17.9	18.2
Net Operating CF	**213**	**288**	**332**	**267**	**276**
Net Invt in Properties	(7.4)	(1,853)	(18.5)	(19.0)	(13.7)
Other Invts (net)	0.0	0.0	0.0	0.0	0.0
Invts in Assoc. & JV	0.0	0.0	0.0	0.0	0.0
Div from Assoc. & JVs	0.0	0.0	0.0	0.0	0.0
Other Investing CF	0.46	0.34	0.35	0.0	0.0
Net Investing CF	**(6.9)**	**(1,853)**	**(18.2)**	**(19.0)**	**(13.7)**
Distribution Paid	(157)	(202)	(260)	(266)	(273)
Chg in Gross Debt	0.0	777	0.0	19.0	13.7
New units issued	0.0	1,034	0.0	0.0	0.0
Other Financing CF	(40.3)	(53.7)	(63.2)	0.0	0.0
Net Financing CF	**(197)**	**1,556**	**(323)**	**(247)**	**(260)**
Currency Adjustments	0.0	0.0	0.0	0.0	0.0
Chg in Cash	8.72	(9.7)	(8.8)	0.70	2.40
Operating CFPS (S cts)	9.81	9.48	11.2	9.20	9.43
Free CFPS (S cts)	9.64	(54.5)	10.9	8.56	9.04

Acquisition of MBC I

Source: Company, DBS Bank

Target Price & Ratings History

S.No.	Date of Report	Closing Price	12-mth Target Price	Rating
1:	26 Apr 17	1.59	1.62	BUY
2:	28 Jul 17	1.61	1.62	HOLD
3:	26 Oct 17	1.58	1.62	HOLD
4:	11 Dec 17	1.59	1.75	BUY
5:	19 Mar 18	1.58	1.75	BUY

Note : Share price and Target price are adjusted for corporate actions.

Source: DBS Bank

Analyst: Mervin SONG, CFA
Derek TAN

DBS Bank recommendations are based an Absolute Total Return* Rating system, defined as follows:
STRONG BUY (>20% total return over the next 3 months, with identifiable share price catalysts within this time frame)
BUY (>15% total return over the next 12 months for small caps, >10% for large caps)
HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)
FULLY VALUED (negative total return i.e. > -10% over the next 12 months)
SELL (negative total return of > -20% over the next 3 months, with identifiable catalysts within this time frame)

Share price appreciation + dividends

Completed Date: 25 Apr 2018 08:10:56 (SGT)
Dissemination Date: 25 Apr 2018 08:15:56 (SGT)

Sources for all charts and tables are DBS Bank unless otherwise specified.

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Singapore Company Guide
Singapore Airlines

Version 10 | Bloomberg: SIA SP | Reuters: SIAL.SI

Refer to important disclosures at the end of this report

DBS Group Research . Equity

14 Feb 2018

BUY (Upgrade from HOLD)

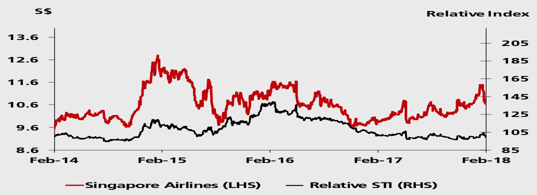
Last Traded Price (13 Feb 2018): S$10.62 (STI : 3,415.07)
Price Target 12-mth: S$12.00 (13% upside) (Prev S$10.55)

Analyst
Paul YONG, CFA +65 6682 3712 paulyong@dbs.com

What's New

- 3QFY18 net profit of S$286m beats expectations due to better-than-expected load factors and yields
- SIA should see better yields ahead as global economy continues its synchronised recovery
- Lifting FY18F/19F/20F forecasts by 18%/26%/28% respectively on higher yield assumptions
- Upgrade to BUY with S$12 target price

Price Relative



Forecasts and Valuation

FY Mar (S$ m)	2017A	2018F	2019F	2020F
Revenue	14,869	15,702	16,429	17,024
EBITDA	2,087	2,816	3,164	3,646
Pre-tax Profit	519	926	964	1,041
Net Profit	360	784	804	860
Net Pft (Pre Ex.)	360	769	804	860
Net Pft Gth (Pre-ex) (%)	(55.2)	113.3	4.6	6.9
EPS (S cts)	30.5	66.3	68.1	72.7
EPS Pre Ex. (S cts)	30.5	65.1	68.1	72.7
EPS Gth Pre Ex (%)	(55)	113	5	7
Diluted EPS (S cts)	29.9	65.0	66.7	71.3
Net DPS (S cts)	20.0	40.0	40.0	40.0
BV Per Share (S cts)	1,107	1,171	1,199	1,231
PE (X)	34.8	16.0	15.6	14.6
PE Pre Ex. (X)	34.8	16.3	15.6	14.6
P/Cash Flow (X)	5.0	4.7	4.0	3.6
EV/EBITDA (X)	5.2	4.4	4.6	4.5
Net Div Yield (%)	1.9	3.8	3.8	3.8
P/Book Value (X)	1.0	0.9	0.9	0.9
Net Debt/Equity (X)	CASH	CASH	0.1	0.2
ROAE (%)	2.8	5.8	5.7	6.0
Earnings Rev (%):		18	26	28
Consensus EPS (S cts):		49.9	46.1	43.3
Other Broker Recs:		B: 7	S: 2	H: 7

Source of all data on this page: Company, DBS Bank, Bloomberg Finance L.P

Fuller planes, better profits

Upgrade to BUY as we see SIA benefitting from a synchronised global economic recovery. We are more upbeat on the outlook for SIA as it should benefit from strong travel demand from the synchronised global economic recovery, which should keep load factors firm and improve passenger yields for its flagship segment. Meanwhile, the cargo business should also remain fairly strong as trade conditions stay fairly buoyant. Contributions from key subsidiaries Silkair and Scoot are also expected to improve as both regional and leisure air travel demand continue to grow.

Where we differ: We have higher-than-consensus forecasts as we have factored in a 2-3% yield improvement per annum in FY19F and FY20F for SIA's flagship passenger business.

Potential catalysts: SIA's share price could rerate if it can demonstrate a sustained improvement in revenues, either from increasing its passenger yield or growing other revenue streams and/or materially lower its operating costs without affecting product quality and revenues.

Longer-dated Brent hedges help mitigate higher jet fuel prices. While jet fuel prices have moved higher y-o-y, SIA is in a better position than most as it has put in longer-dated Brent hedges with maturities up to FYE March 2023, covering up to 47% of the group's projected annual fuel consumption, at an average price ranging from US$53-59 per barrel.

Valuation:
Our S$12 target price is based on 1x FY19 P/BV, which is at about its historical mean and reflects the improving ROE outlook for the company – from less than 3% in FY17 to 6% by FY20F.

Key Risks to Our View:
Vulnerable to demand shocks and/or fuel price increase. With operating margins razor thin, SIA is vulnerable to any demand shocks and/or a sharp increase in fuel prices.

At A Glance

Issued Capital (m shrs)	1,183
Mkt. Cap (Sm/USm)	12,559 / 9,493
Major Shareholders (%)	
Temasek Holdings	55.6
Free Float (%)	44.4
3m Avg. Daily Val (US$m)	11.9
ICB Industry : Consumer Services / Travel & Leisure	

DBS

ed: TH / sa:YM, PY, CS

WHAT'S NEW

3QFY18 earnings beat expectations on better-than-expected load factors and yields

3QFY18 profit jumps 62% y-o-y to S$286m. This was led by a 12.5% y-o-y improvement in EBIT to S$329m, the absence of a write-down of the Tigerair brand and trademark made last year of S$79m, as well as improved contributions from associates and joint ventures.

For 9M18, net profit grew by 43% y-o-y to S$711m, which is ahead of our expectations. Revenue grew 5.7% y-o-y to S$11.8bn.

Broad-based revenue growth in 3QFY18: There was a 6.1% y-o-y increase in revenue to S$4.1bn on revenue improvements in all business segments. At its flagship segment, a 4.4% y-o-y growth in passenger carriage more than offset a slight 1% decline in yield, which was better than we had expected, as load factor improved by 2.6pts to 81.6%. Cargo revenue was also up by nearly 17% y-o-y on 4.4% higher carriage and 12.1% better yield.

Stronger contributions from most segments. EBIT contributions from most of SIA's key segments were better y-o-y in 3QFY18 vs 3QFY17: S$155m vs S$151m for the flagship segment, S$19m vs S$30m for Silkair, S$43m vs S$29m for Scoot, S$88m vs S$53m for SIA Cargo, and S$18m vs S$25m for SIA Engineering.

Quarterly / Interim Income Statement (S$m)

FY Mar	3Q2017	2Q2018	3Q2018	% chg yoy	% chg qoq
Revenue	3,844	3,848	4,077	6.1	5.9
Cost of Goods Sold	(3,551)	(3,615)	(3,747)	5.5	3.7
Gross Profit	**293**	**233**	**329**	**12.5**	**41.6**
Other Oper. (Exp)/Inc	0.0	0.0	0.0	-	-
Operating Profit	**293**	**233**	**329**	**12.5**	**41.6**
Other Non Opg (Exp)/Inc	(88.0)	7.40	5.60	nm	(24.3)
Associates & JV Inc	15.3	(11.9)	21.2	38.6	(278.2)
Net Interest (Exp)/Inc	6.50	(5.5)	(7.2)	nm	(30.9)
Exceptional Gain/(Loss)	0.0	0.0	0.0	-	-
Pre-tax Profit	**227**	**223**	**350**	**54.4**	**57.2**
Tax	(13.8)	(22.8)	(49.3)	257.2	116.2
Minority Interest	(35.7)	(9.9)	(13.6)	61.9	37.4
Net Profit	**177**	**190**	**286**	**61.5**	**50.7**
Net profit bef Except.	177	190	286	61.5	50.7
EBITDA	615	651	783	27.4	20.3
Margins (%)					
Gross Margins	7.6	6.0	8.1		
Opg Profit Margins	7.6	6.0	8.1		
Net Profit Margins	4.6	4.9	7.0		

Source of all data: Company, DBS Bank

CRITICAL DATA POINTS TO WATCH

Critical Factors

Modest growth for SIA's flagship brand in the medium term. SIA's flagship passenger brand has not grown capacity in the last three years, given the global economic malaise over the same period. We expect passenger carriage growth for this segment to continue to be relatively muted – assuming 0.4% growth in FY18 and 1% growth in FY19.

Aside from its mature flagship brand, SIA has been investing and growing other airline brands within its portfolio. These include 1) its wholly owned regional arm Silkair, 2) Budget Aviation Holdings – which consists of the merged Scoot and Tigerair, and 3) investments in Virgin Australia, NokScoot and Vistara, a joint venture with Tata Sons, and which is a full-service airline in India.

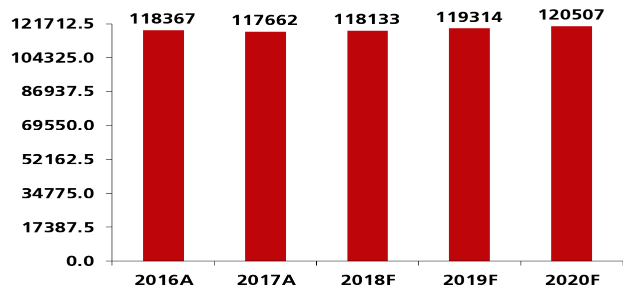
SIA's flagship passenger segment remains the main earnings driver. SIA's flagship brand has historically been its main profit source. Over the last five years, in which SIA Cargo was loss-making in four, SIA's flagship brand accounted for 62-99% of group EBIT. In FY17, the flagship brand contributed S$386m in EBIT while SIA Engineering's EBIT contribution was S$72m. Meanwhile, Silkair, Scoot and Tigerair contributed an aggregated EBIT of S$168m in FY17.

Load factors poised to remain high on strong travel demand and modest capacity growth. We project SIA's passenger load factor to remain firm at 81% in the years ahead, compared to 81.4% for the first nine months of financial year-end March 2018 given the improving global economic outlook and modest capacity increases planned for the flagship brand.

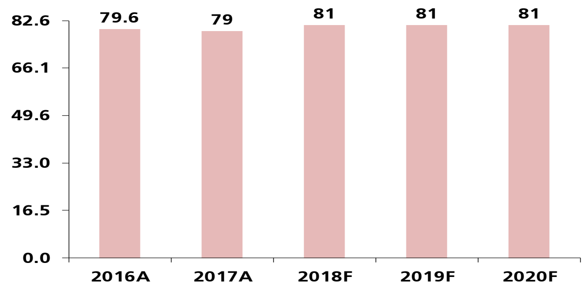
Yields should start to improve, while non-fuel costs are managed down. Reflecting higher fuel costs and stronger demand from a synchronised global economic recovery, we project yields for SIA's flagship segment to improve by c.3% in FY19F and 2% in FY20F. At the same time, owning more of its planes rather than leasing them, along with other cost optimisation initiatives, should help lower non-fuel costs.

Jet fuel prices could be a threat. Jet fuel prices have rebounded significantly since hitting lows in early 2016 and in recent weeks surged to over US$82/bbl before sliding down to US$76/bbl currently. We have assumed an average spot jet fuel price (before hedging) of US$78/bbl in FY19F and US$82/bbl in FY20F.

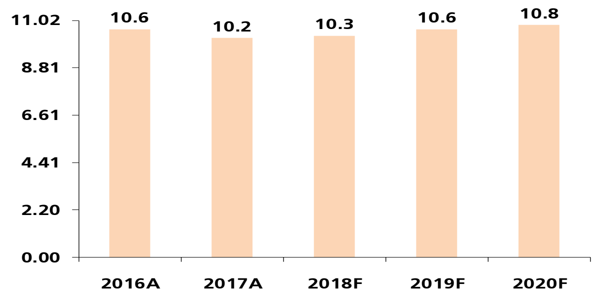
Available seat-km (m)



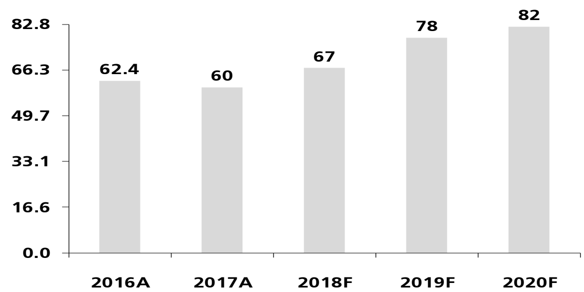
Passenger load factor



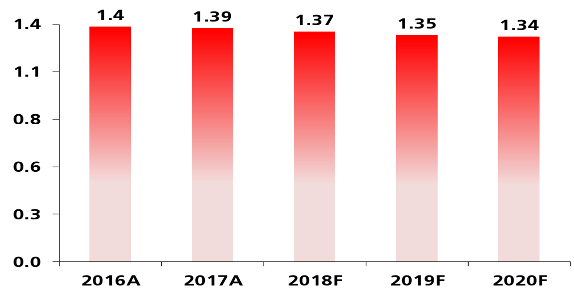
Passenger yield (cents/pkm)



Jet Fuel Price - US$ per barrel



US$/S$ exchange rate



Source: Company, DBS Bank

Balance Sheet:

Capital-intensive business, with over 50% of assets in aircraft and related equipment. At the end of FYE March 2017, SIA had total assets of S$24.7bn, of which S$16.4bn were net fixed assets (largely aircraft and related equipment), and nearly S$3.4bn in cash. On average, about 35% of SIA's aircraft are on operating leases, and it had a fleet of 182 passenger aircraft and seven cargo planes as at 30 September 2017.

Gearing up to fund its growth. At end-FY17, SIA's net cash position stood at c.S$2.1bn - its strong balance sheet provides a firm platform for SIA to grow its business, e.g. its joint venture in India, potential M&A, organic growth, or to weather any industry volatility (although SIA has never reported losses on a full-year basis since its listing). We project SIA to move into a net debt position by FYE March 2019 as it takes delivery of more planes and reduces the number of planes on leases, which will help improve EBIT margins.

Share Price Drivers:

Look for improving yields to drive better margins. With an improving macroeconomic outlook globally, we believe that strong demand for air travel, including for business travel, will help lift yields for SIA's flagship product, which should help margins for the carrier.

Upgrade to BUY, TP S$12. With ROE projected to improve from less than 3% in FY17 to 6% by FY20F, we peg SIA's target price at 1x FY19F P/BV to derive a S$12 target price. This represents the average of SIA's historical P/BV band.

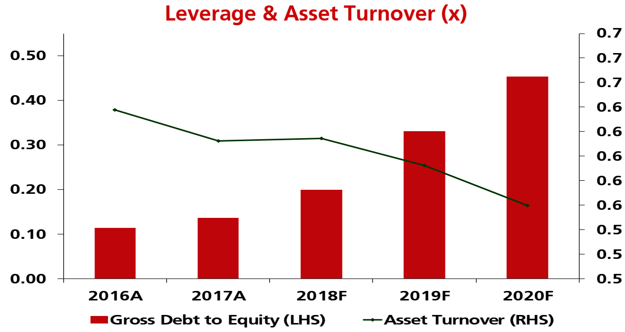
Key Risks:

Vulnerable to demand shocks and fuel price increase. SIA is susceptible to demand shocks such as economic outlook or pandemics, e.g. if the MERS situation hits Singapore like SARS did back in 2003. However, its share price did rebound quickly even during SARS, once the situation was under control. Fuel costs account for over a third of SIA's operating costs and should oil prices spike sharply, it would impact earnings.

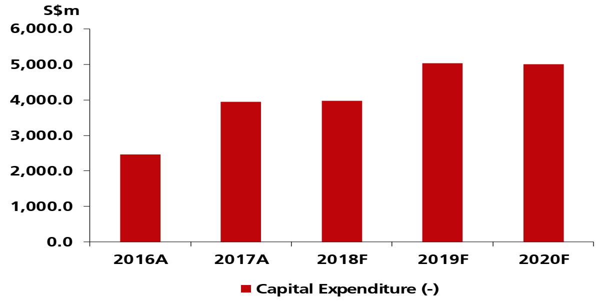
Company Background

Singapore Airlines is a leading global airline group based in Singapore. In the passenger service segment, SIA operates its flagship Singapore Airlines product, and also has SilkAir and Scoot, a low cost carrier, as subsidiaries. SIA also has an associate stake in Virgin Australia. Other business segments include air cargo (SIA Cargo) and SGX-listed SIA Engineering, which is involved in aircraft maintenance and repair.

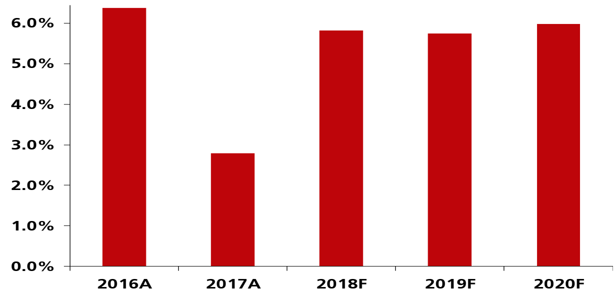
Leverage & Asset Turnover (x)



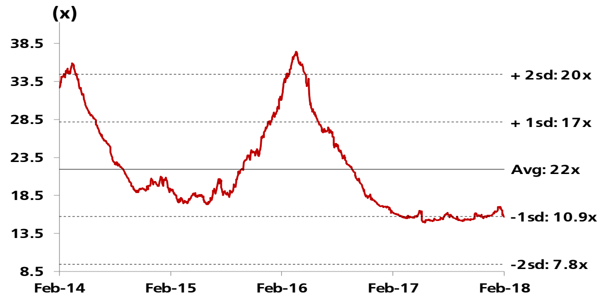
Capital Expenditure



ROE (%)



Forward PE Band (x)



PB Band (x)

Source: Company, DBS Bank

Key Assumptions

FY Mar	2016A	2017A	2018F	2019F	2020F
Available seat-km (m)	118,367	117,662	118,133	119,314	120,507
Passenger load factor	79.6	79.0	81.0	81.0	81.0
Passenger yield (cents/pkm)	10.6	10.2	10.3	10.6	10.8
Jet Fuel Price - US$ per barrel	62.4	60.0	67.0	78.0	82.0
US$/S$ exchange rate	1.40	1.39	1.37	1.35	1.34

Segmental Breakdown

FY Mar	2016A	2017A	2018F	2019F	2020F
Revenues (S$m)					
Airline Operations	14,812	14,403	15,240	15,962	16,557
SIA Engineering	1,114	1,104	1,094	1,107	1,107
Others	89.3	84.5	84.5	84.5	84.5
Eliminations	(776)	(723)	(717)	(725)	(725)
Total	**15,239**	**14,869**	**15,702**	**16,429**	**17,024**
EBIT (S$m)					
Airline Operations	568	558	813	914	1,053
SIA Engineering	104	72.0	75.0	77.0	79.0
Others	(2.1)	9.60	0.0	0.0	0.0
Eliminations	11.2	(16.5)	5.00	5.00	5.00
Total	**670**	**639**	**888**	**991**	**1,132**
EBIT Margins (%)					
Airline Operations	3.8	3.9	5.3	5.7	6.4
SIA Engineering	9.3	6.5	6.9	7.0	7.1
Others	(2.4)	11.4	0.0	0.0	0.0
Total	**4.4**	**4.3**	**5.7**	**6.0**	**6.6**

Income Statement (S$m)

FY Mar	2016A	2017A	2018F	2019F	2020F
Revenue	15,229	14,869	15,702	16,429	17,024
Cost of Goods Sold	(14,547)	(14,246)	(14,809)	(15,433)	(15,887)
Gross Profit	**681**	**623**	**893**	**996**	**1,137**
Other Opng (Exp)/Inc	0.0	0.0	0.0	0.0	0.0
Operating Profit	**681**	**623**	**893**	**996**	**1,137**
Other Non Opg (Exp)/Inc	259	(89.9)	10.0	0.0	0.0
Associates & JV Inc	11.7	(42.1)	15.0	25.0	30.0
Net Interest (Exp)/Inc	20.4	27.8	(7.2)	(57.1)	(126)
Exceptional Gain/(Loss)	0.0	0.0	15.0	0.0	0.0
Pre-tax Profit	**972**	**519**	**926**	**964**	**1,041**
Tax	(121)	(76.7)	(100)	(116)	(135)
Minority Interest	(47.4)	(81.5)	(42.0)	(44.0)	(46.0)
Preference Dividend	0.0	0.0	0.0	0.0	0.0
Net Profit	**804**	**360**	**784**	**804**	**860**
Net Profit before Except.	804	360	769	804	860
EBITDA	2,528	2,087	2,816	3,164	3,646
Growth					
Revenue Gth (%)	(2.2)	(2.4)	5.6	4.6	3.6
EBITDA Gth (%)	29.8	(17.5)	34.9	12.4	15.3
Opg Profit Gth (%)	66.4	(8.6)	43.4	11.5	14.1
Net Profit Gth (Pre-ex) (%)	141.3	(55.2)	113.3	4.6	6.9
Margins & Ratio					
Gross Margins (%)	4.5	4.2	5.7	6.1	6.7
Opg Profit Margin (%)	4.5	4.2	5.7	6.1	6.7
Net Profit Margin (%)	5.3	2.4	5.0	4.9	5.0
ROAE (%)	6.4	2.8	5.8	5.7	6.0
ROA (%)	3.4	1.5	3.1	2.9	2.8
ROCE (%)	3.4	2.9	4.1	4.1	4.2
Div Payout Ratio (%)	66.0	65.6	60.3	58.8	55.0
Net Interest Cover (x)	NM	NM	124.6	17.4	9.0

Source: Company, DBS Bank

Quarterly / Interim Income Statement (S$m)

FY Mar	3Q2017	4Q2017	1Q2018	2Q2018	3Q2018
Revenue	3,844	3,720	3,864	3,848	4,077
Cost of Goods Sold	(3,551)	(3,692)	(3,583)	(3,615)	(3,747)
Gross Profit	293	27.6	281	233	329
Other Oper. (Exp)/Inc	0.0	0.0	0.0	0.0	0.0
Operating Profit	293	27.6	281	233	329
Other Non Opg (Exp)/Inc	(88.0)	(165)	9.80	7.40	5.60
Associates & JV Inc	15.3	1.20	0.80	(11.9)	21.2
Net Interest (Exp)/Inc	6.50	3.70	1.50	(5.5)	(7.2)
Exceptional Gain/(Loss)	0.0	0.0	0.0	0.0	0.0
Pre-tax Profit	227	(132)	293	223	350
Tax	(13.8)	5.70	(49.2)	(22.8)	(49.3)
Minority Interest	(35.7)	(11.9)	(8.6)	(9.9)	(13.6)
Net Profit	177	(138)	235	190	286
Net profit bef Except.	177	(138)	235	190	286
EBITDA	615	266	702	651	783
Growth					
Revenue Gth (%)	5.3	(3.2)	3.9	(0.4)	5.9
EBITDA Gth (%)	27.5	(56.7)	163.9	(7.3)	20.3
Opg Profit Gth (%)	168.5	(90.6)	917.4	(17.2)	41.6
Net Profit Gth (Pre-ex) (%)	173.0	(178.0)	(270.0)	(19.2)	50.7
Margins					
Gross Margins (%)	7.6	0.7	7.3	6.0	8.1
Opg Profit Margins (%)	7.6	0.7	7.3	6.0	8.1
Net Profit Margins (%)	4.6	(3.7)	6.1	4.9	7.0

Balance Sheet (S$m)

FY Mar	2016A	2017A	2018F	2019F	2020F
Net Fixed Assets	14,144	16,433	18,603	21,588	24,196
Invts in Associates & JVs	1,058	1,217	1,057	907	762
Other LT Assets	1,851	1,370	1,370	1,370	1,370
Cash & ST Invts	4,641	3,920	3,524	3,300	3,478
Inventory	182	178	188	197	204
Debtors	1,222	1,145	1,209	1,265	1,311
Other Current Assets	750	457	457	457	457
Total Assets	23,847	24,720	26,407	29,083	31,777
ST Debt	212	42.0	42.0	42.0	42.0
Creditor	2,899	3,296	3,481	3,642	3,774
Other Current Liab	3,376	2,951	2,820	2,915	3,000
LT Debt	1,283	1,795	2,795	4,795	6,795
Other LT Liabilities	2,943	3,167	3,010	3,054	3,098
Shareholder's Equity	12,755	13,083	13,830	14,162	14,549
Minority Interests	378	387	429	473	519
Total Cap. & Liab.	23,847	24,720	26,407	29,083	31,777
Non-Cash Wkg. Capital	(4,122)	(4,467)	(4,447)	(4,639)	(4,803)
Net Cash/(Debt)	3,145	2,084	687	(1,536)	(3,359)
Debtors Turn (avg days)	32.5	29.0	27.4	27.5	27.6
Creditors Turn (avg days)	81.7	89.4	95.8	97.8	100.9
Inventory Turn (avg days)	5.4	5.2	5.2	5.3	5.5
Asset Turnover (x)	0.6	0.6	0.6	0.6	0.6
Current Ratio (x)	1.0	0.9	0.8	0.8	0.8
Quick Ratio (x)	0.9	0.8	0.7	0.7	0.7
Net Debt/Equity (X)	CASH	CASH	CASH	0.1	0.2
Net Debt/Equity ex MI (X)	CASH	CASH	CASH	0.1	0.2
Capex to Debt (%)	164.6	214.7	140.3	104.2	73.1
Z-Score (X)	2.2	2.0	1.9	1.7	1.6

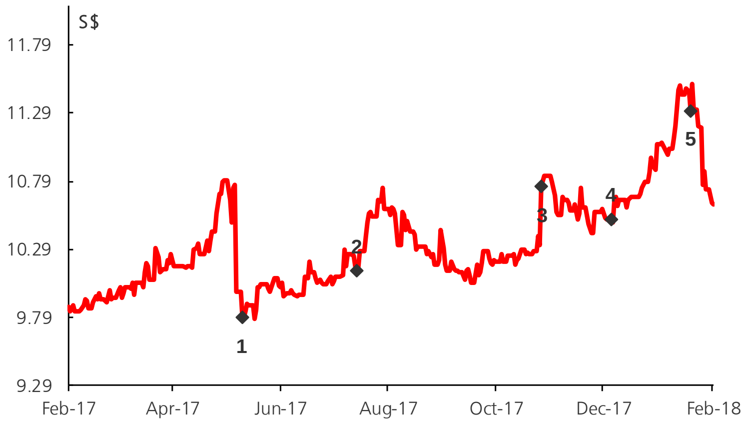
Source: Company, DBS Bank

Cash Flow Statement (S$m)

FY Mar	2016A	2017A	2018F	2019F	2020F
Pre-Tax Profit	972	519	926	964	1,041
Dep. & Amort.	1,576	1,596	1,854	2,099	2,436
Tax Paid	(40.9)	(50.5)	(322)	(100)	(116)
Assoc. & JV Inc/(loss)	(11.7)	42.1	(15.0)	(25.0)	(30.0)
Chg in Wkg.Cap.	403	96.8	202	177	144
Other Operating CF	53.5	289	0.0	0.0	0.0
Net Operating CF	**2,952**	**2,492**	**2,645**	**3,114**	**3,475**
Capital Exp.(net)	(2,462)	(3,943)	(3,980)	(5,040)	(5,000)
Other Invts.(net)	(213)	629	0.0	0.0	0.0
Invts in Assoc. & JV	(142)	(159)	0.0	0.0	0.0
Div from Assoc & JV	116	124	175	175	175
Other Investing CF	0.10	406	0.0	0.0	0.0
Net Investing CF	**(2,700)**	**(2,944)**	**(3,805)**	**(4,865)**	**(4,825)**
Div Paid	(359)	(559)	(236)	(473)	(473)
Chg in Gross Debt	(391)	218	1,000	2,000	2,000
Capital Issues	24.4	33.2	0.0	0.0	0.0
Other Financing CF	54.7	(43.3)	0.0	0.0	1.00
Net Financing CF	**(1,268)**	**(184)**	**764**	**1,527**	**1,527**
Currency Adjustments	(54.7)	43.3	0.0	0.0	0.0
Chg in Cash	(1,070)	(592)	(397)	(223)	178
Opg CFPS (S cts)	216	203	207	249	282
Free CFPS (S cts)	41.5	(123)	(113)	(163)	(129)

Source: Company, DBS Bank

Target Price & Ratings History



S.No.	Date of Report	Closing Price	12-mth Target Price	Rating
1:	22 May 17	9.79	10.10	HOLD
2:	26 Jul 17	10.13	10.10	HOLD
3:	08 Nov 17	10.75	10.30	HOLD
4:	17 Dec 17	10.51	10.30	HOLD
5:	31 Jan 18	11.31	10.55	HOLD

Note *: Share price and Target price are adjusted for corporate actions.*

Source: DBS Bank
Analyst: Paul YONG, CFA

DBS Bank recommendations are based an Absolute Total Return* Rating system, defined as follows:
STRONG BUY (>20% total return over the next 3 months, with identifiable share price catalysts within this time frame)
BUY (>15% total return over the next 12 months for small caps, >10% for large caps)
HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)
FULLY VALUED (negative total return i.e. > -10% over the next 12 months)
SELL (negative total return of > -20% over the next 3 months, with identifiable catalysts within this time frame)

Share price appreciation + dividends

Completed Date: 14 Feb 2018 07:40:59 (SGT)
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Singapore Post

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DBS Group Research . Equity

14 May 2018

BUY

Last Traded Price (11 May 2018): S$1.36 (**STI :** 3,570.17)
Price Target 12-mth: S$1.55 (14% upside) (Prev S$1.61)

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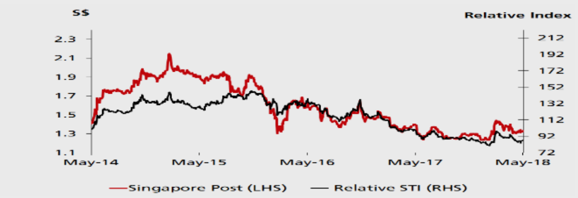
What's New

- Clarity on terminal dues impact as international mail margins affected
- Look forward to a better FY19F
- Declared final dividend of 2 Scts (total dividend of 3.5 Scts, unchanged from last year)
- Maintain BUY, TP revised to S$1.55 on lower earnings

Price Relative



Forecasts and Valuation

FY Mar (S$m)	2017A	2018A	2019F	2020F
Revenue	1,348	1,464	1,581	1,700
EBITDA	202	199	227	248
Pre-tax Profit	55.0	146	163	184
Net Profit	33.4	126	130	147
Net Pft (Pre Ex.)	122	112	130	147
Net Pft Gth (Pre-ex) (%)	(10.8)	(8.3)	16.4	12.8
EPS (S cts)	1.52	5.59	5.75	6.49
EPS Pre Ex. (S cts)	5.57	4.94	5.75	6.49
EPS Gth Pre Ex (%)	(12)	(11)	16	13
Diluted EPS (S cts)	1.52	5.59	5.75	6.49
Net DPS (S cts)	3.50	3.50	4.00	4.00
BV Per Share (S cts)	62.0	62.0	63.7	66.2
PE (X)	89.2	24.3	23.6	21.0
PE Pre Ex. (X)	24.4	27.5	23.6	21.0
P/Cash Flow (X)	14.9	15.5	19.9	13.8
EV/EBITDA (X)	16.7	17.1	15.0	13.4
Net Div Yield (%)	2.6	2.6	2.9	2.9
P/Book Value (X)	2.2	2.2	2.1	2.1
Net Debt/Equity (X)	CASH	CASH	CASH	CASH
ROAE (%)	2.6	9.2	9.2	10.0
Earnings Rev (%):			(9)	(4)
Consensus EPS (S cts):			5.7	6.4
Other Broker Recs:		B: 7	S: 2	H: 1

Source of all data on this page: Company, DBS Bank, Bloomberg Finance L.P

All eyes on postal segment

Postal operating profit is bottoming out, maintain BUY with revised TP of S$1.55. We believe that its postal operating profit, which forms the bulk of the group's operating profit, is bottoming as (1) SPOST has placed in mitigating measures to counter the impact of introduction of terminal dues in 4Q18, and (2) international mail volume from eCommerce continues to accelerate. SPOST has also demonstrated strong execution by narrowing losses at TradeGlobal, which we project to achieve breakeven in FY20F. While competition is still intense in the logistics segment in Hong Kong, it should benefit from growth in Singapore. SPOST eCommerce-related revenue grew 27% y-o-y and now forms c.60% of total revenue. With c.3% yield with FY18-20F earnings CAGR of 14%, SingPost is a unique play on Ecommerce-logistics growth in Asia.

Where we differ: We maintain our positive view over the long-term growth outlook for SPOST. We believe that SPOST, being the dominant player locally with low cost of capital, is well-positioned to establish market leadership in Singapore's fragmented eCommerce logistics sector (~20% market share in parcels). Our earnings estimates are above consensus currently.

Potential catalyst: In the near term, any turnaround at SPOST's eCommerce and logistics segments would be a major catalyst for its share price. In the medium term, we believe the potential divestment of SPC mall could be a catalyst.

Valuation:

Maintain **BUY**, TP of S$1.55. We use DCF valuation (WACC 6%, terminal growth rate 3%) to derive our TP of S$1.55. The stock offers a yield of c.3% at the current share price.

Key Risks to Our View:

Impact of higher terminal dues (increase in international small packets postage rates cannot negate rise in terminal dues) and further escalation of eCommerce losses could depress SPOST's bottom line in the medium term. The opening of Alibaba's regional logistics hub also posts downside risk for SPOST.

At A Glance

Issued Capital (m shrs)	2,263
Mkt. Cap (Sm/USm)	3,077 / 2,303
Major Shareholders (%)	
Temasek Holdings Private Ltd	21.9
Alibaba Investment Ltd	14.5
Free Float (%)	63.6
3m Avg. Daily Val (US$m)	5.7
ICB Industry : Industrials / Industrial Transportation	

WHAT'S NEW

Mixed set of results; look towards a better 2019

Revenues continue to grow; underlying net profit declines on lower operating profits. Headline revenues continued to see healthy growth of 13.5% y-o-y to S$367.5m (-11.0% q-o-q as the last quarter saw peak demand) across all three segments. NPAT came in at S$20.5m, reversing from a loss last year. However, adjusting for gains on one-off and exceptional items, including S$12.7m fair value gains on investment properties, underlying net profit declined to S$15.3m (-28.6% y-o-y, -43.4% q-o-q). Notably, higher professional fees and lower gains on trade-related foreign exchange differences have also impacted operating profit for 4Q18 by c.S$9.4m.

More clarity as terminal dues impact kicked in during the quarter; possible bottoming out of postal operating profit. Postal segment revenues continued to see strong growth on the back of international mail volumes, coming in at S$161.7m (+18.2% y-o-y, -2.6% q-o-q). Changes in international terminal dues took place from Jan 2018 and impacted the margins for international mail as the industry went through a period of adjustment during the quarter, even as SPOST increased postage rates for international small packets previously. The quarter saw sharp decline in operating profit margins to 20.5% (4Q17: 26.9%, 3Q18: 24.2%) while operating profit declined to S$33.2m (-9.8% y-o-y, -17.2% q-o-q).

Mitigation measures put in place during the quarter as a result. According to management, several mitigating measures were put in place during the quarter, such as price increases in certain mail segments and geographies, as well as increase in bilateral negotiations with various entities. SPOST expects that the full extent of the measures will be seen progressively in the new few quarters.

Logistics segment saw better contributions from last-mile entities. Revenue grew 2.1% q-o-q and declined 9.2% y-o-y to S$157.9m as last-mile entities (Couriers Please, SP Parcels, Famous) saw better performance against revenue decline in Quantium Solutions. Operating profit improved to S$5.3m during the quarter (+103.8 y-o-y, +8.2% q-o-q). There continued to be competitive pressures for Quantium Solutions in Hong Kong which is likely to be sustained in the near future. The eCommerce Logistics Hub saw improved utilisation at its warehouse to 96% (3Q18: 87%).

eCommerce on track for improved performance. While the eCommerce segment's operating losses widened from S$3.8m in 3Q18 to S$5.8m this quarter, the second consecutive quarter, revenue continues to grow to replace loss of two major customers a year ago. TradeGlobal continues to add customers over the course of the year as it lost two major customers last year. Management has indicated that on a year-on-year basis, losses have narrowed and it is on track to execute the turnaround business plans for TradeGlobal.

SingPost Centre retail mall saw higher committed occupancy. Committed occupancy improved from 85.9% in 3Q18 to 95.6% in 4Q18. We estimate the mall to generate ~S$19m per annum (operating profit level) going forward.

Dividends unchanged from last year. SPOST has declared a final dividend of 2 Scts this quarter, bringing total dividends for full year to 3.5 Scts, unchanged from last year.

Outlook and recommendation

Postal remains key segment to watch. We believe that with the roll-out of the various mitigating measures, SPOST may see another one to two quarters of volatility in postal operating profit before it stabilises. For the full year, international mail revenues saw an accelerated growth of 37.4% (FY17: 17.4%) against an accelerated decline in domestic mail of 6.6% (FY17: 5.4%) and we forecast growth to continue at c.30% in FY19F against domestic mail's declining revenue of c.9%.

A better FY19F. We expect gross margins to see an improvement from FY18 which was hit by (1) terminal dues impact without the full mitigating measures in place, (2) absence of one-off provisions for logistics segment in FY19F, and (3) narrowing eCommerce losses. In the meantime, we believe SPOST is continuing to drive cost leadership across its various entities and this is likely to translate into operational efficiencies.

Maintain BUY, revised TP of S$1.55. We maintain our BUY call on SPOST with revised TP of S$1.55 as we reduce our earnings for FY19F/20F by 9%/4%, reduce our operating margin assumptions for the postal segment and envisage operating breakeven for the eCommerce segment to be in FY20F instead of FY19F. The stock is currently trading at c.23x forward PE which is near -2SD of its 4-year mean (since the start of its business transformation), supported by c.3% yield with FY18-20F earnings CAGR of 14%.

Quarterly / Interim Income Statement (S$m)

FY Mar	4Q2017	3Q2018	4Q2018	% chg yoy	% chg qoq
Revenue	324	413	368	13.5	(11.0)
Cost of Goods Sold	(405)	(382)	(342)	(15.6)	(10.5)
Gross Profit	(81.7)	30.3	25.2	nm	(16.9)
Other Oper. (Exp)/Inc	16.1	16.8	16.0	(1.0)	(5.0)
Operating Profit	(65.6)	47.1	41.2	(162.8)	(12.6)
Other Non Opg (Exp)/Inc	0.0	0.0	0.0	-	-
Associates & JV Inc	(1.9)	0.95	(6.2)	(227.9)	nm
Net Interest (Exp)/Inc	(5.4)	(3.1)	(3.6)	33.8	(13.8)
Exceptional Gain/(Loss)	0.0	0.0	0.0	-	-
Pre-tax Profit	(72.8)	44.9	31.4	nm	(30.1)
Tax	1.77	(2.9)	(10.9)	nm	269.5
Minority Interest	5.55	1.02	3.40	(38.7)	232.2
Net Profit	(65.5)	43.0	24.0	nm	(44.3)
Net profit bef Except.	(65.5)	43.0	24.0	nm	(44.3)
EBITDA	(42.0)	63.1	50.1	nm	(20.7)
Margins (%)					
Gross Margins	(25.2)	7.3	6.9		
Opg Profit Margins	(20.2)	11.4	11.2		
Net Profit Margins	(20.2)	10.4	6.5		

Source of all data: Company, DBS Bank

CRITICAL DATA POINTS TO WATCH

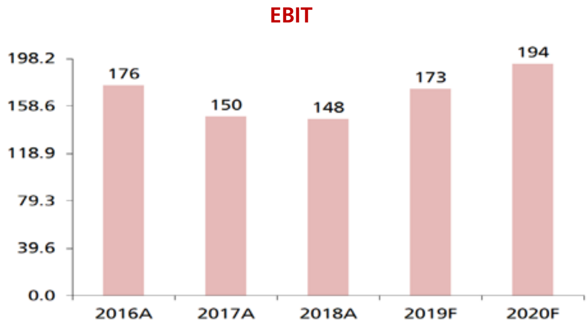
Critical Factors

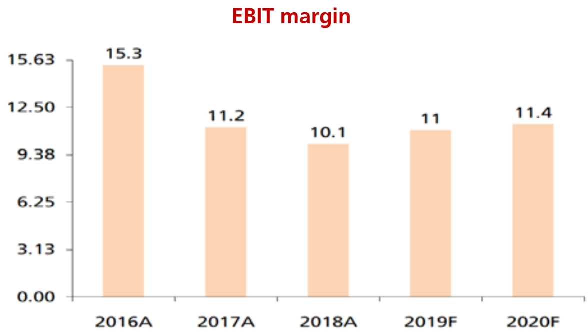
Terminal dues impact kicked in, mail segment's profitability may be bottoming out. SPOST's domestic mail volumes are declining, which is limiting the revenue performance of the mail segment. Though higher international mail volumes, due to cross-border eCommerce, is offsetting most of the decline, lower margins of international mail, compared to domestic mail, is causing margin compression in the segment. As a result, mail segment's profitability has remained relatively stagnant. This is likely to continue over the next 12 months. However, should there be faster growth in cross-border eCommerce, following the completion of its eCommerce logistics hub, and this could provide some support to the mail segment's profitability. Margin compression accelerated in FY17 and may have bottomed out in the last quarter at 20.5% as the impact of terminal dues kicked in. SPOST has embarked on mitigating measures due to the rise in terminal dues.

eCommerce segment turnaround. eCommerce operating income is a critical driver of SPOST's share price (see Appendix 1). Operating losses rose in 3Q17 due to foreign acquisitions, TradeGlobal and Jagged Peak. Jagged Peak has lost a couple of key customers in the US, impacting revenue and profitability. In addition, labour shortages and higher wage costs have also impeded profit improvements. Due to the disappointing results, SPOST took a S$185m impairment on TradeGlobal in 4Q17. Ongoing cost concerns and revenue losses could also have a negative impact in the medium term. As seen during the year, we believe losses are narrowing on a y-o-y basis and turnaround is in place.

Logistics may continue to face headwinds due to competition. We note that SPOST's logistics business is currently facing tight operating margins and intense competition in Hong Kong, and see this trend continuing in the short term. However, SPOST's eCommerce logistics hub started its operations in November 2016 have seen healthy utilisation which has helped SPOST in terms of cost management through automation through periods of peak demand. Management has been keen to point out there will be limited immediate savings through the project, with synergies realised only with scaling up. SPOST has seen healthy utilisation for both its warehouse space (from 45% when it first started to 96% currently) and parcel-sorting machine (21% utilisation).

Singapore Post Centre (SPC) mall rentals to supplement earnings in FY18/19. The redeveloped SPC mall will have a net lettable area of ~176,500sqf. Full rental income contribution for the mall will kick in come FY19. We estimate the mall to generate ~S$19m per annum (operating profit level).





Source: Company, DBS Bank

Appendix 1: A look at Company's listed history – what drives its share price?

Operating income as critical factor

Remarks

Historically, operating income (excluding one-offs) has been useful to explain share price direction and movements.

While rental income would supplement earnings from FY18 with the completion of SPC mall's redevelopment, we believe that going forward, ability to establish market leadership in Singapore's eCommerce logistics sector and impending turnaround of SPOST's eCommerce and logistics segments, would be the key catalysts for SPOST's share price.

SPOST's share price movement

We note that SPOST's businesses have undergone a transformation since 2013 as it embarks on diversification plans on top of its core mail business

Source: Bloomberg Finance L.P., DBS Bank

Balance Sheet:

Conservative balance sheet management. Following a 3-year period of capex and acquisitions, SPOST is likely to see muted investments and M&A activity in FY18 with an emphasis on scaling up its existing businesses. The management has also revised its dividend policy to better reflect the transitional period the company is going through. At present, SPOST has relatively minimal net gearing, following the recent share issue to Alibaba. As a result, with a lower dividend payout, we are likely to see a stronger balance sheet for SPOST in the near term.

Share Price Drivers:

Lower dividend payments weigh on share price. SPOST has revised its dividend policy from a stable dividend payment to one based on a payout ratio of 60-80% of earnings, paid quarterly. Management has cited ongoing investments in eCommerce and other growth projects as the reason for the change. Based on muted earnings growth in the next 12-18 months, we believe the dividend payment for FY19 could come close to 4 Scts as per our current projections.

Potential growth due to Alibaba. SPOST issued 107.55m new shares to Alibaba, as agreed in 2015 strategic partnership, increasing Alibaba's SPOST holding to 14.41% for S$187m. Alibaba also acquired 34% in Quantium Solutions International (SPOST's subsidiary), for S$86.2m in October 2016. Despite the delays, the investment indicates that SPOST's strategic partnership with Alibaba is starting to move forward. This could indicate a potential improvement in SPOST's volumes due to Alibaba as the eCommerce platform looks to expand its regional presence.

Key Risks:

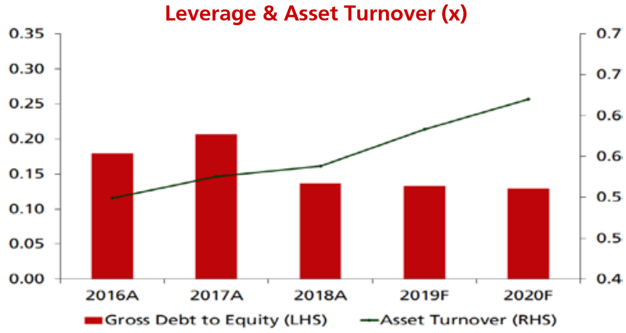
Competition could hamper logistics growth. The logistics segment's profit growth is dependent upon increasing volumes, and tough competition in the logistics segment due to international logistics players could potentially hamper logistics and profit growth in the near term.

Further escalation of eCommerce losses. The eCommerce segment is facing losses following the acquisitions of Jagged Peak and TradeGlobal. A further escalation of losses in these businesses could depress SPOST's bottom line in the medium term.

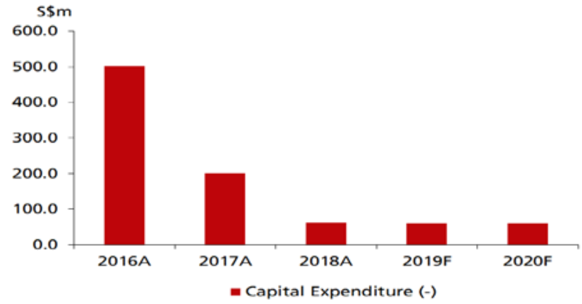
Company Background

Singapore Post Limited (SPOST) is the national postal service provider in Singapore. Besides providing domestic and international postal and courier services, the company also offers end-to-end eCommerce logistics solutions.

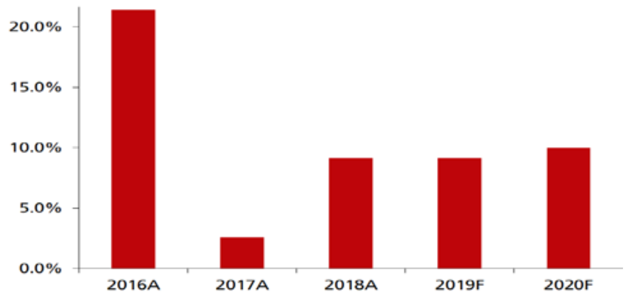
Leverage & Asset Turnover (x)



Capital Expenditure



ROE (%)



Forward PE Band (x)

PB Band (x)

Source: Company, DBS Bank

Key Assumptions

FY Mar	2016A	2017A	2018A	2019F	2020F
Sales growth	25.2	17.0	8.63	7.98	7.54
EBIT	176	150	148	173	194
EBIT margin	15.3	11.2	10.1	11.0	11.4

Segmental Breakdown

FY Mar	2016A	2017A	2018A	2019F	2020F
Revenues (S$m)					
Postal	536	544	626	727	829
Logistics	626	637	664	679	697
E-commerce	98.4	266	266	274	280
Others	(109)	(99.5)	(91.3)	(98.6)	(106)
Total	1,152	1,348	1,464	1,581	1,700
Operating Profit (S$m)					
Postal	157	151	145	145	157
Logistics	38.8	23.6	10.4	13.6	13.9
E-commerce	(7.3)	(33.8)	(16.7)	(7.0)	3.00
Others	95.4	31.1	19.7	21.5	19.9
Total	*284	*172	*158	173	194
Operating Profit Margins					
Postal	29.3	27.7	23.1	20.0	19.0
Logistics	6.2	3.7	1.6	2.0	2.0
E-commerce	(7.4)	(12.7)	(6.3)	(2.6)	1.1
Others	0.0	0.0	0.0	0.0	0.0
Total	24.7	12.7	10.8	11.0	11.4

* includes exceptional items

Income Statement (S$m)

FY Mar	2016A	2017A	2018A	2019F	2020F
Revenue	1,152	1,348	1,464	1,581	1,700
Cost of Goods Sold	(1,024)	(1,244)	(1,375)	(1,473)	(1,573)
Gross Profit	128	104	89.4	108	127
Other Opng (Exp)/Inc	48.5	46.4	58.9	65.5	67.2
Operating Profit	176	150	148	173	194
Other Non Opg (Exp)/Inc	0.0	0.0	0.0	0.0	0.0
Associates & JV Inc	9.07	(1.2)	(3.1)	(1.0)	(1.0)
Net Interest (Exp)/Inc	(10.4)	(5.7)	(13.4)	(9.8)	(9.8)
Exceptional Gain/(Loss)	112	(88.7)	14.5	0.0	0.0
Pre-tax Profit	287	55.0	146	163	184
Tax	(34.2)	(25.2)	(30.7)	(32.6)	(36.7)
Minority Interest	(4.1)	3.69	10.9	0.0	0.0
Preference Dividend	0.0	0.0	0.0	0.0	0.0
Net Profit	249	33.4	126	130	147
Net Profit before Except.	137	122	112	130	147
EBITDA	217	202	199	227	248
Growth					
Revenue Gth (%)	25.2	17.0	8.6	8.0	7.5
EBITDA Gth (%)	(3.9)	(7.1)	(1.6)	14.0	9.2
Opg Profit Gth (%)	(4.7)	(14.7)	(1.5)	17.1	12.0
Net Profit Gth (Pre-ex) (%)	(10.3)	(10.8)	(8.3)	16.4	12.8
Margins & Ratio					
Gross Margins (%)	11.1	7.7	6.1	6.8	7.5
Opg Profit Margin (%)	15.3	11.2	10.1	11.0	11.4
Net Profit Margin (%)	21.6	2.5	8.6	8.2	8.6
ROAE (%)	21.5	2.6	9.2	9.2	10.0
ROA (%)	10.8	1.3	4.6	4.8	5.4
ROCE (%)	8.2	3.8	5.3	6.4	7.0
Div Payout Ratio (%)	60.6	229.6	62.7	69.5	61.6
Net Interest Cover (x)	17.0	26.5	11.1	17.8	19.9

Source: Company, DBS Bank

Quarterly / Interim Income Statement (S$m)

FY Mar	4Q2017	1Q2018	2Q2018	3Q2018	4Q2018
Revenue	324	354	355	413	368
Cost of Goods Sold	(405)	(328)	(338)	(382)	(342)
Gross Profit	**(81.7)**	**25.7**	**17.0**	**30.3**	**25.2**
Other Oper. (Exp)/Inc	16.1	17.5	14.3	16.8	16.0
Operating Profit	**(65.6)**	**43.2**	**31.3**	**47.1**	**41.2**
Other Non Opg (Exp)/Inc	0.0	0.0	0.0	0.0	0.0
Associates & JV Inc	(1.9)	(2.8)	4.92	0.95	(6.2)
Net Interest (Exp)/Inc	(5.4)	(3.9)	(2.8)	(3.1)	(3.6)
Exceptional Gain/(Loss)	0.0	0.0	0.0	0.0	0.0
Pre-tax Profit	**(72.8)**	**36.5**	**33.3**	**44.9**	**31.4**
Tax	1.77	(8.4)	(8.5)	(2.9)	(10.9)
Minority Interest	5.55	2.85	3.59	1.02	3.40
Net Profit	**(65.5)**	**31.0**	**28.5**	**43.0**	**24.0**
Net profit bef Except.	(65.5)	31.0	28.5	43.0	24.0
EBITDA	(42.0)	55.1	51.3	63.1	50.1
Growth					
Revenue Gth (%)	(12.4)	9.4	0.2	16.4	(11.0)
EBITDA Gth (%)	nm	nm	(6.9)	23.2	(20.7)
Opg Profit Gth (%)	(272.1)	(165.9)	(27.6)	50.7	(12.6)
Net Profit Gth (Pre-ex) (%)	(308.9)	(147.3)	(8.1)	51.1	(44.3)
Margins					
Gross Margins (%)	(25.2)	7.2	4.8	7.3	6.9
Opg Profit Margins (%)	(20.2)	12.2	8.8	11.4	11.2
Net Profit Margins (%)	(20.2)	8.7	8.0	10.4	6.5

Includes exceptional items of S$8.6m

Balance Sheet (S$m)

FY Mar	2016A	2017A	2018A	2019F	2020F
Net Fixed Assets	517	566	532	538	544
Invts in Associates & JVs	146	118	115	114	113
Other LT Assets	1,384	1,426	1,451	1,451	1,451
Cash & ST Invts	127	367	314	318	391
Inventory	4.50	4.45	0.96	0.96	0.96
Debtors	210	199	272	233	251
Other Current Assets	26.2	37.6	40.0	40.0	40.0
Total Assets	**2,416**	**2,717**	**2,725**	**2,695**	**2,791**
ST Debt	71.1	149	23.5	23.5	23.5
Creditor	386	395	526	463	498
Other Current Liab	44.0	43.2	46.9	40.3	44.4
LT Debt	209	215	221	221	221
Other LT Liabilities	144	157	118	118	118
Shareholder's Equity	1,550	1,706	1,750	1,789	1,846
Minority Interests	11.1	51.6	40.4	40.4	40.4
Total Cap. & Liab.	**2,416**	**2,717**	**2,725**	**2,695**	**2,791**
Non-Cash Wkg. Capital	(189)	(197)	(260)	(229)	(251)
Net Cash/(Debt)	(154)	2.63	70.1	74.1	147
Debtors Turn (avg days)	59.3	55.4	58.7	58.3	52.0
Creditors Turn (avg days)	135.8	119.6	127.2	127.2	115.6
Inventory Turn (avg days)	N/A	N/A	N/A	N/A	N/A
Asset Turnover (x)	0.5	0.5	0.5	0.6	0.6
Current Ratio (x)	0.7	1.0	1.1	1.1	1.2
Quick Ratio (x)	0.7	1.0	1.0	1.0	1.1
Net Debt/Equity (X)	0.1	CASH	CASH	CASH	CASH
Net Debt/Equity ex MI (X)	0.1	CASH	CASH	CASH	CASH
Capex to Debt (%)	178.8	54.9	25.5	24.6	24.6
Z-Score (X)	3.0	2.7	2.8	2.8	2.9

Reduced debt position in FY18

Source: Company, DBS Bank

Cash Flow Statement (S$m)

FY Mar	2016A	2017A	2018A	2019F	2020F
Pre-Tax Profit	287	55.0	146	163	184
Dep. & Amort.	31.9	53.2	54.2	54.2	54.2
Tax Paid	(30.6)	(30.5)	(31.2)	(39.2)	(32.6)
Assoc. & JV Inc/(loss)	(9.1)	1.18	3.10	1.00	1.00
Chg in Wkg.Cap.	3.52	9.73	58.4	(24.2)	17.3
Other Operating CF	(152)	112	(32.5)	0.0	0.0
Net Operating CF	**131**	**200**	**198**	**155**	**224**
Capital Exp.(net)	(501)	(200)	(62.1)	(60.0)	(60.0)
Other Invts.(net)	0.0	0.0	0.0	0.0	0.0
Invts in Assoc. & JV	29.5	84.9	0.52	0.0	0.0
Div from Assoc & JV	2.17	2.58	0.93	0.0	0.0
Other Investing CF	12.5	22.7	11.9	0.0	0.0
Net Investing CF	**(457)**	**(89.6)**	**(48.8)**	**(60.0)**	**(60.0)**
Div Paid	(167)	(120)	(45.4)	(90.5)	(90.5)
Chg in Gross Debt	41.2	84.0	(119)	0.0	0.0
Capital Issues	17.4	190	0.0	0.0	0.0
Other Financing CF	(23.5)	(24.5)	(37.8)	0.0	0.0
Net Financing CF	**(132)**	**130**	**(202)**	**(90.5)**	**(90.5)**
Currency Adjustments	0.0	0.0	0.0	0.0	0.0
Chg in Cash	(458)	240	(52.6)	4.03	73.0
Opg CFPS (S cts)	5.94	8.69	6.18	7.90	9.11
Free CFPS (S cts)	(17.2)	0.01	6.01	4.18	7.23

Expect capex to come down post completion of SPC Mall

Source: Company, DBS Bank

Target Price & Ratings History

S.No.	Date of Report	Closing Price	12-mth Target Price	Rating
1:	15 May 17	1.34	1.26	HOLD
2:	25 Jul 17	1.34	1.26	HOLD
3:	04 Aug 17	1.32	1.26	HOLD
4:	10 Oct 17	1.28	1.26	HOLD
5:	16 Nov 17	1.30	1.23	HOLD
6:	04 Dec 17	1.28	1.23	HOLD
7:	02 Feb 18	1.38	1.61	BUY
8:	05 Mar 18	1.33	1.61	BUY

***Note**: Share price and Target price are adjusted for corporate actions.*

Source: DBS Bank
Analyst: Rui Wen LIM
Sachin MITTAL

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BUY (>15% total return over the next 12 months for small caps, >10% for large caps)
HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)
FULLY VALUED (negative total return i.e. > -10% over the next 12 months)
SELL (negative total return of > -20% over the next 3 months, with identifiable catalysts within this time frame)

Share price appreciation + dividends

Completed Date: 14 May 2018 09:15:35 (SGT)
Dissemination Date: 14 May 2018 09:44:42 (SGT)

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Singtel

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DBS Group Research . Equity

7 May 2018

BUY

Last Traded Price (4 May 2018): S$3.50 (STI : 3,545.38)
Price Target 12-mth: S$3.85 (10% upside) (Prev S$4.30)

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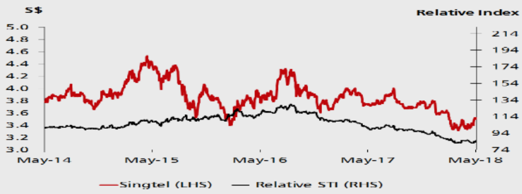
What's New

- FY18F/19F earnings trimmed 5%/10% mainly due to expected drop in Telkomsel's contribution
- Expect 4Q18F underlying profit of S$824m (-17% y-o-y, -8% q-o-q) on 17 May due to weak Telkomsel & Bharti
- Maintain BUY with revised TP of S$3.85; core business is trading at a 20-30% discount to its peers

Price Relative



Forecasts and Valuation

FY Mar (S$m)	2017A	2018F	2019F	2020F
Revenue	16,711	17,609	18,209	18,763
EBITDA	8,017	7,567	7,716	8,300
Pre-tax Profit	5,364	6,795	4,863	5,284
Net Profit	3,853	5,494	3,540	3,795
Net Pft (Pre Ex.)	3,929	3,560	3,540	3,795
Net Pft Gth (Pre-ex) (%)	3.0	(9.4)	(0.6)	7.2
EPS (S cts)	23.6	33.6	21.7	23.2
EPS Pre Ex. (S cts)	24.1	21.8	21.7	23.2
EPS Gth Pre Ex (%)	1	(9)	(1)	7
Diluted EPS (S cts)	23.6	33.6	21.7	23.2
Net DPS (S cts)	17.5	20.5	17.6	17.5
BV Per Share (S cts)	173	189	190	196
PE (X)	14.8	10.4	16.1	15.1
PE Pre Ex. (X)	14.5	16.1	16.1	15.1
P/Cash Flow (X)	15.6	11.8	13.9	13.4
EV/EBITDA (X)	8.5	8.7	8.7	8.1
Net Div Yield (%)	5.0	5.9	5.0	5.0
P/Book Value (X)	2.0	1.9	1.8	1.8
Net Debt/Equity (X)	0.4	0.3	0.3	0.3
ROAE (%)	14.5	18.6	11.4	12.1
Earnings Rev (%):		(5)	(10)	N/A
Consensus EPS (S cts):		23.9	24.4	26.2
Other Broker Recs:		B: 15	S: 0	H: 7

Source of all data on this page: Company, DBS Bank, Bloomberg Finance L.P

4Q18F preview; negatives in the price

Offers 6% earnings CAGR over FY18-20F with a decent 5% dividend yield. Singtel is a unique telco-tech play which is beginning to reap the benefits of digital investments made 3-4 years ago and is ahead of its regional peers on digital transformation efforts. However, we trim our FY18F/19F earnings by 5%/10% mainly on the back of a potential drop in contribution from Telkomsel which might lead to sluggish 4Q18F and 1Q19F results. Excluding the market cap of its associates, Singtel's core business is trading at only 5.7x FY19F EV/EBITDA at ~20-30% discount to its regional and local peers.

Where we differ: Digital businesses should not be valued like a telco business. Due to EBITDA losses incurred in the Digital Life! and cyber security businesses, the market ascribes a negative value to them. We argue that these businesses are worth S$0.14 per share based on ~1x revenue multiple as scale is the key for such businesses and Singtel has already shown the capability to turn around a loss-making digital advertising business into positive EBITDA territory.

Potential catalysts: Final DPS of 10.7 Scts and sequential earnings growth from 2Q19F onwards. Singtel has a track record of maintaining final DPS at 10.7 Scts, ex-dividend in early August. Earnings to grow from 2Q19 onwards due to recovery of Telkomsel and resumption of National Broadband Network (NBN) migration fee in Australia.

Valuation:

We use a sum-of-the-parts (SOTP) valuation for Singtel to derive a target price of S$3.85 with a key change being sharply lower valuation accounting for ~20% of our Singtel's valuation versus ~30% earlier.

Key Risks to Our View:

Bear-case TP of S$3.20 if core and associates disappoint. If core EBITDA were to decline 3% annually over FY18-20F due to new mobile entrants (base case of 3% CAGR) and if Bharti's and Telkomsel's market value were to drop 20% each, our fair value could decline to S$3.20.

At A Glance

Issued Capital (m shrs)	16,329
Mkt. Cap (Sm/USm)	57,151 / 42,819
Major Shareholders (%)	
Temasek Holdings	52.3
Free Float (%)	47.7
3m Avg. Daily Val (US$m)	65.6

ICB Industry : Telecommunications / Fixed Line Telecommunications

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WHAT'S NEW

Telkomsel weakness

We trim Singtel's FY18F/19F earnings by 5%/10%. This is mainly on the back of a potential drop in contribution from Telkomsel leading to potentially weak 4Q18F and 1Q19F results.

Telkomsel has contributed ~30% of Singtel's post-tax earnings so far this year. The Indonesian telecom sector is suffering due to mandatory SIM registration exercise and huge cannibalisation of voice and SMS revenue by cheap data.

Telkomsel's 1Q18 earnings (4Q18F for Singtel) were 15% below our expectations as mobile revenue fell ~2% y-o-y versus expectations of 2-3% growth. There are signs of improved competition after the SIM card registration cut-off date of 1 May 2018 as smaller players cannot continue to sell cheap SIM cards. This will be positive for Telkomsel in the longer term. However, the damage has been done and industry repair will take some time. We have cut our FY19F/20F earnings for Telkomsel by 20%/27% on the back of slower industry revenue growth assumption.

Associate Pre-tax contributions (S$m)

	FY17A	FY18F	FY19F	FY20F
Telkomsel	1422	1,367	1,262	1,260
Bharti Airtel	580	262	253	602
AIS	420	450	534	569
Globe	288	248	255	287
NetLink	159	74	15	20
Others	**72**	**50**	**57**	**64**
Total	**2,941**	**2,450**	**2,375**	**2,802**

YoY Growth	FY18F	FY19F	FY20F
Telkomsel	-4%	-8%	0%
Bharti Airtel	-55%	-3%	138%
AIS	7%	19%	7%
Globe	-14%	3%	13%
NetLink	-53%	-79%	31%
Others	-31%	13%	13%
Overall	-17%	-3%	18%

Source: DBS Bank for Telkomsel, SingPost and NetLink, DBS Vickers for AIS, Consensus Blomberg estimates for Bharti, Globe and others

4Q18F Earnings Preview
Currency S$m

FY MAR (m)	4Q17	3Q18	4Q18F	YoY	QoQ
Sales	4308	4603	4404	2%	-4%
Cost of Goods Sold	-3061	-3391	-3167		
Gross Profit	1247	1212	1237		
Other Operating Income	61	81	25		
Depreciation & Amortisation	-585	-586	-601	3%	3%
EBIT	723	707	661	-9%	-6%
Interest Income			48		
Interest Expense	-82	-81	-137		
Share of Associates' or JV Income	720	553	505	-30%	-9%
Exceptional Gains/(Losses)	-25	-8	11		
Pretax Profit	1336	1171	1088		
Tax	-381	-290	-234		
Minority Interests	8	8	-30		
Net Profit	963.0	890.0	824	-14%	-7%
Underlying profit	988.0	898.0	824	-17%	-8%

Source: Company for past results, DBS Bank for 4Q18F

Core operating profit and associate contribution to hurt 4Q18F results to be reported on 17 May. Potential 6% drop in EBIT sequentially due to an absence of ~A$70m of NBN migration fee in 4Q18F which was temporarily halted in November 2017. Potential 9% drop in pre-tax associate contribution with Telkomsel's contribution falling to ~S$300m in 4Q18F versus S$330m in 3Q18 and Bharti's contribution falling to S$8m versus S$38m in 3Q18 offset partially by rise in contribution from Advance Info Service (AIS) Thailand.

Digital businesses should be valued separately on different metrics. Due to EBITDA losses incurred in the Digital Life! and cyber security businesses, the market ascribes a negative value to them. We argue that these businesses are worth S$0.14 per share based on ~1x revenue multiple as scale is the key for such businesses and Singtel has already shown its capabilities by turning around a loss-making digital advertising business into positive EBITDA territory.

Valuation of Digital businesses

Digital business	FY19F Rev (S$m)	EV/EBITDA	EV
Cyber security	648	1.46	948
Digital Life	1,356	0.98	1,322
			2,270
Per share (S$)			**0.14**

Source: DBS Bank

Digital Life is worth S$1.3bn. We have valued Singtel's Digital Life business at S$1.3bn using a mix of Singtel's adtech acquisition prices and EV/Revenue multiples of recent industry acquisitions. To be conservative, we have used a 25% discount to account for any valuation premium for Singtel's ad tech acquisition prices. Similarly, we apply a 25% discount to EV/revenue multiple of 1.31x for recent industry acquisitions in order to be conservative. Using the average value of the two methods, we have arrived at an enterprise value of S$1.3bn for Singtel's Digital Life business.

Singtel cybersecurity business is worth ~S$1bn. We have valued Singtel's cybersecurity business at S$948m using a mix of Trustwave acquisition price and Industry EV/Revenue multiples. To be conservative, we have used a 25% discount to account for any valuation premium for Trustwave's acquisition price. Similarly, we have used a 10% liquidity discount on the industry EV/revenue multiple of 2.51x to be conservative. Using the average value of the two methods, we have arrived at an enterprise value of S$948m for Singtel's cybersecurity business.

Final DPS of 10.7 Scts is a potential catalyst. Singtel has a track record of maintaining its final DPS at 10.7 Scts and interim dividend of 6.8 Scts over the last three years. We think that Singtel is trying to maintain or enhance dividends and its earnings payout ratio of 70-75% has some room to increase in FY19F.

Sequential earnings growth from 2Q19F onwards could be another catalyst. Earnings are likely to grow from 2Q19 onwards due to recovery of Telkomsel and resumption of National Broadband Network (NBN) migration fee in Australia. Telkomsel is expected to stage a comeback in earnings as competition improves after the SIM card registration cut-off date of 1 May 2018. Besides, Singtel could also benefit from resumption of NBN migration fee of A$60-70m each quarter in Australia which was stopped by the regulator in November 2017 due to the technical issues but is expected to resume between June and August 2018.

Core business trading at 20-30% valuation discount versus local peers is hard to justify. The market is attaching a significant valuation discount to the core plus digital business of Singtel, possibly over concerns on the magnitude of losses in the digital segment in the past. This has resulted in Singtel's core plus digital businesses trading at only 5.7x FY19F EV/EBITDA versus ~7x for M1 and ~9x for StarHub, despite having a much more resilient business model.

Singtel's Valuation Breakdown

Singtel's Valuation	Value (S$ m)	Per share (S$)	Valuation Basis
Singapore core business	16,981		7x FY 19F EV/EBITDA based on regional average
Australia core business	20,412		7x FY 19F EV/EBITDA based on regional average
Digital Business	2,270		
Net Debt	-9,829		
Equity value of the core business	29,817	1.69	
Regional telco investments		2.12	Closing Share prices, 15x PE for Telkomsel assuming 10% y-o-y drop in earnings
Share value		**3.85**	

Source: Company, DBS Bank

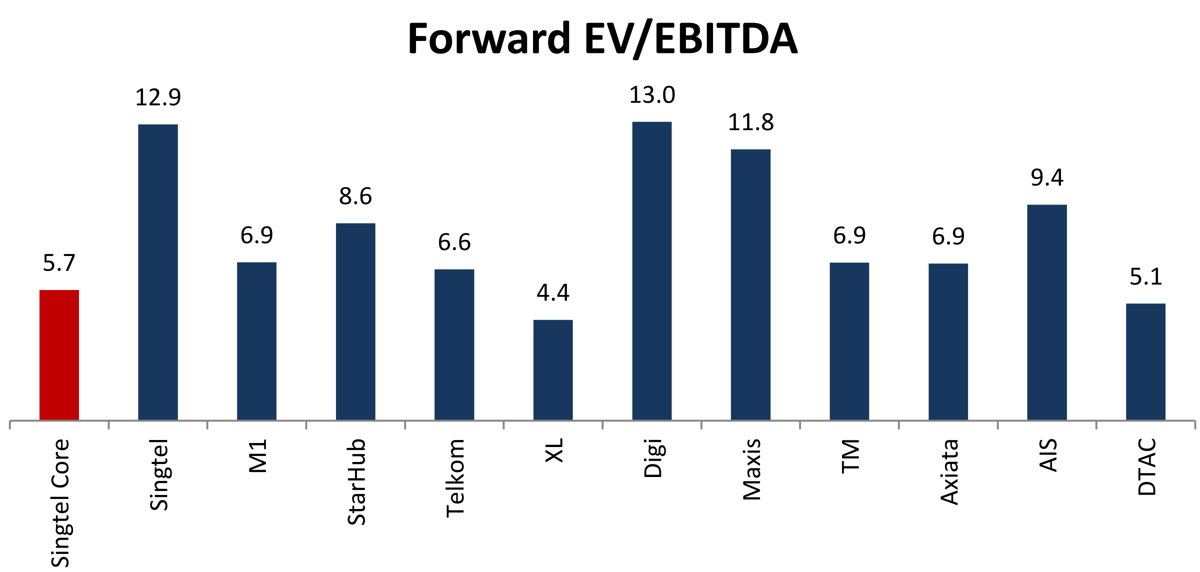
We have valued Singtel's Singapore and Australia operations at FY19F EV/EBITDA valuations of 7x each. Valuations of regional associates: AIS and SingPost are based on our fair value estimates, while the valuation of Telkomsel is based on an FY19F PE (March YE) of 15x as we assume a 10% y-o-y drop in Telkomsel's earnings. We have used the current share prices to determine the carrying value of other associate holdings of Singtel.

Associates' valuation contribution based on the current market capitalisation

Associates	Total shares	Share price	Exchange rate	Stake	Value (S$ m)	Per Share (S$)
Airtel	3,997	395.00	50.50	40%	12,350	0.70
AIS	2,973	208.00	23.80	32%	8,263	0.47
Globe*	132	1540.00	38.90	47%	2,466	0.14
Singpost	2,273	1.33	1.00	22%	657	0.04
	FY19F (Mar YE) Profit (Rpb)	FY19F PER		Stake	Value (S$ m)	
Telkomsel	27,000	15	10,505	35%	13,494	0.77
Total					37,230	
Holding company discount (5%)					-1,861	
Net investment holdings					**35,368**	**2.12**

Based on our estimates, Singtel's core plus digital business is trading at ~28% valuation discount vs. regional peers.
Source: DBS Bank, company

Singtel's Core business is trading at a significant discount to regional peers



Source: DBS Bank, Reuters

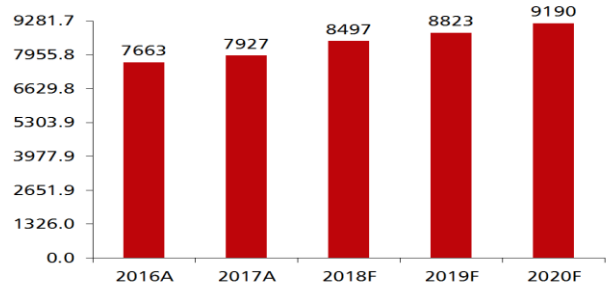
CRITICAL DATA POINTS TO WATCH

Critical Factors

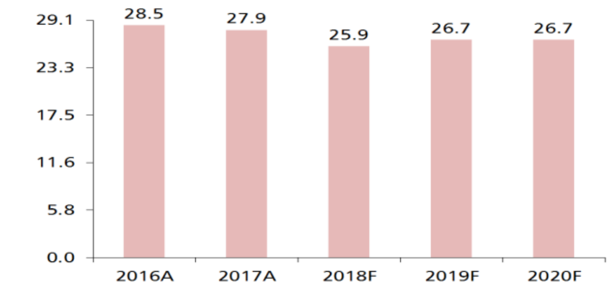
Associate pre-tax contribution to decline 3% in FY19F before rising 18% in FY20F. Going forward, we expect AIS and SingPost to drive growth in FY19F partially offsetting weakness from Telkomsel and Bharti. AIS benefits from benign competition in Thailand while SingPost is likely to benefit from rising volume of e-commerce international mail and parcels. Meanwhile, Telkomsel and Bharti are facing earnings headwinds due to competitive pressures and industry trends. Bharti is likely to see some decline in FY19F earnings due to an aggressive Jio in India while Telkomsel is burdened with continued reliance on legacy revenues. However, Bharti could be the key growth driver in FY20F due to industry consolidation in India.

Low single-digit EBITDA growth due to growth in Australia and lower losses in Digital Life. We expect the core business of Singtel (Singapore + Optus) to see low single-digit EBITDA growth in FY19F similar to what we have seen in FY18 so far. Singtel could also benefit from resumption of the NBN migration fee of A$ 60-70m each quarter in Australia. The project was halted by the regulator in November 2017 due to technical issues. However, NBN migration is expected to resume between June and August 2018, resultantly boosting Singtel's EBITDA. In addition, Digital Life segment is expected to make significant reductions on its EBITDA losses, which should lift Singtel's overall EBITDA.

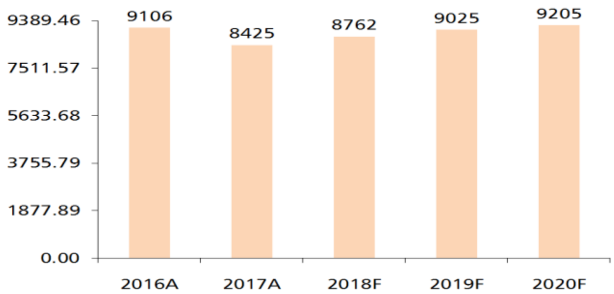
Singapore Revenue (S$m)



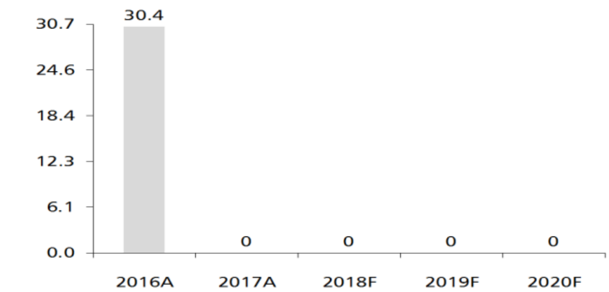
Singapore EBITDA Margin (%)



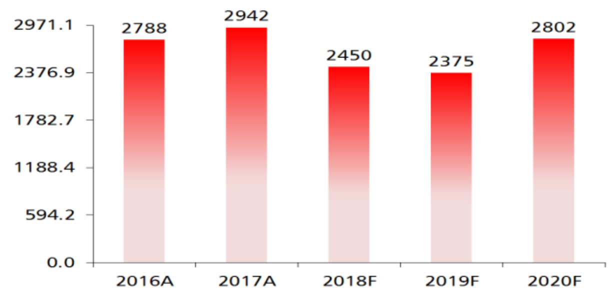
Optus Revenue (A$m)



Optus EBITDA Margin (%)



Associate pre-tax earnings (S$m)

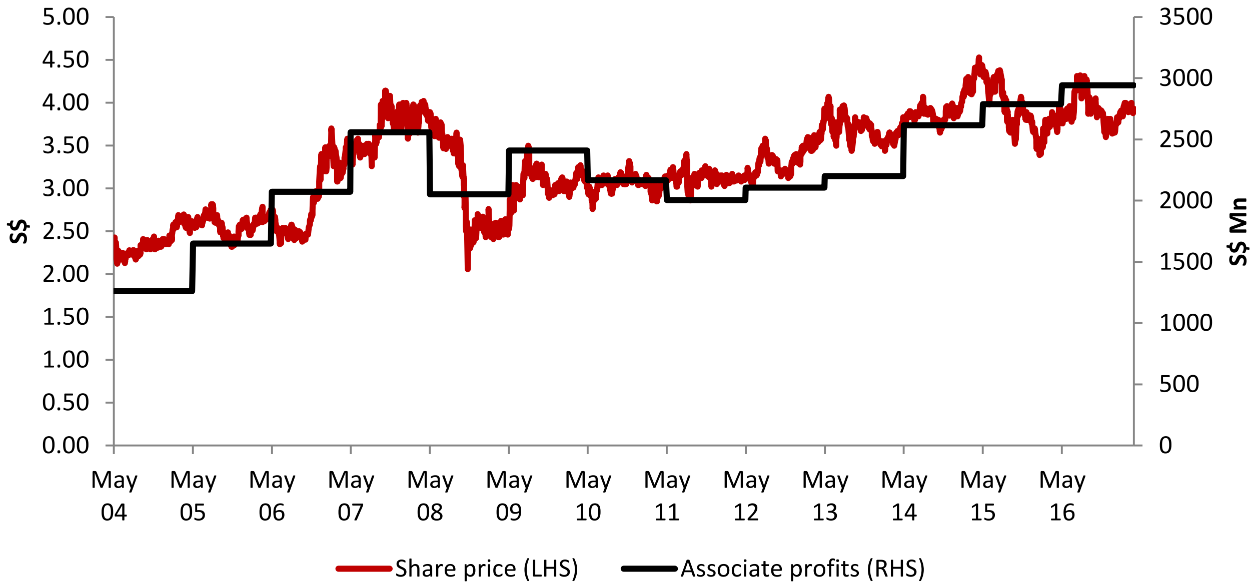


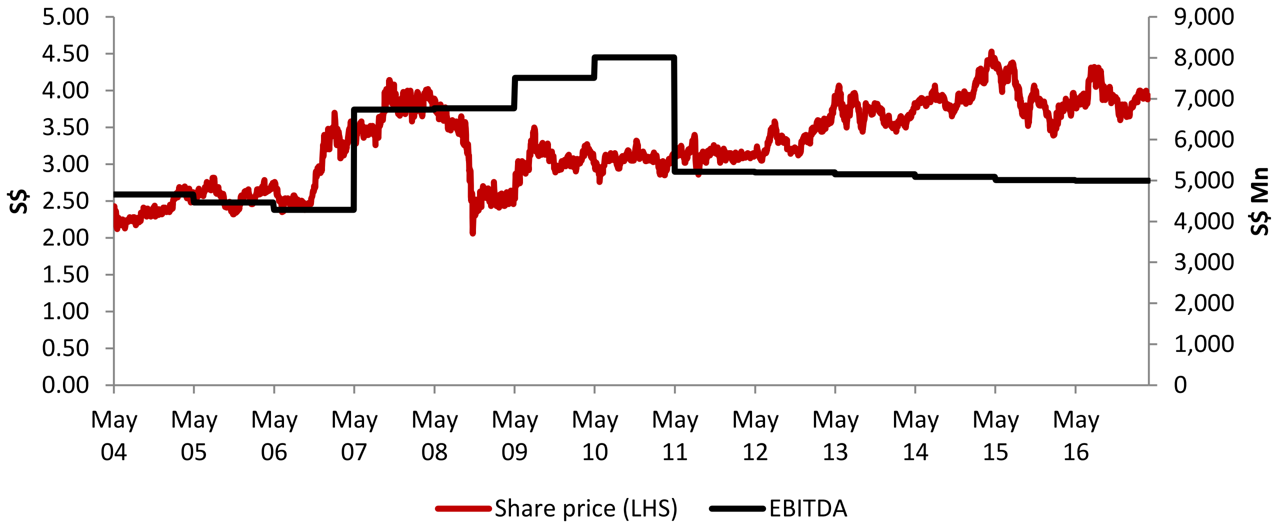
Source: Company, DBS Bank

Appendix 1: A look at Company's listed history – what drives its share price?

Associate profits are the most critical factor followed by the EBITDA. In the critical factor analysis, we conducted over the past ~10 years, Singtel's share price seems to follow Associate profits and EBITDA. Singtel's share price change had a positive correlation of 0.20 with the associate profit and a positive correlation of 0.22 with EBITDA. The two factors are directly indicative of the profitability and cash flow generation of Singtel and are very important factors in understanding the overall health of the firm.

Share price vs associate profits





Source: Company, DBS Bank

Balance Sheet:

Strong balance sheet. This is reflected in FY18F net debt-to-EBITDA of only ~1.3x giving ample room to Singtel to invest in new business opportunities and/or raise its earnings payout ratio from 70-75% now. If Singtel were to leverage to 2x net debt-to-EBITDA, it implies the company could borrow another S$5bn if it wants to. In our view, Singtel should be able to sustain its dividends at the current level even if earnings were to decline due to any reason.

Share Price Drivers:

Sequential growth in earnings from 2Q19F onwards. We see potential catalyst for earnings growth at Singtel from 2Q19 with the recovery of Telkomsel and resumption of NBN migration fees in Australia. Telkomsel could benefit from a benign competitive environment in Indonesia from 2Q18, with the end of the ongoing prepaid SIM registration period. Singtel could also benefit from resumption of NBN migration fee of AS60-70m each quarter in Australia which was stopped by the regulator in November 2017 due to the technical issues but is expected to resume between June and August 2018.

Final and interim dividends. Singtel has a track record of maintaining final DPS at 10.7 Scts and interim dividend at 6.8 Scts over the last three years. We think that Singtel is trying to maintain or enhance dividends and its earnings payout ratio of 70-75% has some room to increase in FY19F.

Key Risks:

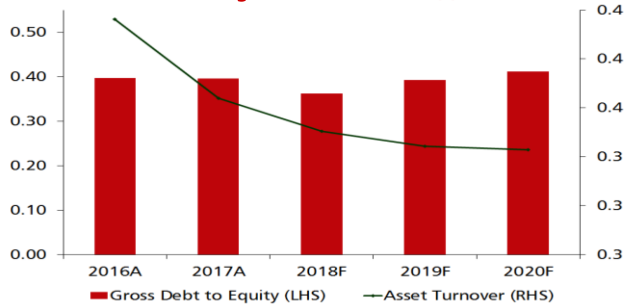
Bear-case valuation for Singtel is S$3.20. If core EBITDA were to decline 3% each year over FY18-20F due to new mobile entrants (base case of 3% CAGR) and if Bharti's and Telkomsel's market value were to drop 20% each, our fair value could decline to S$3.20.

Bull-case valuation for Singtel is S$4.40. In our bull case, we have assumed core EBITDA to grow 6% each over FY18-20F despite new mobile entrants in Singapore and Australia and if Bharti's market value were to increase 20% along with a 10% growth in Telkomsel's earnings for FY18F, our fair value could rise to S$4.40.

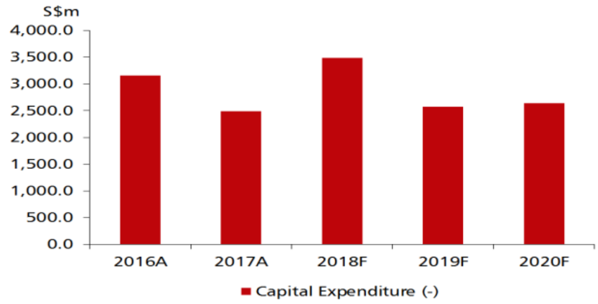
Company Background

Singtel is the largest telecom operator in Singapore and its Australian subsidiary Optus is the second largest operator in Australia. Singtel also has substantial stakes in telcos in the region - Telkomsel in Indonesia, Bharti in India, AIS in Thailand and Globe in Philippines.

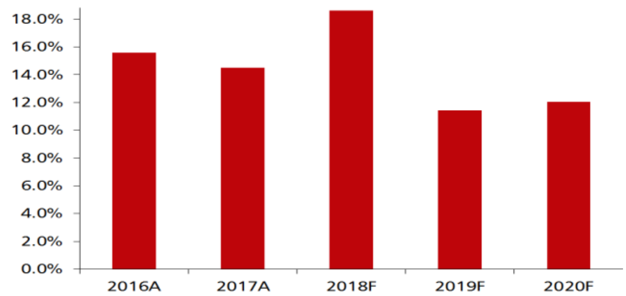
Leverage & Asset Turnover (x)



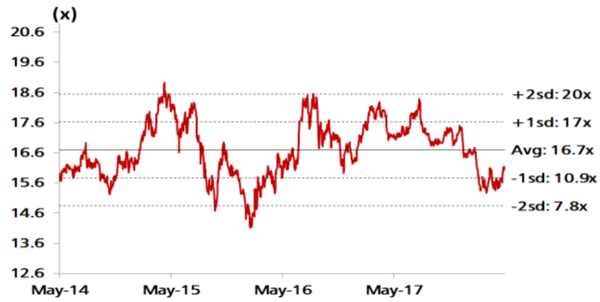
Capital Expenditure



ROE (%)



Forward PE Band (x)



PB Band (x)

Source: Company, DBS Bank

Key Assumptions

FY Mar	2016A	2017A	2018F	2019F	2020F
Singapore Revenue (S$m)	7,663	7,927	8,497	8,823	9,190
Singapore EBITDA Margin	28.5	27.9	25.9	26.7	26.7
Optus Revenue (A$m)	9,106	8,425	8,762	9,025	9,205
Optus EBITDA Margin (%)	30.4	0.0	0.0	0.0	0.0
Associate pre-tax earnings	2,788	2,942	2,450	2,375	2,802

Income Statement (S$m)

FY Mar	2016A	2017A	2018F	2019F	2020F
Revenue	16,961	16,711	17,609	18,209	18,763
Cost of Goods Sold	(12,097)	(11,929)	(12,719)	(13,095)	(13,491)
Gross Profit	**4,864**	**4,782**	**4,891**	**5,114**	**5,272**
Other Opng (Exp)/Inc	(2,001)	(2,024)	(2,131)	(2,295)	(2,425)
Operating Profit	**2,864**	**2,759**	**2,759**	**2,820**	**2,847**
Other Non Opg (Exp)/Inc	44.0	77.4	0.0	0.0	0.0
Associates & JV Inc	2,788	2,942	2,450	2,375	2,802
Net Interest (Exp)/Inc	(309)	(337)	(348)	(332)	(365)
Exceptional Gain/(Loss)	56.9	(76.6)	1,934	0.0	0.0
Pre-tax Profit	**5,444**	**5,364**	**6,795**	**4,863**	**5,284**
Tax	(1,586)	(1,533)	(1,291)	(1,313)	(1,480)
Minority Interest	12.5	21.7	(10.0)	(10.0)	(10.0)
Preference Dividend	0.0	0.0	0.0	0.0	0.0
Net Profit	**3,871**	**3,853**	**5,494**	**3,540**	**3,795**
Net Profit before Except.	3,814	3,929	3,560	3,540	3,795
EBITDA	7,845	8,017	7,567	7,716	8,300
Growth					
Revenue Gth (%)	(1.5)	(1.5)	5.4	3.4	3.0
EBITDA Gth (%)	1.2	2.2	(5.6)	2.0	7.6
Opg Profit Gth (%)	(2.2)	(3.7)	0.0	2.2	0.9
Net Profit Gth (Pre-ex) (%)	(0.6)	3.0	(9.4)	(0.6)	7.2
Margins & Ratio					
Gross Margins (%)	28.7	28.6	27.8	28.1	28.1
Opg Profit Margin (%)	16.9	16.5	15.7	15.5	15.2
Net Profit Margin (%)	22.8	23.1	31.2	19.4	20.2
ROAE (%)	15.6	14.5	18.6	11.4	12.1
ROA (%)	9.0	8.4	10.9	6.7	6.9
ROCE (%)	5.5	4.9	5.1	4.5	4.4
Div Payout Ratio (%)	72.1	74.2	61.0	81.0	75.5
Net Interest Cover (x)	9.3	8.2	7.9	8.5	7.8

Source: Company, DBS Bank

Associate contributions to decline in FY19F before recovering in FY20F

Quarterly / Interim Income Statement (S$m)

FY Mar	3Q2017	4Q2017	1Q2018	2Q2018	3Q2018
Revenue	4,410	4,308	4,232	4,370	4,603
Cost of Goods Sold	(3,236)	(3,061)	(3,036)	(3,125)	(3,391)
Gross Profit	1,174	1,247	1,197	1,245	1,212
Other Oper. (Exp)/Inc	(515)	(524)	(499)	(552)	(505)
Operating Profit	659	723	698	693	707
Other Non Opg (Exp)/Inc	0.0	0.0	0.0	0.0	0.0
Associates & JV Inc	694	720	734	659	553
Net Interest (Exp)/Inc	(41.0)	(82.0)	(87.8)	(91.0)	(81.0)
Exceptional Gain/(Loss)	(3.0)	(25.0)	(28.5)	1,960	(8.0)
Pre-tax Profit	1,309	1,336	1,315	3,221	1,171
Tax	(342)	(381)	(429)	(338)	(290)
Minority Interest	6.00	8.00	5.50	6.00	8.00
Net Profit	973	963	892	2,889	890
Net profit bef Except.	976	988	920	929	898
EBITDA	1,353	1,443	1,431	1,352	1,260
Growth					
Revenue Gth (%)	7.9	(2.3)	(1.8)	3.3	5.3
EBITDA Gth (%)	(4.8)	6.7	(0.8)	(5.5)	(6.8)
Opg Profit Gth (%)	(3.7)	9.7	(3.5)	(0.7)	2.0
Net Profit Gth (Pre-ex) (%)	(0.3)	1.2	(6.9)	1.0	(3.3)
Margins					
Gross Margins (%)	26.6	28.9	28.3	28.5	26.3
Opg Profit Margins (%)	14.9	16.8	16.5	15.9	15.4
Net Profit Margins (%)	22.1	22.4	21.1	66.1	19.3

Balance Sheet (S$m)

FY Mar	2016A	2017A	2018F	2019F	2020F
Net Fixed Assets	11,154	11,893	12,343	12,785	13,161
Invts in Associates & JVs	11,086	14,235	15,013	16,024	17,217
Other LT Assets	16,160	16,249	16,965	16,575	16,191
Cash & ST Invts	462	534	2,212	2,357	3,266
Inventory	320	352	371	384	395
Debtors	4,366	4,924	5,189	5,366	5,529
Other Current Assets	17.5	107	107	107	107
Total Assets	43,566	48,294	52,200	53,598	55,866
ST Debt	686	3,134	2,134	2,134	2,134
Creditor	4,597	4,922	5,187	5,364	5,527
Other Current Liab	1,257	1,216	2,211	2,233	2,400
LT Debt	9,255	8,052	9,052	10,052	11,052
Other LT Liabilities	2,768	2,756	2,756	2,756	2,756
Shareholder's Equity	24,967	28,191	30,828	31,017	31,944
Minority Interests	35.7	22.4	32.4	42.4	52.4
Total Cap. & Liab.	43,566	48,294	52,200	53,598	55,864
Non-Cash Wkg. Capital	(1,151)	(755)	(1,731)	(1,740)	(1,895)
Net Cash/(Debt)	(9,479)	(10,652)	(8,974)	(9,829)	(9,920)
Debtors Turn (avg days)	88.8	101.5	104.8	105.8	106.0
Creditors Turn (avg days)	166.2	179.3	178.1	182.1	183.3
Inventory Turn (avg days)	11.2	12.7	12.7	13.0	13.1
Asset Turnover (x)	0.4	0.4	0.4	0.3	0.3
Current Ratio (x)	0.8	0.6	0.8	0.8	0.9
Quick Ratio (x)	0.7	0.6	0.8	0.8	0.9
Net Debt/Equity (X)	0.4	0.4	0.3	0.3	0.3
Net Debt/Equity ex MI (X)	0.4	0.4	0.3	0.3	0.3
Capex to Debt (%)	31.8	22.2	31.2	21.1	20.0
Z-Score (X)	3.3	3.0	2.9	2.8	2.8

Strong cash position to drive dividends and investments

Source: Company, DBS Bank

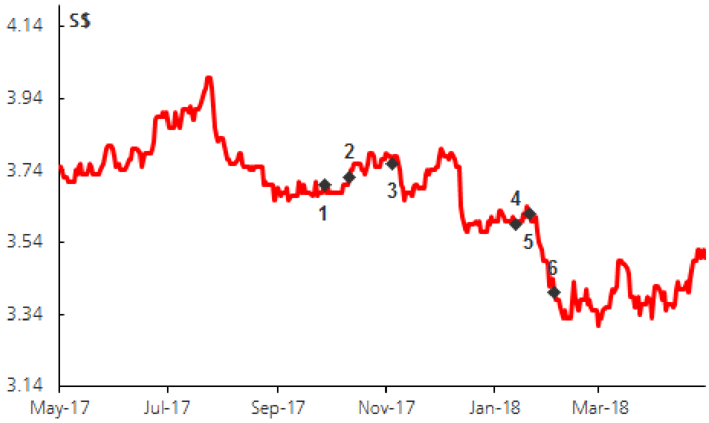
Cash Flow Statement (S$m)

FY Mar	2016A	2017A	2018F	2019F	2020F
Pre-Tax Profit	5,444	5,364	6,795	4,863	5,284
Dep. & Amort.	2,149	2,239	2,358	2,521	2,652
Tax Paid	(658)	(834)	(296)	(1,291)	(1,313)
Assoc. & JV Inc/(loss)	(2,788)	(2,942)	(2,450)	(2,375)	(2,802)
Chg in Wkg.Cap.	(1,031)	(492)	(19.0)	(12.7)	(11.7)
Other Operating CF	182	323	(1,538)	414	450
Net Operating CF	**3,297**	**3,659**	**4,850**	**4,119**	**4,259**
Capital Exp.(net)	(3,157)	(2,488)	(3,490)	(2,572)	(2,642)
Other Invts.(net)	42.7	40.4	0.0	0.0	0.0
Invts in Assoc. & JV	(200)	(2,410)	0.0	0.0	0.0
Div from Assoc & JV	1,351	1,656	1,407	1,364	1,609
Other Investing CF	574	26.1	2,165	0.0	0.0
Net Investing CF	**(1,389)**	**(3,177)**	**82.3**	**(1,208)**	**(1,033)**
Div Paid	(2,794)	(2,821)	(2,857)	(3,351)	(2,867)
Chg in Gross Debt	1,129	1,158	0.0	1,000	1,000
Capital Issues	0.0	1,602	0.0	0.0	0.0
Other Financing CF	(378)	(362)	(396)	(414)	(450)
Net Financing CF	**(2,044)**	**(422)**	**(3,254)**	**(2,766)**	**(2,317)**
Currency Adjustments	34.8	11.9	0.0	0.0	0.0
Chg in Cash	(101)	72.0	1,678	146	909
Opg CFPS (S cts)	27.2	25.4	29.8	25.3	26.2
Free CFPS (S cts)	0.88	7.17	8.33	9.47	9.90

Capex to remain stable

Source: Company, DBS Bank

Target Price & Ratings History



Note: *Share price and Target price are adjusted for corporate actions.*

S.No.	Date of Report	Closing Price	12-mth Target Price	Rating
1:	02 Oct 17	3.70	4.30	BUY
2:	16 Oct 17	3.72	4.30	BUY
3:	09 Nov 17	3.76	4.30	BUY
4:	18 Jan 18	3.59	4.30	BUY
5:	25 Jan 18	3.62	4.30	BUY
6:	08 Feb 18	3.40	4.30	BUY

Source: DBS Bank
Analyst: Sachin MITTAL

DBS Bank recommendations are based an Absolute Total Return* Rating system, defined as follows:
STRONG BUY (>20% total return over the next 3 months, with identifiable share price catalysts within this time frame)
BUY (>15% total return over the next 12 months for small caps, >10% for large caps)
HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)
FULLY VALUED (negative total return i.e. > -10% over the next 12 months)
SELL (negative total return of > -20% over the next 3 months, with identifiable catalysts within this time frame)

Share price appreciation + dividends

Completed Date: 7 May 2018 08:12:45 (SGT)
Dissemination Date: 7 May 2018 11:20:02 (SGT)

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Singapore Company Guide

ST Engineering

Version 12 | Bloomberg: STE SP | Reuters: STEG.SI

Refer to important disclosures at the end of this report

DBS Group Research . Equity

14 May 2018

BUY

Last Traded Price (11 May 2018): S$3.39 (**STI :** 3,570.17)
Price Target 12-mth: S$4.10 (21% upside)

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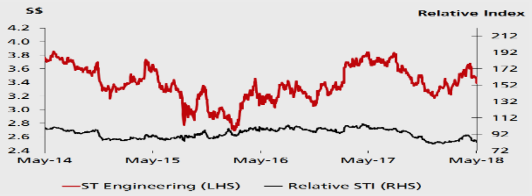
What's New

- 1Q18 core net profit of US$122m (+23% y-o-y) in line, STE should be back on growth trajectory in FY18
- Orderbook remains at near peak level at S$13.4bn
- Aero engine workload seems to be trending higher
- Marine margins in FY18 could be weaker as delivery of problematic ConRo vessel is pushed back slightly

Price Relative



Forecasts and Valuation

FY Dec (S$m)	2016A	2017A	2018F	2019F
Revenue	6,684	6,619	6,876	7,255
EBITDA	904	857	893	956
Pre-tax Profit	591	623	658	715
Net Profit	485	512	530	576
Net Pft (Pre Ex.)	535	512	530	576
Net Pft Gth (Pre-ex) (%)	1.2	(4.4)	3.6	8.7
EPS (S cts)	15.5	16.4	17.0	18.5
EPS Pre Ex. (S cts)	17.1	16.4	17.0	18.5
EPS Gth Pre Ex (%)	0	(4)	4	9
Diluted EPS (S cts)	15.5	16.4	17.0	18.5
Net DPS (S cts)	15.0	15.0	15.5	16.0
BV Per Share (S cts)	69.9	71.7	73.7	76.7
PE (X)	21.8	20.7	20.0	18.4
PE Pre Ex. (X)	19.8	20.7	20.0	18.4
P/Cash Flow (X)	13.9	13.9	15.5	14.8
EV/EBITDA (X)	12.0	12.9	12.5	11.7
Net Div Yield (%)	4.4	4.4	4.6	4.7
P/Book Value (X)	4.9	4.7	4.6	4.4
Net Debt/Equity (X)	0.0	0.1	0.1	0.1
ROAE (%)	22.5	23.2	23.4	24.5
Earnings Rev (%):			(2)	1
Consensus EPS (S cts):			17.7	19.1
Other Broker Recs:		B: 14	S: 1	H: 1

Source of all data on this page: Company, DBS Bank, Bloomberg Finance L.P

Confidence in growth potential

BUY on multiple re-rating drivers ahead. ST Engineering's (STE) recent share price retreat ex-final dividend payout is a good buying opportunity for patient investors. We like STE for a combination of factors: i) award of some of the larger contracts that STE is vying for (e.g. US Postal Service vehicle contract and US Marine Corps contract) are expected to be announced in 2018, providing potential upside catalysts if STE (and partners) are chosen; ii) improved visibility from STE's target to more than double smart city revenues by 2022 and grow other segment revenues at 2-3x the global GDP growth rate; iii) Aerospace segment rebound, with margins improving this year on stronger CFM engine MRO demand, and in the longer-term, sizeable contribution expected from P2F programmes currently in ramp-up phase; iv) expected deliveries of the two problematic ConRo vessels in 2Q/3Q18 which should help shipbuilding turn profitable, though it is slightly delayed than expected. Meanwhile, dividend yield is around 4.5%, which should provide support to the stock price.

Where we differ: 1Q18 was a quiet quarter with no unexpected contract wins, and earnings are typically seasonally lower as well, which leads to some sell off in the market. But we think STE is at the cusp of a 'next leg up' in its growth story while trading at reasonable valuations (just below mean historical P/E), with a 4.5% dividend yield to boot, which makes it attractive.

Potential catalyst: Significant order wins, turnaround at US shipbuilding operations, and progress with smart city initiatives.

Valuation:

Our TP of S$4.10 is based on a blended valuation framework, which factors in both earnings growth and long-term cash-generative nature of STE's businesses.

Key Risks to Our View:

A protracted slowdown in shipbuilding and execution hiccups at new business segments could derail earnings. Also, lack of action on the M&A front could lead to inefficient use of balance sheet and lower ROEs in the future.

At A Glance

Issued Capital (m shrs)	3,120
Mkt. Cap (Sm/USm)	10,578 / 7,917
Major Shareholders (%)	
Temasek Holdings Private Ltd (%)	50.7
Free Float (%)	49.3
3m Avg. Daily Val (US$m)	12.0

ICB Industry : Industrials / Aerospace & Defense

ed: JS / sa: PY, CS

WHAT'S NEW

1Q18 core profits in line

Core PBT and net profit in line with expectations: Excluding the c.S$4.8m effect of a realised foreign currency translation loss on the dissolving of two US legal entities Dalfort LP and Dalfort GP, PBT was c.S$149m for the quarter, which was broadly in line with expectations. Reported PBT of S$144m was in line with expectations, representing 12% y-o-y growth on a restated basis (on adoption of new SFRS(I) rules), and accounting for roughly 22% of our full-year net profit estimates, which is in line with the usual seasonality. Revenues improved 9% y-o-y to S$1,647m. Core net profit (similarly excluding the Dalfort translation loss) came in at S$122m, which is almost 23% higher y-o-y, representing around 22% of our full-year net profit estimates.

Less visibility on sub-segment profit trends for now, owing to change in reporting from PBT to net profit. At the more detailed sub-segment level, ST Engineering seems to have shifted its reporting focus from profit before tax (PBT) to net profit (PATMI), which makes sub-segment comparison (for e.g. Aircraft Maintenance & Modification sub-segment within the Aerospace segment) in terms of historical trends challenging this quarter. Q-o-q comparisons are also less meaningful due to the restatement of financials in line with SFRS(I) adoption and the lack of restated financials for 4Q17 at this point.

Marine segment earnings recovery pushed back on ConRo delivery delay. While we had previously expected the two problematic ConRo vessels being built by ST Marine's US shipyard operations to be delivered in 1Q18, thus relieving the shipbuilding sub-segment of additional provisions, we understand the first ConRo vessel is now scheduled for delivery at the end of 2Q18 and the second vessel should be delivered in 3Q18. To recap, these two vessels were the drag on the Marine segment's shipbuilding operations; shipbuilding would have been profitable in 1Q18 if not for provisions on the ConRos.

PBT margins generally in line, save for a cyclical low in Electronics margins. Group PBT margins came in at 9% excluding the effect of the Dalfort translation loss. Segment-wise, PBT margins were generally in line with our full-year estimates, save for the Electronics segment which saw a weaker 1Q18 PBT margin of 8%, though the company has attributed this to seasonality affecting the sales mix, and they expect PBT margin to improve in subsequent quarters with a view towards achieving the usual 10% PBT margin for the full year.

Engine workload trend looks promising. Management said that ST Aerospace's engine shops are experiencing high utilisation rates, with an uptick in shop visits felt since last year, which has continued into 2018. Problems with the new Airbus NEO and Boeing MAX aircraft variants have delayed their entry into service, pushing back the retirement of some older aircraft, which is positive for MRO work in general. Meanwhile heightened checks on the CFM56-7B engines following the Southwest aircraft explosion has boosted workload on that front.

Orderbook remains robust. Orderbook remained flat q-o-q at S$13.4bn which is near historical peak levels. Announced order wins of S$1.14bn from the Aerospace and Electronics segments in 1Q18 were in line with previous year's amounts.

Net cash balance sheet; higher spend on growth projects (otherwise on dividends) would be positive. Balance sheet remains healthy; M&A or higher dividends would be a positive. On the back of strong OCF and minimal capex for the quarter, ST Engineering is now back in a net cash position (from 0.05x net gearing in 4Q17). We think higher spending on M&A (at a reasonable price of course) would be positive for ROE, otherwise higher dividend payout would be a plus point too.

Quarterly / Interim Income Statement (S$m)

FY Dec	1Q2017	4Q2017	1Q2018	% chg yoy	% chg qoq
Revenue	1,539	1,702	1,647	7.0	(3.3)
Cost of Goods Sold	(1,222)	(1,358)	(1,321)	8.1	(2.7)
Gross Profit	317	344	326	2.7	(5.4)
Other Oper. (Exp)/Inc	(190)	(179)	(193)	1.4	8.0
Operating Profit	127	166	133	4.7	(19.8)
Other Non Opg (Exp)/Inc	0.0	0.0	0.0	-	-
Associates & JV Inc	13.8	13.0	15.4	12.2	18.3
Net Interest (Exp)/Inc	(3.8)	(5.4)	(4.5)	(19.5)	16.9
Exceptional Gain/(Loss)	0.0	0.0	0.0	-	-
Pre-tax Profit	137	174	144	5.1	(17.0)
Tax	(27.0)	(1.7)	(24.0)	(11.4)	1,336.7
Minority Interest	(6.5)	(3.4)	(2.3)	64.2	(31.1)
Net Profit	103	168	118	13.8	(30.1)
Net profit bef Except.	103	168	118	13.8	(30.1)
EBITDA	193	237	203	5.5	(14.3)
Margins (%)					
Gross Margins	20.6	20.2	19.8		
Opg Profit Margins	8.3	9.7	8.1		
Net Profit Margins	6.7	9.9	7.1		

Note: 1Q17 and 4Q17 numbers have not been presented here on restated basis following adoption of SFRS (I)

Source of all data: Company, DBS Bank

CRITICAL DATA POINTS TO WATCH

Critical Factors

Conglomerate with diverse interests in defense and commercial spheres. STE started out life as a defense contractor but has leveraged its technical knowhow over the years to penetrate the commercial market. It boasts multinational operations with a global presence in 23 countries and 41 cities, and hires more than 22,000 employees. The group has reduced its reliance on the defense sector over time from 57% of revenues in 2002 to the current 35%, with another c.33% from government agencies and the balance from commercial businesses.

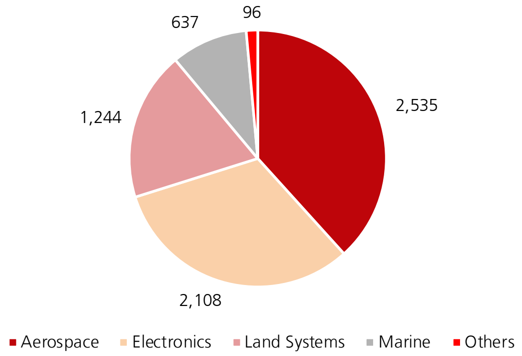
STE could engage in M&A of distressed assets/companies. With a cash balance of c.S$1.3bn and a net cash balance sheet as of 1Q18, STE has a significant war chest at its disposal. One potential area of interest signaled by the company is in purchasing distressed ship repair operations to add on to STE's existing ship repair business, which has maintained healthy margins.

Healthy orderbook drives visibility. As of end-1Q18, STE's orderbook stood at S$13.4bn, boosted by a large contract secured in 2017 for the construction of the Singapore Armed Forces' next-generation Armoured Fighting Vehicles (AFVs), which we estimate to be worth ~S$1bn. The orderbook provides robust revenue visibility into FY18/19, with a roughly 1.9x book-to-bill ratio.

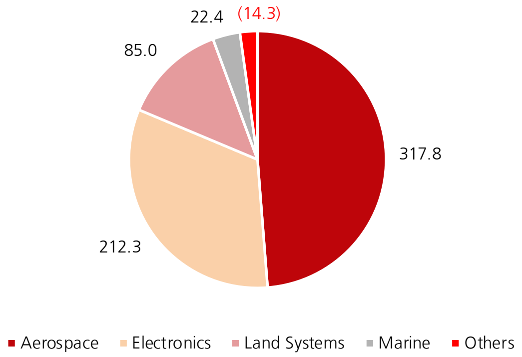
Move into new markets to boost Aerospace segment's growth. Continued initiatives by ST Aerospace to broaden its capabilities should propel its growth in the longer term. These include a partnership with Airbus for passenger-to-freighter conversion of its A320/A321 and A330 jets, marking a diversification of its conversion portfolio; a continued expansion of its cabin interior service solutions business, particularly for VIP aircraft completions; and expansion of its mid-life aircraft leasing business.

Smart City initiatives should be a key long-term growth driver. Within Singapore's Smart Nation framework, we estimate projects worth more than S$1bn in the near future, as the Singaporean government pushes for smart technology usage across the utility, healthcare, housing and transport spaces. STE is aiming to more than double its annual smart city revenues by 2022 from 2017 levels of about c.S$1bn. Globally, Frost & Sullivan and Technavio have both forecasted the global smart city market to be valued at c.US$1.5tr in 2020, from an implied c.US$600bn as of end-2015, representing a CAGR of about 20%. This indicates a market that would be almost 3x as large as, say, the global MRO market, with global sales of about US$60-70bn per year (or US$300-350bn over a 5-year period).

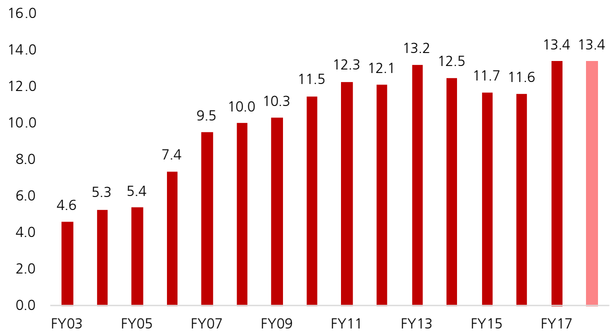
FY17 revenue breakdown by segment (S$m)



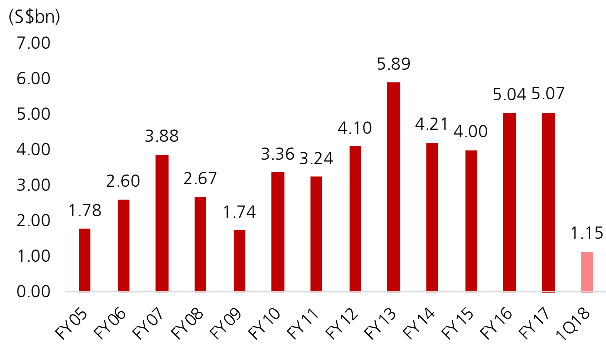
FY17 PBT breakdown by segment



Net orderbook (S$bn)



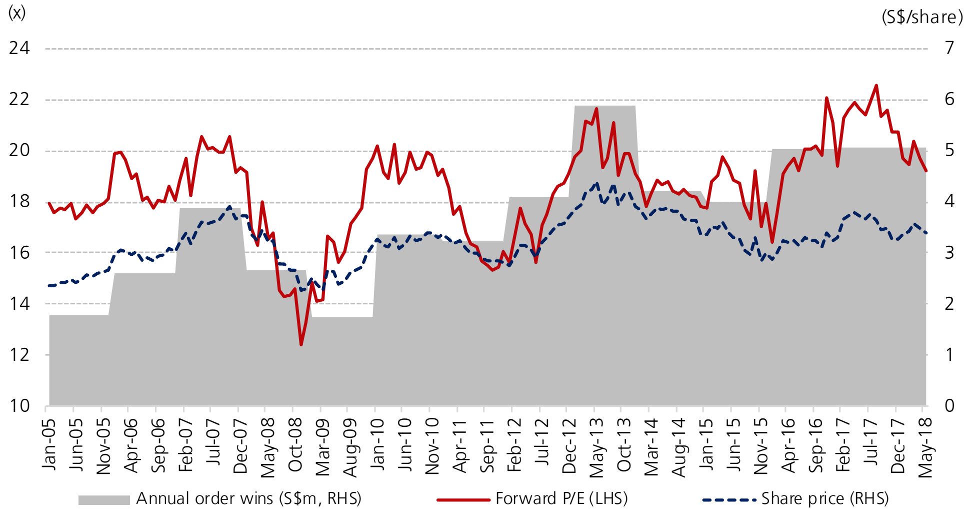
Order wins (S$m)



Source: Company, DBS Bank

Appendix 1: A look at ST Engineering's listed history – what drives its share price?

Valuation peaks coincide with order win levels



Source: Bloomberg Finance L.P., Company

Valuation peaks – summary of significant events at the time

2007 peak	2010 peak	2013 peak	2017 peak
- Positive outlook for MRO, strong aerospace margins - Land systems saw a turnaround in margins - Record orderbook levels reached - Electronics and Marine growing steadily - Land systems touted to have secured a **S$1bn defence contract**	- Contract for Terrex 8x8 ICVs secured - Estimated **new defence orders of close to S$2bn** secured - Aero margins continue to improve as FedEx P2F project turns profitable - Trend towards higher MRO outsourcing is encouraging - Global airline industry beginning to recover	- Management guiding for higher revenues/PBT in FY13 - Orderbook reaches record high of S$13bn - **Singapore Navy contract** secured, estimated to be worth **S$1.8bn** - Strong aero contract wins in 4Q12 - Aerospace segment showing gross margin expansion	- Orderbook @ S$13.3bn as of 3Q17 - near all-time highs - **SAF AFV contract secured** earlier in the year, which we think is worth ~S$1bn - Strong contract wins YTD (S$3.8bn) - Land systems turnaround post-disposal of loss-making Chinese subsidiaries seems to have taken a breather - Smart nation projects bode well for long-term growth - smart city market size to be US$1.5 trillion by 2020 (Frost & Sullivan)

Source: Newswires, Company, DBS Bank

Balance Sheet:

Healthy balance sheet can drive M&A ambitions. STE has a strong net cash balance sheet. In recent years, STE has channeled cash into bonds and share buybacks to improve returns on capital. However, with a sizeable cash balance of c.S$1.3bn, there is ample ammunition to pursue M&A.

Dividend payout should remain steady. Strong operating cash flows provide support to a decent dividend yield of around 4.5% currently. We expect STE to pay around 15.5 Scts dividend per share in total for FY18 (slightly higher than FY17), equating to c.93% of our core profit estimate, and roughly in line with historical payout ratios.

Share Price Drivers:

Strong order wins. Total announced order wins of S$5.07bn in FY17 matched FY16's amount, and was a healthy number about 18% higher than the average order win level from FY11-FY15. Even higher levels of order win announcements in FY18 would help boost the share price.

Recovery in the Marine sector. The Marine sector is arguably facing the strongest industry headwinds on the commercial front, with low offshore oil & gas spending and muted ordering activity in conventional shipping, despite low orderbook. Cost overruns in the US exacerbate the situation. An industry recovery, as well as better productivity in the US, would provide more confidence in the medium-term earnings of the business.

Key Risks:

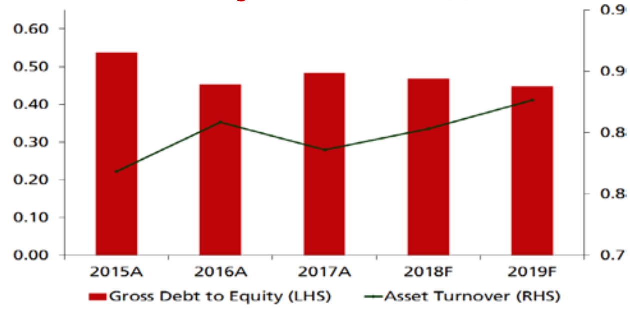
Aerospace margins could come under pressure if execution of new market segment entry is poor. In the Aerospace segment, headwinds posed by lower work content and longer maintenance intervals at the traditional airframe and engine MRO businesses are to be countered by growth in new markets and businesses such as P2F conversion work on the Airbus 330 models and the ramp-up of new MRO facilities in China. Execution risk is therefore present.

Protracted slowdown in shipbuilding. The traditional shipping sector is just coming off major industry overcapacity, while the slide in oil prices also affects demand for offshore vessels. Visibility on demand recovery is low at this point.

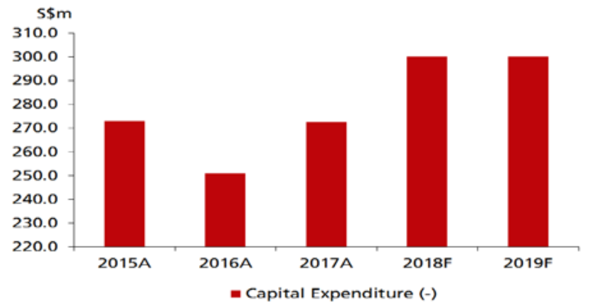
Company Background

ST Engineering (STE) is an integrated engineering group in the aerospace, electronics, land systems and marine sectors. The company has over the years diversified its businesses and geographies.

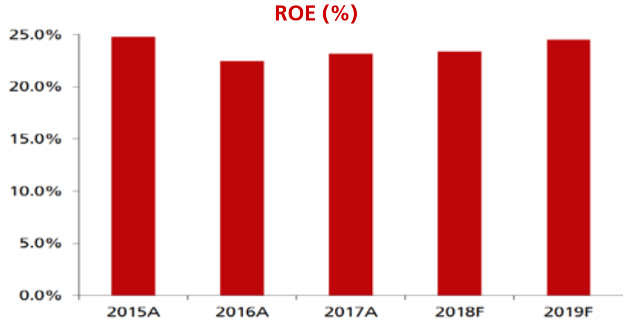
Leverage & Asset Turnover (x)



Capital Expenditure

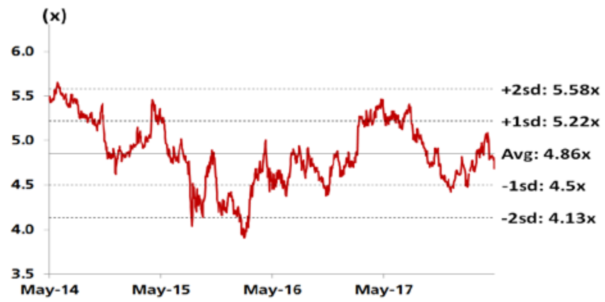


ROE (%)



Forward PE Band (x)

PB Band (x)



Source: Company, DBS Bank

Segmental Breakdown

FY Dec	2015A	2016A	2017A	2018F	2019F
Revenues (S$m)					
Aerospace	2,090	2,484	2,535	2,632	2,718
Electronics	1,709	1,885	2,108	2,361	2,477
Land Systems	1,396	1,305	1,244	1,217	1,413
Marine	958	841	637	572	551
Others	182	169	95.6	95.6	95.6
Total	6,335	6,684	6,619	6,876	7,255
PBT (S$m)					
Aerospace	291	300	318	325	347
Electronics	191	208	212	234	248
Land Systems	65.0	22.2	85.0	74.0	87.0
Marine	88.3	75.1	22.4	37.4	44.8
Others	(4.6)	(14.8)	(14.3)	(12.0)	(12.0)
Total	630	591	623	658	715
PBT Margins (%)					
Aerospace	13.9	12.1	12.5	12.3	12.8
Electronics	11.2	11.0	10.1	9.9	10.0
Land Systems	4.7	1.7	6.8	6.1	6.2
Marine	9.2	8.9	3.5	6.5	8.1
Others	(2.5)	(8.7)	(15.0)	(12.5)	(12.5)
Total	9.9	8.8	9.4	9.6	9.9

Delivery of the SAF Armoured Fighting Vehicles beginning in 2019 should boost Land Systems' revenues in FY19

Expecting some margin improvement on higher engine MRO demand

Income Statement (S$m)

FY Dec	2015A	2016A	2017A	2018F	2019F
Revenue	6,335	6,684	6,619	6,876	7,255
Cost of Goods Sold	(5,053)	(5,378)	(5,296)	(5,501)	(5,804)
Gross Profit	**1,282**	**1,305**	**1,323**	**1,375**	**1,451**
Other Opng (Exp)/Inc	(694)	(713)	(732)	(753)	(771)
Operating Profit	**588**	**593**	**591**	**622**	**680**
Other Non Opg (Exp)/Inc	0.0	0.0	0.0	0.0	0.0
Associates & JV Inc	58.3	63.8	49.3	50.3	51.3
Net Interest (Exp)/Inc	(16.3)	(15.1)	(17.0)	(15.2)	(16.8)
Exceptional Gain/(Loss)	0.0	(50.7)	0.0	0.0	0.0
Pre-tax Profit	**630**	**591**	**623**	**658**	**715**
Tax	(98.7)	(97.8)	(87.9)	(105)	(114)
Minority Interest	(2.6)	(8.4)	(23.6)	(22.1)	(24.0)
Preference Dividend	0.0	0.0	0.0	0.0	0.0
Net Profit	**529**	**485**	**512**	**530**	**576**
Net Profit before Except.	529	535	512	530	576
EBITDA	834	904	857	893	956
Growth					
Revenue Gth (%)	(3.1)	5.5	(1.0)	3.9	5.5
EBITDA Gth (%)	(0.2)	8.4	(5.1)	4.2	7.0
Opg Profit Gth (%)	(3.2)	0.8	(0.3)	5.3	9.3
Net Profit Gth (Pre-ex) (%)	(0.5)	1.2	(4.4)	3.6	8.7
Margins & Ratio					
Gross Margins (%)	20.2	19.5	20.0	20.0	20.0
Opg Profit Margin (%)	9.3	8.9	8.9	9.1	9.4
Net Profit Margin (%)	8.4	7.2	7.7	7.7	7.9
ROAE (%)	24.8	22.5	23.2	23.4	24.5
ROA (%)	6.4	5.9	6.1	6.2	6.6
ROCE (%)	10.6	10.6	10.6	10.6	11.3
Div Payout Ratio (%)	87.9	96.7	91.5	91.3	86.7
Net Interest Cover (x)	36.2	39.3	34.7	41.1	40.5

Source: Company, DBS Bank

Quarterly / Interim Income Statement (S$m)

FY Dec	1Q2017	2Q2017	3Q2017	4Q2017	1Q2018
Revenue	1,539	1,756	1,622	1,702	1,647
Cost of Goods Sold	(1,222)	(1,434)	(1,282)	(1,358)	(1,321)
Gross Profit	317	322	340	344	326
Other Oper. (Exp)/Inc	(190)	(180)	(184)	(179)	(193)
Operating Profit	127	142	156	166	133
Other Non Opg (Exp)/Inc	0.0	0.0	0.0	0.0	0.0
Associates & JV Inc	13.8	11.7	10.9	13.0	15.4
Net Interest (Exp)/Inc	(3.8)	(3.8)	(4.1)	(5.4)	(4.5)
Exceptional Gain/(Loss)	0.0	0.0	0.0	0.0	0.0
Pre-tax Profit	137	150	163	174	144
Tax	(27.0)	(30.2)	(29.0)	(1.7)	(24.0)
Minority Interest	(6.5)	(8.1)	(5.5)	(3.4)	(2.3)
Net Profit	103	112	128	168	118
Net profit bef Except.	103	112	128	168	118
EBITDA	193	205	222	237	203
Growth					
Revenue Gth (%)	(15.4)	14.1	(7.7)	5.0	(3.3)
EBITDA Gth (%)	(25.1)	6.5	8.1	6.9	(14.3)
Opg Profit Gth (%)	(25.8)	11.7	10.0	6.3	(19.8)
Net Profit Gth (Pre-ex) (%)	(39.3)	7.8	15.1	31.2	(30.1)
Margins					
Gross Margins (%)	20.6	18.3	20.9	20.2	19.8
Opg Profit Margins (%)	8.3	8.1	9.6	9.7	8.1
Net Profit Margins (%)	6.7	6.4	7.9	9.9	7.1

Balance Sheet (S$m)

FY Dec	2015A	2016A	2017A	2018F	2019F
Net Fixed Assets	1,709	1,670	1,719	1,799	1,874
Invts in Associates & JVs	462	406	448	469	490
Other LT Assets	1,208	1,477	1,581	1,581	1,581
Cash & ST Invts	1,134	1,094	999	944	904
Inventory	1,943	1,898	1,764	1,833	1,934
Debtors	1,320	1,458	1,646	1,710	1,804
Other Current Assets	394	363	315	315	315
Total Assets	8,169	8,365	8,473	8,649	8,902
ST Debt	195	116	326	326	326
Creditor	1,703	1,722	1,613	1,675	1,767
Other Current Liab	1,822	1,963	1,963	1,992	2,036
LT Debt	1,019	993	894	894	894
Other LT Liabilities	1,170	1,127	1,157	1,157	1,157
Shareholder's Equity	2,132	2,182	2,240	2,302	2,394
Minority Interests	129	262	281	304	328
Total Cap. & Liab.	8,169	8,365	8,473	8,649	8,902
Non-Cash Wkg. Capital	132	34.0	150	190	249
Net Cash/(Debt)	(79.3)	(14.9)	(221)	(277)	(316)
Debtors Turn (avg days)	76.0	75.8	85.6	89.1	88.4
Creditors Turn (avg days)	126.4	121.8	119.8	113.6	112.6
Inventory Turn (avg days)	140.5	136.6	131.6	124.3	123.2
Asset Turnover (x)	0.8	0.8	0.8	0.8	0.8
Current Ratio (x)	1.3	1.3	1.2	1.2	1.2
Quick Ratio (x)	0.7	0.7	0.7	0.7	0.7
Net Debt/Equity (X)	0.0	0.0	0.1	0.1	0.1
Net Debt/Equity ex MI (X)	0.0	0.0	0.1	0.1	0.1
Capex to Debt (%)	22.5	22.6	22.3	24.6	24.6
Z-Score (X)	2.5	2.5	2.5	2.5	2.5

Low gearing and a c.S$1bn cash balance gives ammunition for M&A and R&D investment

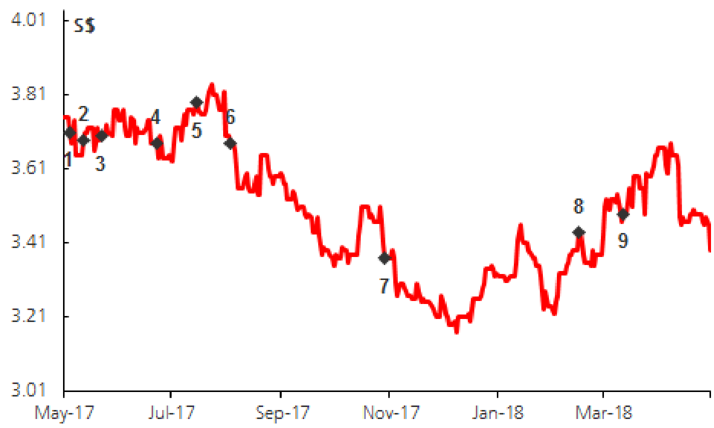
Source: Company, DBS Bank

Cash Flow Statement (S$m)

FY Dec	2015A	2016A	2017A	2018F	2019F
Pre-Tax Profit	630	591	623	658	715
Dep. & Amort.	187	247	217	221	224
Tax Paid	(111)	(76.7)	(91.7)	(105)	(114)
Assoc. & JV Inc/(loss)	(58.3)	(63.8)	(49.3)	(50.3)	(51.3)
Chg in Wkg.Cap.	(227)	(13.4)	(8.7)	(40.1)	(59.2)
Other Operating CF	44.6	74.7	73.1	0.0	0.0
Net Operating CF	465	759	764	683	714
Capital Exp.(net)	(273)	(251)	(273)	(300)	(300)
Other Invts.(net)	(264)	7.80	144	0.0	0.0
Invts in Assoc. & JV	0.27	(34.4)	(85.8)	(5.0)	(5.0)
Div from Assoc & JV	51.4	44.7	81.0	35.0	35.0
Other Investing CF	7.98	(34.4)	(113)	0.0	0.0
Net Investing CF	(477)	(267)	(246)	(270)	(270)
Div Paid	(498)	(466)	(468)	(468)	(484)
Chg in Gross Debt	109	(29.3)	127	0.0	0.0
Capital Issues	(75.9)	6.26	9.17	0.0	0.0
Other Financing CF	(55.1)	(52.4)	(57.7)	0.0	0.0
Net Financing CF	(520)	(541)	(389)	(468)	(484)
Currency Adjustments	12.6	3.18	(34.3)	0.0	0.0
Chg in Cash	(519)	(46.6)	94.1	(55.8)	(39.9)
Opg CFPS (S cts)	22.3	24.7	24.7	23.1	24.8
Free CFPS (S cts)	6.20	16.3	15.7	12.3	13.3

Source: Company, DBS Bank

Target Price & Ratings History



S.No.	Date of Report	Closing Price	12-mth Target Price	Rating
1:	15 May 17	3.71	4.12	BUY
2:	23 May 17	3.69	4.12	BUY
3:	02 Jun 17	3.70	4.12	BUY
4:	03 Jul 17	3.68	4.12	BUY
5:	26 Jul 17	3.79	4.12	BUY
6:	14 Aug 17	3.68	3.80	HOLD
7:	09 Nov 17	3.37	3.70	HOLD
8:	26 Feb 18	3.44	3.90	BUY
9:	23 Mar 18	3.49	4.10	BUY

***Note**: Share price and Target price are adjusted for corporate actions.*

Source: DBS Bank
Analyst: Suvro Sarkar
Glenn NG

DBS Bank recommendations are based an Absolute Total Return* Rating system, defined as follows:
STRONG BUY (>20% total return over the next 3 months, with identifiable share price catalysts within this time frame)
BUY (>15% total return over the next 12 months for small caps, >10% for large caps)
HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)
FULLY VALUED (negative total return i.e. > -10% over the next 12 months)
SELL (negative total return of > -20% over the next 3 months, with identifiable catalysts within this time frame)

Share price appreciation + dividends

Completed Date: 14 May 2018 07:51:48 (SGT)
Dissemination Date: 14 May 2018 08:39:52 (SGT)

Sources for all charts and tables are DBS Bank unless otherwise specified.

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Singapore Company Focus

Y Ventures Group Ltd

Bloomberg: YVEN SP | Reuters: YVEN.SI **Refer to important disclosures at the end of this report**

DBS Group Research . Equity 28 Mar 2018

BUY

(Initiating Coverage)
Last Traded Price (27 Mar 2018): S$0.54 **(STI :** 3,439.35)
Price Target 12-mth: S$0.77 (44% upside)

Potential Catalyst: Earnings delivery, M&A, Shift to consignment model

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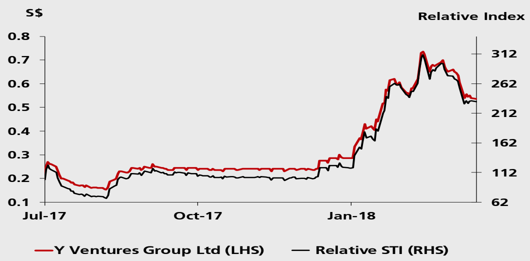
Price Relative



Forecasts and Valuation

FY Dec (US$m)	2017A	2018F	2019F	2020F
Revenue	14.2	25.2	37.6	52.4
EBITDA	0.13	2.75	6.03	10.1
Pre-tax Profit	(1.0)	2.54	5.84	9.91
Net Profit	(0.9)	1.80	4.14	7.03
Net Pft (Pre Ex.)	0.08	1.80	4.14	7.03
EPS (S cts)	(0.6)	1.15	2.64	4.49
EPS Pre Ex. (S cts)	0.05	1.15	2.64	4.49
EPS Gth (%)	nm	nm	130	70
EPS Gth Pre Ex (%)	(95)	2,051	130	70
Diluted EPS (S cts)	(0.6)	1.15	2.64	4.49
Net DPS (S cts)	0.39	0.23	0.53	0.90
BV Per Share (S cts)	3.98	4.80	6.92	10.5
PE (X)	nm	46.5	20.3	11.9
PE Pre Ex. (X)	1000.1	46.5	20.3	11.9
P/Cash Flow (X)	nm	53.9	56.8	21.6
EV/EBITDA (X)	628.6	30.5	13.9	8.2
Net Div Yield (%)	0.7	0.4	1.0	1.7
P/Book Value (X)	13.4	11.1	7.7	5.1
Net Debt/Equity (X)	0.0	CASH	CASH	CASH
ROAE (%)	(20.8)	26.5	45.1	51.5
Consensus EPS (S cts):		2.36	3.40	N/A
Other Broker Recs:		B: 0	S: 0	H: 1

ICB Industry : Technology
ICB Sector: Software & Computer Services
Principal Business: Y Ventures is a Singapore-founded data analytics driven e-commerce retailer and distributor

Source of all data on this page: Company, DBS Bank, Bloomberg Finance L.P.

Data-driven e-commerce player

- Early-stage yet profitable online distributor and retailer with a differentiated business model
- EBITDA projected to grow at 92% CAGR over FY18F-20F
- Initiate coverage with BUY and TP of S$0.77, offering potential upside of c.44%

Proprietary data analytics capabilities cement its position as a value-adding partner to traditional businesses. Y Ventures Group (YVEN) distributes products from third-party brands over some of the largest e-commerce platforms (including Amazon and Lazada) across ten countries. Unlike traditional distributors & e-commerce platforms, YVEN stands out for its provision of value-added data analytics service to brand partners, allowing them to adapt their products to the market needs. In return, the brands offer significant price discounts to YVEN. The launch of private labels in areas where YVEN is confident of achieving strong sell-through rates based on analytics, as in the case of JustNile and Faire Leather Co, further augments margins.

Multi-pronged approach to e-commerce driving 92% EBITDA CAGR over FY18F-20F. Earnings growth should primarily be driven by the (i) Expansion of YVEN's brand partner network and product range. R3 Asian Gems – a fund linked to the founder of V3/OSIM group, will help to introduce new retail brands, strategic alliances and possible acquisition targets, (ii) Replication of the Elsevier partnership model to other book publishers and new product categories, and (iii) Acceleration of private label projects, which tend to have longer gestation periods but offer higher margins.

Cross-border purchase platform AORA could start contributing from FY19F onwards, providing further upside. Due to limited visibility, we have yet to factor this into our projections.

Valuation:

Initiate with BUY and TP of S$0.77, based on 20x FY19F EV/EBITDA, at a 15% discount to larger peers' 23x due to YVEN's smaller scale. This translates to 3.2x FY19F EV/Sales vs peers' 3.8x. Our bear case valuation of S$0.47 suggests an attractive risk-reward ratio at current levels.

Key Risks to Our View:

(i) Execution and inventory obsolescence risk, (ii) Platform-specific risks, (iii) Equity fund raising, and (iv) Concentration risk

At A Glance

Issued Capital (m shrs)	205
Mkt. Cap (Sm/USm)	110 / 83.8
Major Shareholders (%)	
Yik Sen Low	34.7
Yik Jin Low	34.7
Prism Investment Ventures Ltd	11.1
Free Float (%)	19.6
3m Avg. Daily Val (US$m)	0.62

Company Background

Young, promising and already profitable. Leveraging on its proprietary data analytics platform, local e-commerce retailer and distributor YVEN has been profitable from the onset, which is rare among tech start-ups.

Incorporated in January 2013, the group has grown quickly over a relatively short span and currently markets over 5,500 SKUs of private label and third-party branded merchandise through 25 online marketplaces (including Amazon, eBay, Lazada, and Tokopedia) across ten countries.

YVEN's Online Marketplace Statistics

12,000 of **5,500** on **25**

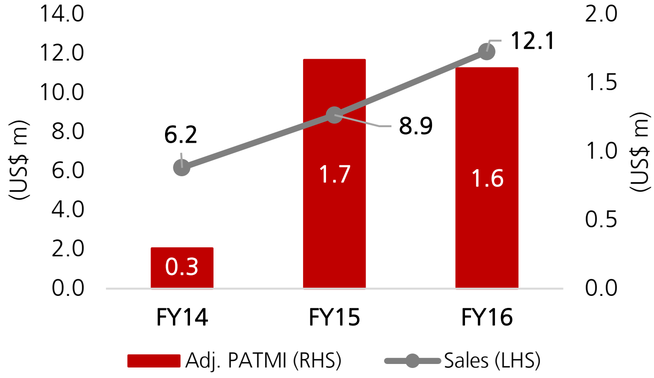
Active Product Listings | SKUs | Online Marketplaces

Source: Company, DBS Bank

YVEN's main value proposition lies in its ability to incorporate data analytics into the traditional e-commerce model, which helps optimise product and brand marketing efforts, and enhances sell-through rates. The company's strong sales performance (and profits) over FY14-17 demonstrates this.

Gross merchandising value more than doubled from c.S$6.2m in FY14 to c.$14.2m in FY17, with a steady earnings base of roughly US$1.5-16m p.a (FY15-16). Apart from one-off IPO and marketing expenses, property impairment charges and exchange losses, YVEN should have otherwise been profitable in FY17.

Pre-IPO Gross Merchandising Value vs PATMI (FY13-16)



Source: Company, DBS Bank

Unique proxy to the global e-commerce secular growth story. YVEN's Catalist Board listing in July 2017 breathed new life into SGX's technology cluster, largely represented by manufacturing-related companies. Within this space, the group stands out for its proven data-driven approach to online retailing, and as a unique proxy to the fast-growing global e-commerce market.

Still in the early stages of growth, we believe that YVEN's SGX listing adds credibility and serves as a valuable aid to the group's ongoing efforts to further expand its brand partner network and product portfolio. Its exponential growth potential and unique exposure (vs technology cluster peers) should continue to drive investor interest in the stock.

Over 70% of FY17 sales were from the US

Source: Company, DBS Bank

Primarily derives revenue from e-commerce retail and distribution business. YVEN derives revenue from three key business segments, primarily: -

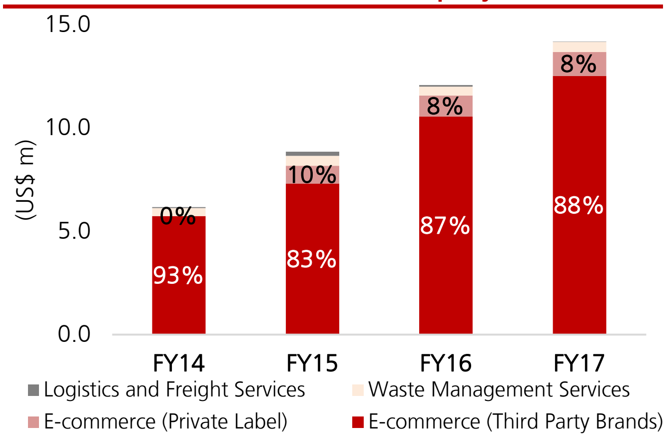
i. E-commerce retail and distribution (c.96.4% of FY17 sales),
ii. Logistics and freight forwarding services (c.3.5% of FY17 sales), and
iii. Waste management services (c.0.1% of FY17 sales)

Comprising third-party brands and private label product sales, contributions from the e-commerce segment have grown quickly alongside YVEN's expanding product portfolio - from approximately 300 SKUs as at end-2014 to c.2,500 by end-2015 and over 5,500 currently, and continues to represent the bulk of the group's consolidated revenues.

YVEN's inventories are mainly held in third-party warehouses managed by various third-party logistics companies and last-mile fulfilment service providers, but also provides logistics and freight forwarding services to third-party customers from time to time.

Through subsidiary Skap Waste Management, the group also provides waste management services (i.e. disposal of residential waste and secured disposal of sensitive documents and media containing confidential info, etc) in Singapore, but contributions remain small for now.

Bulk of Sales from Distribution of Third-party Products



Source: Company, DBS Bank

Stronghold in books a steady revenue source. The group first began its e-commerce journey by procuring used textbooks from Singapore and selling them on online marketplaces in the US. Leveraging on its proprietary data analytics software, the group identified significant untapped potential in online book retailing, as most publishers had extensive offline distribution channels but often lacked the necessary tools and expertise to develop an online presence.
A substantial proportion of YVEN's purchases are from book publishers, particularly medical textbooks and reference materials from Elsevier Group.

Major Suppliers – Books Represent c.83% of Purchases

% of Total Purchases				
Suppliers of Books	FY14	FY15	FY16	FY17*
Elsevier Group	47.6	47.1	66.6	
SR International	17.3	0.6	-	
ChoiceTexts (Asia)	5.5	-	-	
Popular Book Company	5	4.4	0.4	
CV Spectra Group	0.7	10.1	7.4	
PT Buku Trading	0.5	5.1	8.4	
Total:	76.6	67.3	82.8	82.8

**based on DBS estimates*
Source: Company, DBS Bank

YVEN's niche in online book retailing serves as a steady source of revenues – we estimate that c.80% of FY17 sales were derived from books - and has allowed the group to command superior gross margins of over 40% from FY14-17.

Upside from replication of successful partnership with Elsevier to other publishers and product categories. Following the recent onboarding of a leading academic publisher (similar to Elsevier), YVEN's online book sales are likely to remain on a steady growth trajectory but ongoing efforts to replicate its successful model to other product segments should see proportions shift in favour of the budding Home and Décor and FMCG categories. For FY18F, the company expects contributions from books to be closer to 65-70% vs average of c.77% over FY14-17.

Beyond Books; Other Product Categories Growing Quickly

E-commerce Sales for Third-party Brands (US$ m) *					
Product Categories	FY14	FY15	FY16	FY17	CAGR
Books	5.2	6.2	9.6	10.8	27.3%
Others (Home/Décor, FMCG)	0.5	1.1	1.0	1.8	49.4%

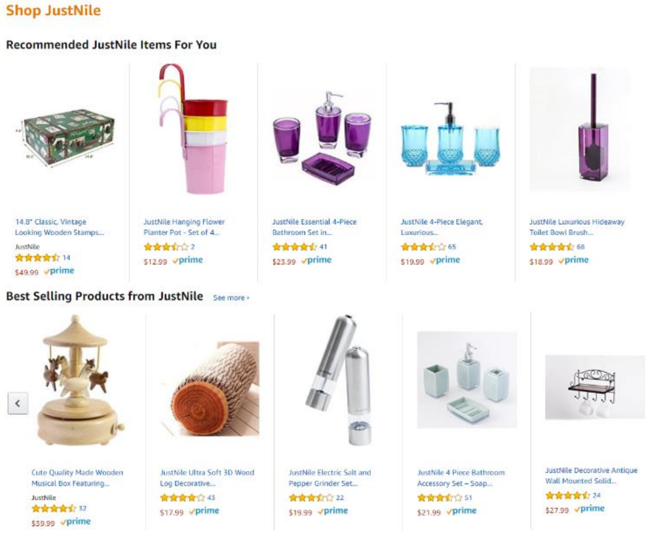
**based on DBS estimates*
Source: Company, DBS Bank

Private label strategy taking shape. In addition to distributing merchandises under third-party brands, YVEN also sells OEM merchandises of home and décor products on online marketplaces through its private label, JustNile, which was launched in 2015. Examples of OEM merchandise sold through JustNile include wall clocks, mirrors and bathroom accessories.

Owing to longer gestation periods, private label sales growth of 16.1% CAGR over FY15-17 has lagged that of third-party brands (30.9% CAGR), but is set to accelerate going forward post the launch of Faire Leather, driving margin improvement.

A quick scan of JustNile's virtual store on Amazon also shows that the bulk of its data-backed product selections have generated positive ratings and reviews.

Favourable Ratings for JustNile Products on Amazon



Source: Amazon

Synergistic collaborations with retail veterans a prelude of opportunities to come. We see the slew of collaborative opportunities that YVEN has been accorded with by industry veterans over the past year as a strong vote of confidence in YVEN's complementary retail-focused data analytics capabilities.

On 14 August 2017, a joint venture agreement was inked between YVEN and Toscano Pte Ltd to launch an online men's leather goods label, Faire Leather Co. The group also raised S$1.2m in January 2018 from strategic investor, R3 Asian Gems – a fund linked to the founder of V3/OSIM group, Ron Sim. Both parties have also signed a non-binding memorandum of understanding (MOU) in which R3 will help to introduce new retail brands, strategic alliances and possible acquisition targets that synergise with YVEN's longer-term growth objectives.

Most recently, on 2 March 2018, YVEN also entered into a non-binding MOU with Singapore Post Limited to explore a potential collaboration for the development of an e-commerce buying platform and logistics-related technology, among others.

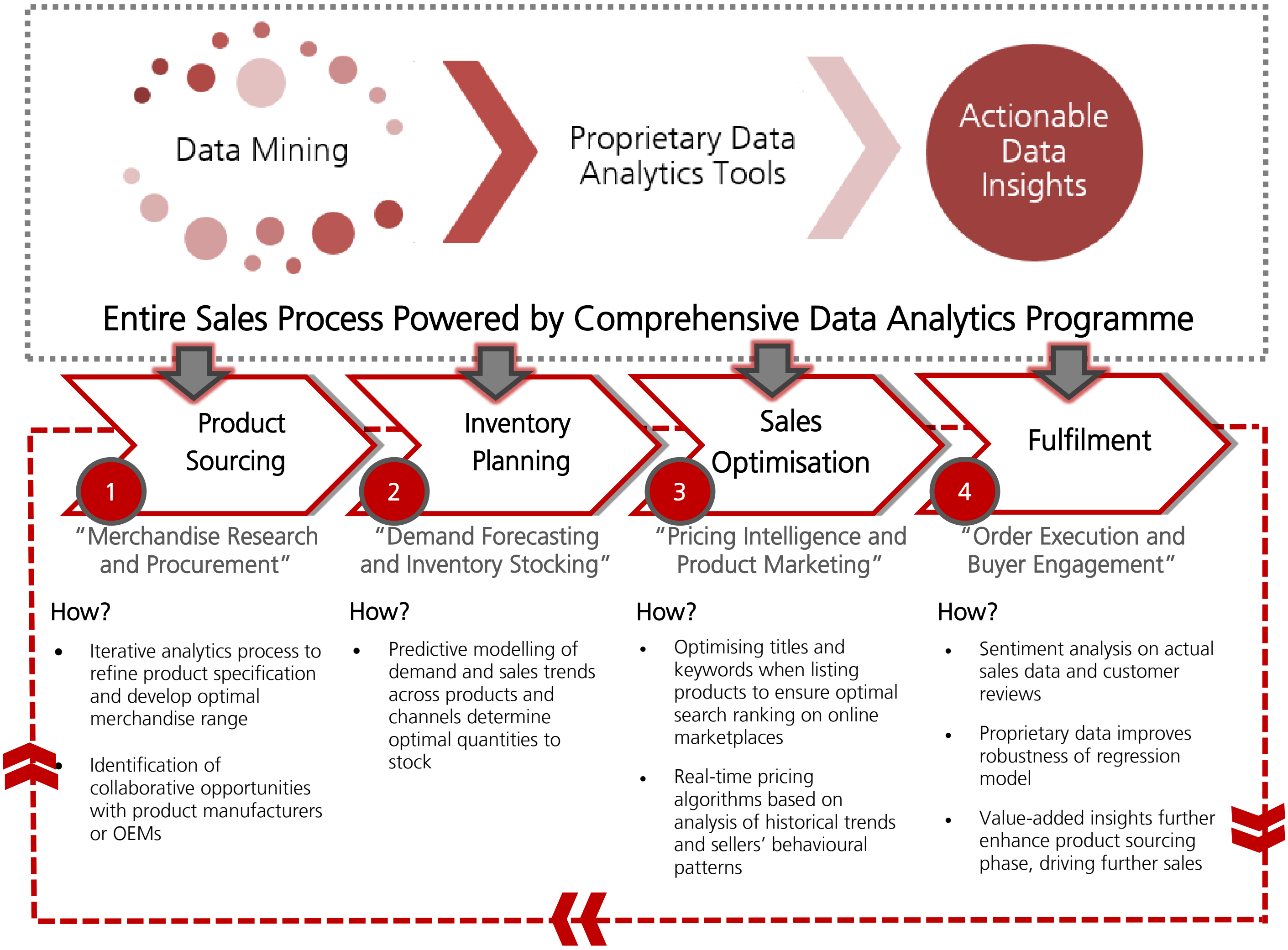
Summary of Recent Collaborations

Date	Partner	Nature of Collaboration
Aug-17	Toscano	Joint venture for the business of marketing, distribution and online retail of men's leather accessories and related products through Faire Leather
Jan-18	R3 Asian Gems	i) Subscribed to 2.4% of YVEN's enlarged share capital of 205m shares for S$1.2m. ii) R3 to contribute its expertise, strategic advice and business contacts in the consumer retail market – particularly the introduction of new retail brands, strategic alliances and acquisition targets to the group.
Mar-18	SingPost	Non-binding MOU for the development of: i) An e-commerce buying platform, AORA, which will focus on cross-border purchases and consolidation of deliveries on behalf of consumers, and (ii) Logistics-related technology to enhance efficiency across the vertical logistics chain.

Source: Company, SGX announcements, DBS Bank

Business Model – Not Your Typical Distributor

Data Analytics is the Backbone of Y Ventures' Profitable E-Commerce Business



Source: Company, DBS Bank

Unlocking the power of data to forge win-win partnerships and sell better. The traditional business model does not enable brand owners to capitalise on valuable insights which may be obtained through the use of online distribution/retail channels.

YVEN's unique business model fills a vital gap in the retail space, and creates value. Its edge in data analytics allows the group to identify market opportunities and procure third-party branded merchandise (often direct from the source) at discounted prices – essentially volume discounts without substantial upfront volume commitments.

In turn, YVEN provides brand partners with ready access to its platform-agnostic distribution network, dedicated marketing efforts, profit-sharing and valuable data insights. We envision such win-win partnerships to be popular with traditional retailers who have yet to establish an online presence.

The merits of YVEN's data-backed business model are reflected in its above-average margins vs traditional distributors, and profitability despite still being in the early stages of growth:

Net Margins	FY14	FY15	FY16
Y Ventures (YVEN)	4.8%	18.8%	12.6%

FMCG Industry Average	3-10%
Electronics Industry Average	3-7%

Source: Company, Alliance Experts

Creating Value for Brand Partners: Case Study on Book Publishers

Examples of Value Creation Through Data Analytics

Research across different brands to pinpoint market gaps where publishers can potentially grow their presence

Source: Company, DBS Bank

Proven formula for successful long-term partnerships can be applied to other segments. Supported by actionable data insights, YVEN's ever-growing domain knowledge and value-add to brand owners in this underserved category provide a strong foundation for long-standing mutually beneficial partnerships, and is evidenced by the former's robust growth in the high-margin book publishing category since its incorporation in 2013.

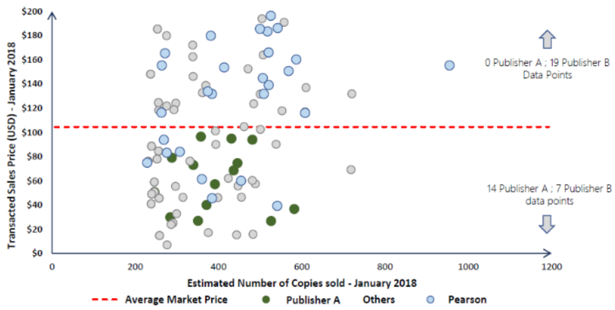
The practical applications for YVEN's proprietary data insights are multifaceted. Examples of value-added data-driven services and strategies that the group has provided to/developed for leading academic publishers in recent years include:

- Helping brand owners to squeeze out parallel importers
- Identifying genres where market gaps exist, i.e. Health Care Delivery, Public Health, etc
- Taking advantage of real-time pricing opportunities to maximise earnings potential
- Development of region-specific, omni-channel sales and marketing strategies

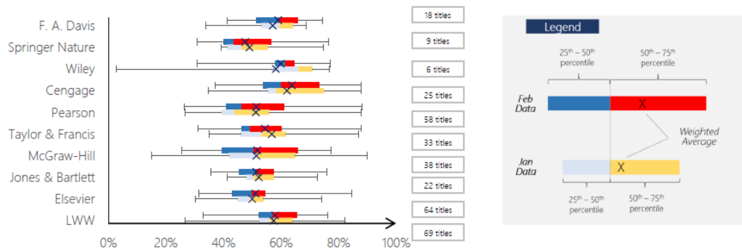
Rather than a one-off success, we see vast potential for YVEN's scalable technology, which can be readily customised and applied to other product categories - driving sustainable, long-term growth.

Finding Pricing Opportunities to Maximise Earnings

Price Scatter Plot:



Discount Percentile Mapping:



Source: Company, DBS Bank

Successful Launch of Faire Leather Provides Further Validation

Incubating new brands; integrating data analytics with traditional product development. Through its data programme, YVEN uncovered an opportunity within the consumer space - its research show that consumers tend to be relatively brand-agnostic for quality men's leather products within a given (undisclosed) price range.

The group subsequently partnered with traditional leather goods company Tocco Toscano ("Toscano") to launch Faire Leather Co. YVEN will own 51% of Faire Leather Co. and Toscano the remaining 49%. The partnership aims to leverage on YVEN's unique specialisation in online distribution and Toscano's expertise in leather craftsmanship.

Offering "functional luxury at a fair price". Cutting out the middle man, cost savings from Faire Leather's direct-to-consumer approach are passed on to consumers. Faire Leather has privileged access to Toscano's factory, which has also produced for several luxury brands. This allows Faire Leather to enjoy cost savings throughout the production process, while providing assurance of product quality.

Kickstarter campaign a resounding success. Faire Leather used crowdfunding platform Kickstarter as a test bed for the viability of the Everyday Padfolio and Travel Briefcase, whose features were crafted based on data gathered from in-depth sentiment analyses.

To fund their production, a campaign was launched to raise S$50,000 in November 2017. At the end of the campaign in January 2018, Faire Leather had raised over S$406,000 – the highest funded Kickstarter campaign ever launched in Singapore.

Faire Leather: Travel Briefcase and Everyday Padfolio

Everyday Padfolio

Travel Briefcase

Product Philosophy: Polished Exteriors, Effortless Organisation

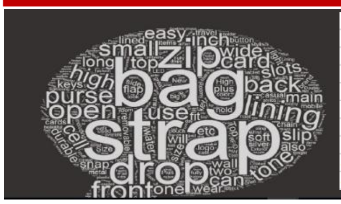
Source: Faire Leather Co.

Utilising Data Analytics to Develop Faire Leather Co.

Quantitative Analysis

Category	Total Est Units Sold /mth (,000)	Total Est Rev /mth	Count of Brands within Top 100 listings	Est Rev /Brand	Est SP /Product
Handbag & Wallet	95	3.3M	64	52K	$35
Clutches	12	400K	47	9K	$33
Cross-Body Bags	47	1.8M	52	35K	$39
Evening Bags	16	300K	49	6K	$18
Shoulder Bags	61	1.2M	59	22K	$36
Top-Handle Bags	44	1.2M	59	20K	$28
Wristlets	10	280K	45	6K	$27
Wallets	45	970K	72	13K	$21
Handbag Accessories	15	230K	55	4K	$15

Qualitative Analysis

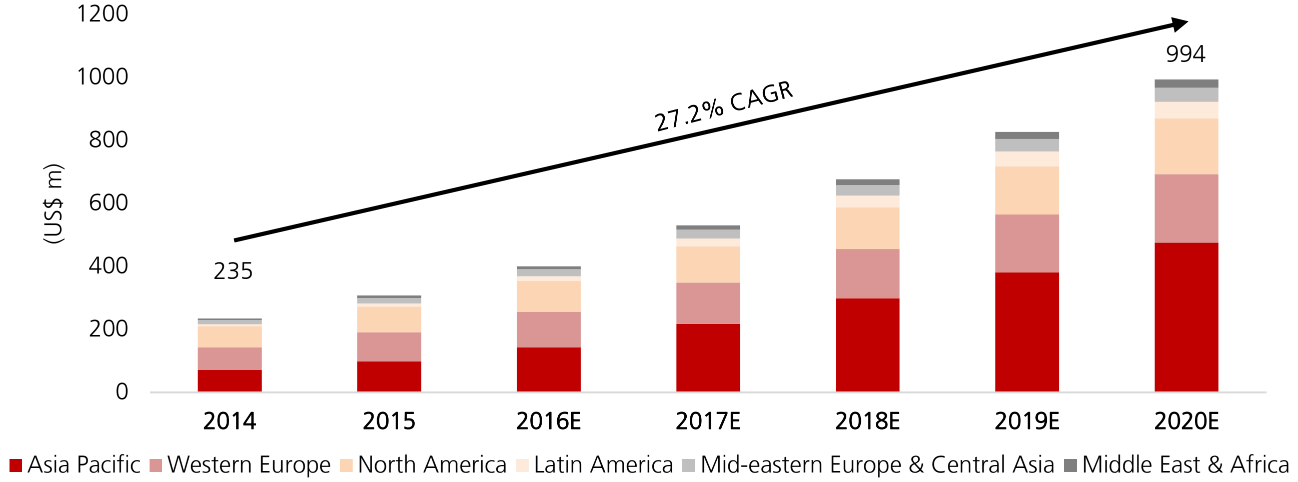


Weight	Keyword
89	bag
83	pocket
83	zipper
81	pockets
65	shoulder
57	leather
53	strap
49	Zipper
42	closure

Source: Company, Amazon, DBS Bank

Industry Prospects

Cross-border B2C E-commerce Transaction Value to Near US$1tr Mark by 2020



Source: Accenture & AliResearch: Global Cross Border B2C e-Commerce Market 2020, DBS Bank

Explosive growth in online B2C cross-border transactions. Consultancy firm Accenture predicts that the total gross merchandising value (GMV) of cross-border and domestic e-commerce will grow at a 13.5% CAGR to reach US$3.4tr by 2020, as over 2bn individuals (c.60% of the global population) are expected to transact c.13.5% of their overall retail consumption online.

While B2C online transactions have been mainly domestic, the rise of m-commerce (mobile commerce) and advancements to logistics infrastructure and last-mile connectivity are set to grow cross-border transactions twice as fast. Poised to grow at a 27.2% CAGR, annual cross-border B2C transactions could deliver US$994bn in gross merchandising value by 2020, representing c.29.2% of the overall e-commerce pie.

Asia to Account for c.48% of Cross-border B2C Trade by 2020

Region	(US$ bn)		
	2014	2020E	CAGR%
Asia Pacific	71	476	37.3%
Western Europe	73	217	19.9%
North America	67	177	17.6%
Latin America	6	53	43.8%
Mid-eastern Europe & Central Asia	13	45	23.0%
Middle East & Africa	5	26	31.6%
Total	235	994	27.2%

Source: Accenture & AliResearch, DBS Bank

Online marketplaces to play a bigger role. A study conducted by the Ecommerce Foundation estimated that global marketplaces such as Amazon and Alibaba will own c.39% of the global online retail market by 2020 vs 10-30% in 2015, depending on the country.

Largely untapped potential in Asia. Approximately 70-80% of YVEN's FY17 revenues were generated from online marketplaces in the US. Marketplaces in Europe and Asia accounted for the remaining 20-30%. While robust demand from US marketplaces have served as a steady source of revenue for the group, the rapidly-growing Asian e-commerce market also holds immense potential.

Accenture also believes that Asia alone could account for c.47.9% of global cross-border B2C trade by 2020, vs c.30.2% in 2014. The growing preference for e-commerce in Asia bodes well for YVEN, as the group has already established networks with leading online marketplaces in the region, which are ready for the ramp-up.

Upcoming "buy-for-me" platform a multi-million dollar opportunity. According to a report by Google and Temasek Holdings, Singapore's e-commerce market will grow at least fivefold over a ten-year period to reach US$5.4bn by 2025. Approximately 55% are estimated to be cross-border transactions.

Assuming YVEN's collaboration with SingPost, AORA, materialises, and that it is able to command 5% of market share by 2025 with a 2% service fee on GMV, translates into potential fee revenue of over S$3m p.a.

Management and Strategy

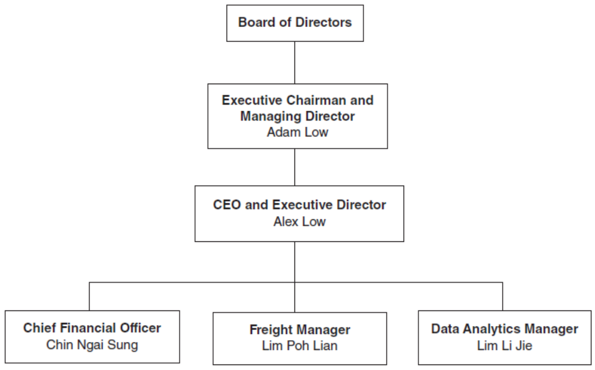
Led by an experienced management team. YVEN is co-founded and led by brothers Adam and Alex Low. Combined, they hold a controlling c.71% stake in the company.

They each carry over 14 years of experience in e-commerce distribution and data analytics, and together with the key management team, have taken their expertise in the retail arena to new heights – starting with the onboarding of leading medical publishing house Elsevier Group to YVEN's online distribution network in mid-2014.

The group has since expanded its client and product base to over 5,500 SKUs across >20 brands, with a wider geographical coverage.

Dividend policy. YVEN does not have a fixed dividend policy but expects to pay dividends of at least 20% in FY18F.

Management Reporting Structure



Source: Company

Key Management Team

Adam Low	Executive Chairman and Managing Director (Co-founder of YVEN)	- Oversees the logistics arm of the group, focusing on sourcing and procurement, freight forwarding as well as waste management services - Prior to founding the group, Adam spent six years with the Singapore Armed Forces, primarily as a liaison officer with the Defence, Science and Technology Agency - Holds a Diploma in Electronics Engineering from Temasek Polytechnic
Alex Low	Chief Executive Officer and Executive Director (Co-founder of YVEN)	- Primarily responsible for the overall day-to-day management of the group, including business strategy, online marketplace channel expansion, online sales and technology department - Graduated from University of Washington with a Bachelor of Science in Applied and Computational Mathematics, also holds a Master in Business Administration from Peking University
Chin Ngai Sung	Chief Financial Officer	- Responsible for all finance activities and accounting operations, reviewing legal documents, liaising with external lawyers and providing financial strategic planning, budgeting and forecasting - Nearly two decades of experience in audit and finance. Prior to joining YVEN, served as the Finance Director of Aardwolf Pestkare (Singapore) where he led the financial and tax functions
Lim Poh Lian	Freight Manager	- Responsibilities include coordination, cross-border freight arrangements and being a liaison with last-mile fulfilment companies - Over 12 years of experience in the logistics industry and joined YVEN in 2012
Lim Li Jie	Data Analytics Manager	- Responsible for implementing, improving and managing the data analytics capabilities of the group, with a focus on the book publishing product category - Obtained his Bachelor of Computing from the National University of Singapore in 2004

Source: Company, DBS Bank

Multi-pronged Approach to E-commerce

Source: Company

Ease of scale. YVEN's platform-agnostic data analytics capabilities can be readily customised and applied across product categories and geographies, which enables the group to identify and capitalise on market gaps and lucrative opportunities as they arise.

Ongoing investments in R&D should further enhance the effectiveness of its data analytics programme. Coupled with greater visibility and working capital post-IPO, YVEN could easily replicate its success in books (Distribution) and launch of Faire Leather (Retail), as it expands its geographical coverage, brand partner network and product range.

Capitalising on new collaborative opportunities; OSIM could be one. YVEN's SGX listing has helped open new doors for the group. Per our conversations with management, it now has over 100 brands on its waiting list. The majority are likely to be traditional businesses which are still operating on a smaller scale.

Given finite resources, not all will translate into actual collaborative opportunities – at the onset. We believe that priority will also be given to more established brands - but the strong interest provides a glimpse into YVEN's long-term growth potential.

V3 Group Brand Portfolio

Source: V3 Group Limited

Further, following R3's investment in the company earlier this year, we do not rule out a possible injection of selected products under V3's established GNC, TWG and OSIM brands into YVEN's distribution portfolio. This could yield significant benefits for YVEN from both an earnings and brand equity perspective.

Adopting a consignment model could help unlock higher scalability. YVEN's inventory-taking model allows the group to maximise earnings potential per unit sale (i.e. higher margins) but on the flip side, ties up capital.

Still in the early stages of growth, we opine that the adoption of a consignment strategy which runs parallel to, and could eventually replace the group's existing inventory-taking model. This would free up working capital toward higher-margin segments and unlock higher scalability for the group, allowing YVEN to expand quickly.

While we are comforted by YVEN's inroads into the consignment market through its partnership with Taiwanese brand, Footpure, we acknowledge that it could take time before this strategy pans out on a larger scale.

Launch of new e-commerce projects such as the potential collaboration with SingPost to develop a global cross-border buying platform, AORA. Given the non-binding MoU, we have yet to impute contributions from this project into our forecasts.

Upside from M&A. In addition to organic growth, YVEN is also on the lookout for strategic acquisitions or joint ventures with synergistic parties, particularly distributors with strategic alignments and investment in consumer product brands, existing channel stores and overseas joint ventures.

Key Risks

Inherent risks in inventory-taking model. Compared to a consignment-based approach, an inventory-based model carries substantially higher sell-through risks. Weaker-than-expected sales also ties up capital, which could have otherwise been redeployed to higher-margin projects. YVEN also bears the risk of inventory obsolescence.

While there are clear risks to an inventory-based model, we believe that YVEN's data analytics capabilities would help lower its sell-through risks substantially vs traditional distributors.

Possible equity fund raising to grow business. YVEN's inventory-taking model entails upfront payments to brand partners, which ties up working capital. Apart from capital required to expand its product range, its AORA project which is still in the early stages of development, also requires further investment.

To grow its business and finance longer-term growth objectives, we believe that YVEN would likely have to re-tap the equity market. Conversely, inability to raise funds could impede growth.

AORA remains a wildcard. We estimate that YVEN has invested at least US$500,000 to develop the AORA platform. While the capabilities and skills that have been developed in the process are transferable, there is no guarantee that the platform will be commercially viable.

Platform-specific risks. YVEN is exposed to platform-related risks at both the data and sales level.

YVEN's data analytics capabilities are based off public and proprietary data obtained from online marketplaces. Insights derived from these datasets help formulate the group's product and pricing strategies. If these marketplaces choose to withhold such data from users later on, or if these data sets turn out to be erroneous, it could have an adverse impact on the group.

Additionally, YVEN is also susceptible to changes in commission rates charged by online marketplaces, which may have to be absorbed by the group.

Concentration risk. Approximately 80% of FY16 revenues were derived from the books publishing category. The Elsevier Group alone accounted for c.67% of YVEN's purchases.

YVEN has benefited strongly from its entrenched relationship with Elsevier Group, which has translated to higher margins. Disruptions to their partnership could weigh heavily on the group's profitability.

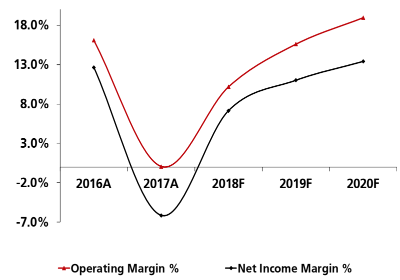
Key Assumptions

Segmental Breakdown

FY Dec	2015A	2016A	2017A	2018F	2019F	2020F
Revenues (US$m)						
E-commerce retail and distribution	8.19	11.6	13.7	24.7	37.0	51.8
Logistics and freight forwarding services	0.21	0.09	0.01	0.02	0.02	0.02
Waste management services	0.48	0.44	0.49	0.52	0.54	0.57
Total	8.87	12.1	14.2	25.2	37.6	52.4

Source: Company, DBS Bank

Margins Trend



Income Statement (US$m)

FY Dec	2015A	2016A	2017A	2018F	2019F	2020F
Revenue	8.87	12.1	14.2	25.2	37.6	52.4
Cost of Goods Sold	(4.6)	(6.8)	(8.3)	(15.1)	(22.5)	(31.4)
Gross Profit	**4.31**	**5.32**	**5.94**	**10.1**	**15.0**	**21.0**
Other Opng (Exp)/Inc	(2.6)	(3.6)	(7.2)	(7.8)	(9.4)	(11.3)
Operating Profit	**1.96**	**1.94**	**0.01**	**2.56**	**5.85**	**9.93**
Other Non Opg (Exp)/Inc	0.0	0.0	0.0	0.0	0.0	0.0
Associates & JV Inc	0.0	0.0	0.0	0.0	0.0	0.0
Net Interest (Exp)/Inc	0.0	0.0	0.0	0.0	0.0	0.0
Exceptional Gain/(Loss)	0.0	(0.1)	(1.0)	0.0	0.0	0.0
Pre-tax Profit	**1.94**	**1.84**	**(1.0)**	**2.54**	**5.84**	**9.91**
Tax	(0.2)	(0.2)	0.0	(0.4)	(1.0)	(1.7)
Minority Interest	(0.1)	(0.1)	0.12	(0.3)	(0.7)	(1.2)
Preference Dividend	0.0	0.0	0.0	0.0	0.0	0.0
Net Profit	**1.67**	**1.53**	**(0.9)**	**1.80**	**4.14**	**7.03**
Net Profit before Except.	1.67	1.61	0.08	1.80	4.14	7.03
EBITDA	2.07	2.05	0.13	2.75	6.03	10.1
Growth						
Revenue Gth (%)	43.6	36.5	17.4	77.3	49.0	39.5
EBITDA Gth (%)	321.3	(0.9)	(93.6)	2,004.4	119.4	67.6
Opg Profit Gth (%)	385.7	(0.8)	(99.7)	40,622.4	128.5	69.7
Net Profit Gth (Pre-ex) (%)	466.2	(3.6)	(94.9)	2,105.2	129.5	69.9
Margins & Ratio						
Gross Margins (%)	48.6	43.9	41.8	40.0	40.0	40.0
Opg Profit Margin (%)	22.1	16.1	0.0	10.2	15.6	19.0
Net Profit Margin (%)	18.8	12.6	(6.2)	7.2	11.0	13.4
ROAE (%)	71.7	55.7	(20.8)	26.5	45.1	51.5
ROA (%)	37.3	27.9	(11.2)	15.7	25.8	30.2
ROCE (%)	51.2	44.2	0.1	25.9	43.9	50.2
Div Payout Ratio (%)	6.5	158.8	N/A	20.0	20.0	20.0
Net Interest Cover (x)	93.9	85.0	0.3	132.2	317.8	568.4

Steady margin expansion as YVEN gains scale

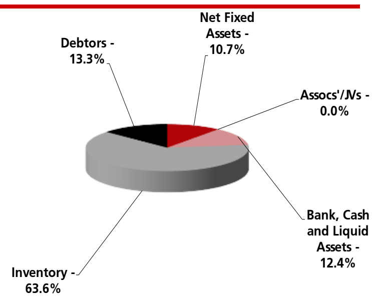
Source: Company, DBS Bank

Balance Sheet (US$m)

FY Dec	2015A	2016A	2017A	2018F	2019F	2020F
Net Fixed Assets	1.57	1.52	1.34	1.37	1.46	1.61
Invts in Associates & JVs	0.0	0.0	0.0	0.0	0.0	0.0
Other LT Assets	0.0	0.0	0.21	0.44	0.37	0.30
Cash & ST Invts	0.73	0.94	0.88	1.58	2.00	4.16
Inventory	1.03	2.63	6.06	8.13	12.5	18.1
Debtors	0.85	0.82	1.20	1.71	2.54	3.55
Other Current Assets	0.90	0.0	0.0	0.0	0.0	0.0
Total Assets	**5.08**	**5.91**	**9.70**	**13.2**	**18.9**	**27.7**
ST Debt	0.03	0.03	0.04	0.04	0.04	0.04
Creditor	0.53	1.61	1.93	3.43	5.11	7.13
Other Current Liab	0.29	0.71	0.40	0.73	0.73	0.73
LT Debt	0.97	0.94	0.94	0.90	0.85	0.81
Other LT Liabilities	0.02	0.02	0.03	0.03	0.03	0.03
Shareholder's Equity	3.13	2.36	6.08	7.52	10.8	16.5
Minority Interests	0.11	0.25	0.28	0.59	1.29	2.49
Total Cap. & Liab.	**5.08**	**5.91**	**9.70**	**13.2**	**18.9**	**27.7**
Non-Cash Wkg. Capital	1.96	1.13	4.93	5.67	9.22	13.8
Net Cash/(Debt)	(0.3)	0.0	(0.1)	0.65	1.11	3.32
Debtors Turn (avg days)	28.9	25.1	26.0	21.1	20.6	21.2
Creditors Turn (avg days)	46.9	58.4	79.4	65.5	69.7	71.5
Inventory Turn (avg days)	89.0	100.0	194.8	173.4	168.5	178.6
Asset Turnover (x)	2.0	2.2	1.8	2.2	2.3	2.3
Current Ratio (x)	4.1	1.9	3.4	2.7	2.9	3.3
Quick Ratio (x)	1.9	0.7	0.9	0.8	0.8	1.0
Net Debt/Equity (X)	0.1	0.0	0.0	CASH	CASH	CASH
Net Debt/Equity ex MI (X)	0.1	0.0	0.0	CASH	CASH	CASH
Capex to Debt (%)	2.0	5.7	8.7	13.5	21.1	31.1

Source: Company, DBS Bank

Asset Breakdown



Higher inventory levels as at end-FY17 reflects optimism over growth outlook

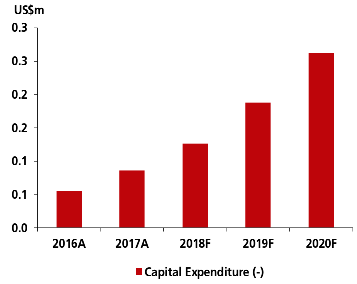
Cash Flow Statement (US$m)

FY Dec	2015A	2016A	2017A	2018F	2019F	2020F
Pre-Tax Profit	1.94	1.84	(1.0)	2.54	5.84	9.91
Dep. & Amort.	0.10	0.10	0.12	0.19	0.18	0.18
Tax Paid	0.0	0.0	0.0	(0.1)	(1.0)	(1.7)
Assoc. & JV Inc/(loss)	0.0	0.0	0.0	0.0	0.0	0.0
Chg in Wkg.Cap.	(1.3)	0.65	(3.5)	(1.1)	(3.6)	(4.5)
Other Operating CF	0.0	0.02	1.19	0.0	0.0	0.0
Net Operating CF	**0.71**	**2.60**	**(3.2)**	**1.55**	**1.48**	**3.87**
Capital Exp.(net)	0.0	(0.1)	(0.1)	(0.1)	(0.2)	(0.3)
Other Invts.(net)	0.0	0.0	0.0	0.0	0.0	0.0
Invts in Assoc. & JV	0.0	0.0	0.0	0.0	0.0	0.0
Div from Assoc & JV	0.0	0.0	0.0	0.0	0.0	0.0
Other Investing CF	0.0	0.0	(0.3)	(0.3)	0.0	0.0
Net Investing CF	**0.0**	**(0.1)**	**(0.3)**	**(0.5)**	**(0.2)**	**(0.3)**
Div Paid	(0.1)	(2.4)	(0.6)	(0.4)	(0.8)	(1.4)
Chg in Gross Debt	0.0	0.0	0.0	(0.1)	(0.1)	(0.1)
Capital Issues	0.10	0.16	5.68	0.0	0.0	0.0
Other Financing CF	(0.4)	0.0	(1.6)	0.0	0.0	0.0
Net Financing CF	**(0.5)**	**(2.3)**	**3.46**	**(0.4)**	**(0.9)**	**(1.5)**
Currency Adjustments	0.0	0.0	0.02	0.0	0.0	0.0
Chg in Cash	0.23	0.20	(0.1)	0.70	0.41	2.16
Opg CFPS (S cts)	1.32	1.28	0.22	1.68	3.21	5.37
Free CFPS (S cts)	0.45	1.67	(2.1)	0.91	0.82	2.31

Source: Company, DBS Bank

Assumes 20% payout from FY18F

Capital Expenditure



Valuation

Base-case valuation is S$0.77 per share. In our base case, we assume an acceleration in sales growth across third-party and private label products, but a moderation in margins vs FY16 levels due to the recent expansion of its team.

YVEN typically stocks what it can sell within a three-month period. Given management's conservative nature, the significant c.130% increase in inventory levels at end-FY17 implies that efforts to grow its brand partner network and product range are going according to plan, and signals its rising confidence in sell-through rates for the years ahead. Our revenue growth assumptions of 77% and 49% y-o-y for FY18F and FY19F respectively, thus seem reasonable in our view.

Substantial investments have been poured into the development of the AORA platform alongside SingPost, which could result in recurring fee income for the group. Due to the lack of visibility, we have not factored in contributions from this project which could yield revenues of at least S$0.5m in its first full-year of launch.

Valuation based on 20x FY19F EV/EBITDA, at 15% discount to larger peers' average of 23x. Despite YVEN's high growth profile, we favour an EV/EBITDA to EV/Sales valuation metric for the company. We believe this better reflects the merits of YVEN's data-driven approach, which underscores its steady profit-generation ability, and is rare for an early-stage, high-growth company.

Given its smaller scale, balanced against projected EBITDA growth of c.92% CAGR over FY18F-20F, we see a multiple of 20x as fair. This translates to FY19F EV/Sales of 3.2x, which is also at a 15% discount to larger peers' 3.8x.

Base-case Valuation (EV/EBITDA)	
FY19 EBITDA of YVEN (US$m)	6.0
EV/EBITDA FY1 Peer Multiple	23.4
EV/EBITDA Valuation (15% Discount to Peers)	120.2
Outstanding Shares (m)	205
Implied share price (SG$)	**0.77**

Source: DBS Bank

Peer Comparables for YVEN (Based on Consensus Estimates)

Company Name	Exchange	GICS Sub-Industry Name	Price Close (LCL)	Market Cap (US$m)	Revenue (FY0, US$m)	P/E (FY0)	P/E (FY1)	EV/Sales (FY1)	EV/EBITDA (FY1)
Alibaba	USA	Internet Software & Services	$ 192.6	482,547	22,994	56.6	36.4	12.6	29.0
Amadeus IT	Spain	Data Processing & Outsourced Services	€ 62.2	33,837	5,821	24.8	24.9	5.6	14.4
Amazon.com	USA	Internet & Direct Marketing Retail	$ 1,591.0	770,215	177,866	348.9	191.2	3.4	29.3
ASOS	UK	Internet & Direct Marketing Retail	GBP 7,514	8,772	2,487	103.8	76.9	2.5	36.7
Baozun	USA	Internet Software & Services	$ 46.2	2,525	638	64.0	38.2	3.0	27.8
eBay	USA	Internet Software & Services	$ 42.8	43,347	9,567	21.4	18.7	4.3	12.7
Groupon	USA	Internet & Direct Marketing Retail	$ 4.6	2,555	2,844	41.4	23.0		
Jumei International	USA	Internet & Direct Marketing Retail	$ 3.1	466	904	11.1			
Overstock.com	USA	Internet & Direct Marketing Retail	$ 48.5	1,214	1,800			0.6	
Rakuten	Japan	Internet & Direct Marketing Retail	¥ 928.6	12,501	8,383	11.8	16.3	1.9	11.0
Shopify	USA	Internet Software & Services	$ 146.3	14,655	673				
Start Today	Japan	Internet & Direct Marketing Retail	¥ 2,714	7,937	686	52.1	37.7	8.3	24.7
Stitch Fix	USA	Internet & Direct Marketing Retail	$ 21.8	2,114	977			1.5	35.4
Transcosmos	Japan	Data Processing & Outsourced Services	¥ 2,847	1,304	2,176	17.3	29.9	0.5	13.5
Wayfair	USA	Internet & Direct Marketing Retail	$ 84.9	7,510	4,721			1.2	
						68.5	49.3	3.8	23.4
Y Ventures	Singapore	Internet & Direct Marketing Retail	SGD 0.54	83	14		49.3	5.4	72.4

Source: ThomsonReuters, Company

Bull-case valuation of S$1.23 per share. Under our bull-case scenario, we assume that sales would be supercharged by the onboarding of reputed brand partners, i.e. the V3/OSIM group and adoption of a consignment strategy for selected categories, which offers higher scalability.

This would result in sales tracking closer to/outpacing inventory growth in FY18F/19F, to grow at 100%/60% y-o-y respectively. As higher scalability kicks in, EBITDA margins could improve to 15.9%/21.8% for FY18F/19F, vs 10.1%/16.9% under our base-case assumption. Similarly, we have not factored in any contributions from AORA.

Bull-case Valuation (EV/EBITDA)	
FY19 EBITDA of Y Ventures (US$m)	9.6
EV/EBITDA FY1 Peer Multiple	23.4
EV/EBITDA Valuation (10% Discount to Peers)	192.1
Outstanding Shares (m)	205
Implied share price (SG$)	1.23

Source: DBS Bank

Bear-case valuation of S$0.47 per share. In our bear-case scenario, we assume lower inventory turnover, presumably on a longer gestation period for new products as YVEN continues to expand into new categories, and impute lower growth given upfront purchase requirements inherent in YVEN's inventory-taking model, which could constrain the group's strong growth potential.

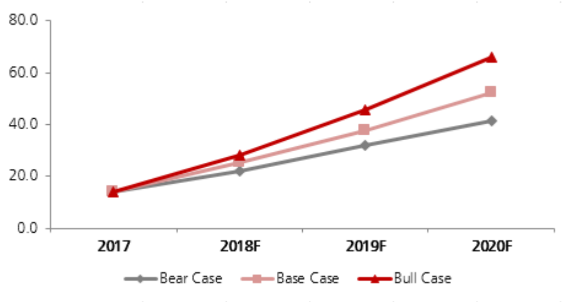
In this case, revenue growth for FY18F/19F would be more modest at 55%/45% respectively. Higher overheads and lower scale result in lower EBITDA of US$3.7m.

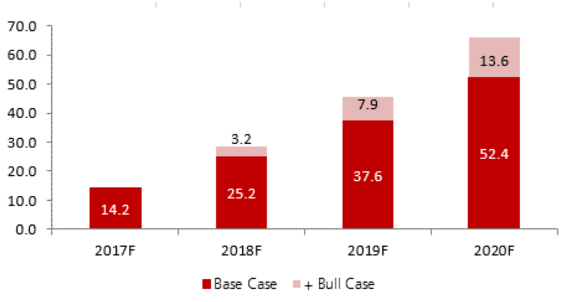
Bear-case Valuation (EV/EBITDA)	
FY19 EBITDA of Y Ventures (US$m)	3.7
EV/EBITDA FY1 Peer Multiple	23.4
EV/EBITDA Valuation (10% Discount to Peers)	72.8
Outstanding Shares (m)	205
Implied share price (SG$)	0.47

Source: DBS Bank

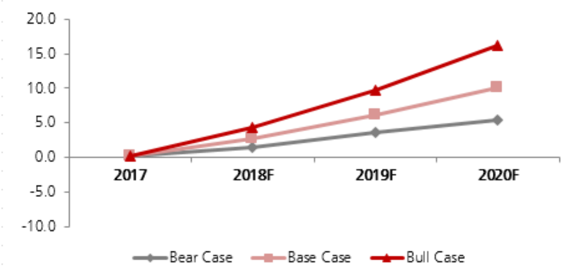
Scenario Analysis

Sales (US$ m, FY17-20F)





Adj. EBITDA (US$ m, FY17-20F)



Source: DBS Bank

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STRONG BUY (>20% total return over the next 3 months, with identifiable share price catalysts within this time frame)
BUY (>15% total return over the next 12 months for small caps, >10% for large caps)
HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)
FULLY VALUED (negative total return i.e. > -10% over the next 12 months)
SELL (negative total return of > -20% over the next 3 months, with identifiable catalysts within this time frame)

Share price appreciation + dividends

Completed Date: 28 Mar 2018 11:00:27 (SGT)
Dissemination Date: 28 Mar 2018 11:59:09 (SGT)

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Singapore Industry Focus

Singapore Banks

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DBS Group Research . Equity

26 Apr 2018

The quarter all have been waiting for

- Positive trends expected for NIM, loan growth and lower credit cost; typical seasonally strong quarter for wealth management; insurance is a wildcard
- Sustained SIBOR/SOR rates will ensure NIM remains on an uptrend; lower credit cost back to pre-oil & gas crisis days is the trend going forward
- BUY ratings maintained on OCBC and UOB; TPs raised on higher NIM; entering a new era of higher ROEs
- Singapore banks releasing 1Q18 results starting from end April (DBS: 30 Apr, UOB: 3 May, OCBC: 7 May (GEH: 4 May))

The long awaited strong quarter. Net interest margin (NIM) and credit cost will be the focus this quarter. The sustained SIBOR uplift since 4Q17 should be well reflected in 1Q18's NIM. With the woes from oil & gas non-performing loans (NPL) largely taken care off, banks should be booking significantly lower provisions y-o-y. Loan growth is expected to hover around 2% q-o-q while fee income should be seasonally stronger supported by wealth management. OCBC may experience some volatility in its insurance contribution because of the new accounting standard. All in, this is the long awaited strong set of quarterly results we have been waiting for. After going through several years of NIM compression and two years of NPL woes, the Singapore banks are ready to shine. Valuations are heading to +1SD of mean.

MAS' stance seals interest rate upcycle; room for SOR/SIBOR to accelerate further. The Monetary Authority of Singapore (MAS) had on 13 April slightly increased the slope of the nominal effective exchange rate policy (SGD NEER) band to an appreciation pace. Our strategists do not expect a follow through with another tightening at the next review in Oct 2018. In this respect, expectations of a sustained upward trend for SOR/SIBOR should persist, which is positive for the banks. Taking this stance into consideration, we have lifted our NIM projections for FY18-19F by an additional 2-3bps resulting in earnings upgrades of c.4%. This is the basis to our higher TPs.

BUYs maintained; TPs raised; heading to the next level. We have BUYs on both OCBC and UOB with UOB as our preferred pick for 1) lower credit costs vs historical levels providing better earnings uplift, and 2) certainty of at least S$1.00 full year dividend. Our TP for UOB is raised to S$33.20. We continue to hope for higher dividends for OCBC. We have raised our TP for OCBC to S$15.30. Sustainable deliveries could push banks' valuations closer to +1SD of the 10-year mean.

Key risks. While all the stars appear aligned for the Singapore banks, there are a couple of risk factors. If SIBOR/SOR starts to decline, the NIM story will be out of the window (some degree of probability); slower than expected loan growth (small probability), and another upset in asset quality (low probability) could derail earnings upside.

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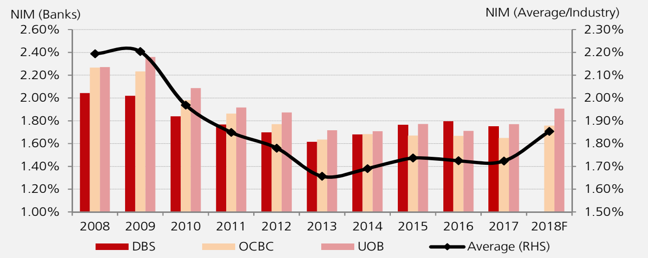
STOCKS

	Price	Mkt Cap	12-mth Target Price	Performance (%)		
	S$	US$m	S$	3 mth	12 mth	Rating
DBS	29.74	57,378	NA	9.6	56.8	NR
OCBC Bank	13.76	43,308	15.30	3.0	42.0	BUY
UOB	29.39	36,732	33.20	5.2	36.4	BUY

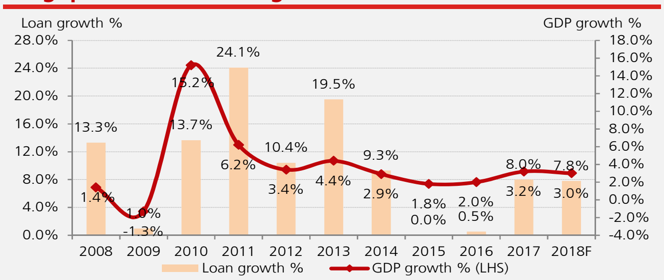
Source: DBS Bank, Bloomberg Finance L.P.
Closing price as of 26 Apr 2018

Singapore Banks: NIM trends



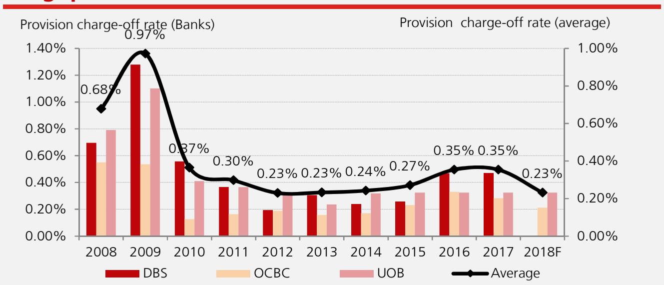
No forecasts for DBS
Source: Companies, DBS Bank

Singapore Banks: Loan growth



Source: Companies, DBS Bank

Singapore Banks: Credit costs



Source: Companies, DBS Bank

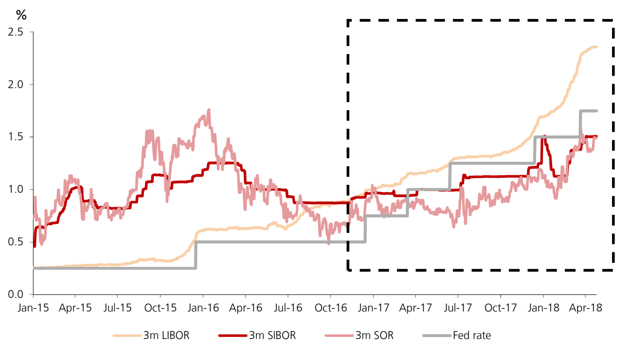
Reiterating our 2018 view; trends expected in 1Q18

A recovery year with greater conviction. In our 2018 Singapore Bank outlook report released on 23 Nov 2017, we highlighted three key trends to watch in 2018: 1) SIBOR rally will kick-start; NIM momentum should pick up, 2) pick up in loan growth, further supplementing top-line growth, and 3) NPL issues largely over, resulting in significantly lower credit costs. In 1Q18, we expect all these three trends to be visible.

NIM uplift story intact, should be clearly visible in 1Q18. With rate hikes almost a certainty in the coming quarters, the 3M SIBOR/SOR have broken out of their trading range, reaching their highest levels so far; currently at 1.5%. With a greater pass-through expected from the USD rates to SIBOR/SOR, the Singapore banks are almost surely to deliver higher NIM. The expected sustained rise in SIBOR should see the Singapore banks' NIM on a firmer rise in 2018.

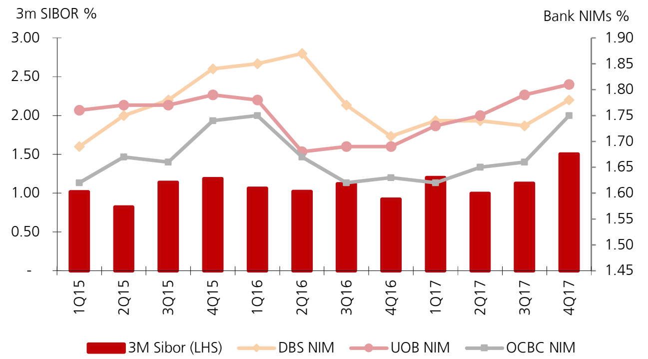
Better than expected NIM uptrend; earnings raised. With the MAS's stance on the SGD NEER announced on 13 April and expectations that the SGD would appreciate at a slower pace vs the USD, there will still be room for SOR/SIBOR to continue to rise. Our interest rate strategist expects SOR/SIBOR to surpass 2% by the end of the year. With greater certainty of this trend, taking into account some elements of competition and rise in funding costs outside Singapore operations, we have further raised our NIM forecast by 2-3bps on average. We now expect OCBC to see NIM improve by 8bps (from 6bps) to 1.73% (FY17: 1.65%) and UOB to see NIM improve by 9bps (from 6bps) to 1.86% (FY17: 1.77%). Our sensitivity analysis shows that every 25 bps rise in interest rates that reprices the S$, HK$ and US$ books collectively will lift NIM by an average of 3bps (UOB: +1bp; OCBC: +3bps) with a corresponding 2% increase (UOB: +1%; OCBC: +2%) in sector earnings.

Singapore: 3-month SIBOR, SOR and LIBOR; correlation has strengthened



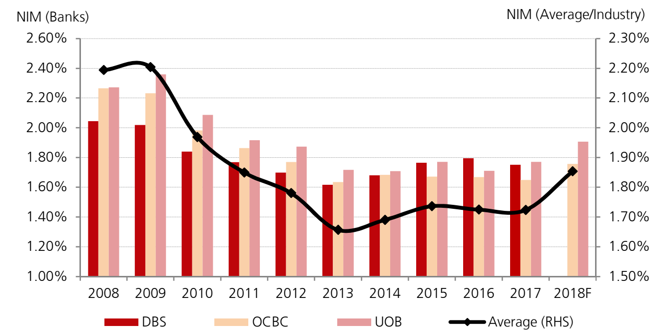
Source: Bloomberg Finance L.P., DBS Bank

Singapore Banks: NIM and SIBOR quarterly trends; NIM gradually picking up since end-2016



Source: Companies, Bloomberg Finance L.P., DBS Bank

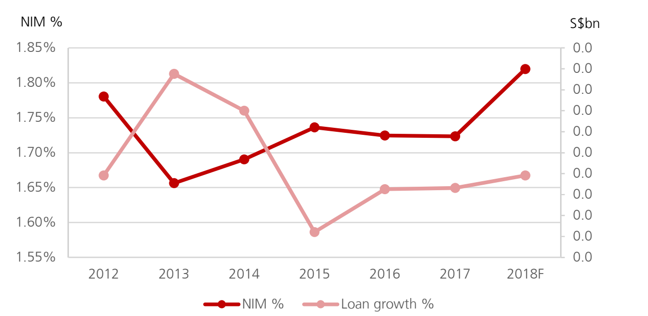
Singapore Banks: NIM forecasts; on an uptrend



Note: No forecasts for DBS
Source: Companies, DBS Bank

First time in years, net interest income driven by both NIM and loan growth. The Singapore banks suffered from NIM compression during 2010-15, followed by several years of slow loan growth in 2015-16 with the slowest growth of 0% y-o-y in 2015. In 2017, loan growth picked up with a slight improvement in NIM. In 2018, both NIM and loan growth will drive net interest income.

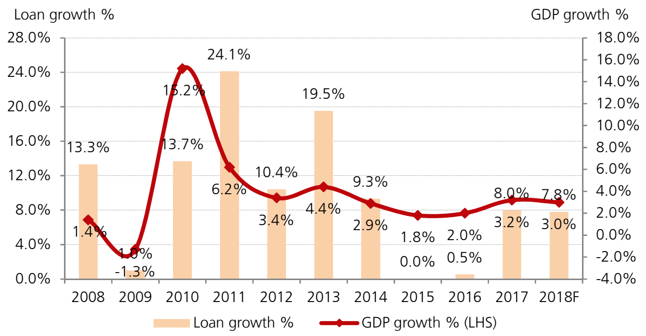
Singapore Banks: NIM and loan growth



Note: No forecasts for DBS
Source: Companies, DBS Bank

Sustained loan growth trends. Loan growth surprised on the upside in 2017 with banks generally guiding for 7-8% loan growth. The momentum is expected to continue in 2018, still driven by property-related (mainly domestic) as well as domestic and regional corporate loans. Sensitivity of loan growth to earnings is marginal (every 1 ppt increase in loan growth leads to only less than 1% impact on earnings). It would be more important to watch the impact of NIM on earnings.

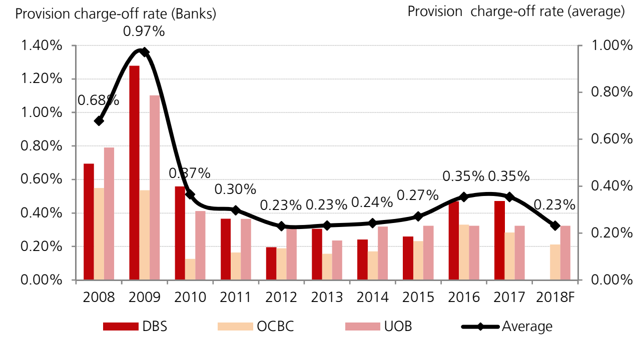
Singapore Banks: Sustained loan growth trends in 2018



Note: No forecasts for DBS
Source: Companies, DBS Bank

Lower credit costs in 2018, a certainty. With NPL woes addressed in 2017, the banks should have a clean start in 2018 and credit costs should ease. We expect credit cost to drop by 12bps to 23bps (2017: 35bps). Based on our estimates, the through-the-cycle credit cost (2003-2016) stands at 35bps. With the implementation of IFRS9/SFAS109, banks are no longer allowed to buffer up general provisions. The SFAS109 requires banks to maintain a minimum of 1% collective impairment allowance and specific allowance to be set aside on a case-by-case basis (regulatory loss absorption reserves). The Expected Credit Loss (ECL) model includes more forward-looking information to assess credit quality of the bank's underlying financial assets. With the current health operating environment and benign NPLs (now that the oil & gas issues have been sorted out), credit costs should reflect the pre-oil & gas crisis levels. The IFRS9/SFAS109 accounting rule will be tested in a crisis scenario.

Singapore Banks: Credit cost trends; tapering off sharply



Note: No forecasts for DBS
Source: Companies, DBS Bank

Seasonally strong fee income in 1Q18. 1Qs are typically strong for wealth management and market related activities. We expect fee income to be strong for the banks. OCBC may be an exception because of a change in accounting rules related to its insurance income contribution. While we expect Great Eastern Holdings (GEH) to post strong 1Q18 figures, its non-operational profit (from its non-par fund profit) could be stripped out and placed under other comprehensive income, under a new accounting rule (IFRS4 for insurance companies; which is equivalent to IFRS9 for banks).

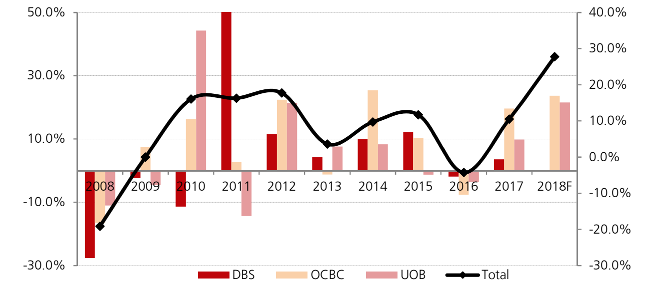
Expenses would also be seasonally higher in 1Q. It is also typical that personnel costs are loaded in 1Q but the impact should not be too far away from the full year guidance. Cost-to-income ratio would benefit from higher revenues.

Capital – the last round of deduction for Basel III. We have reached the final year before the transitional period to fully loaded CET1. Banks have been well prepared for this. Over the past few years, the banks have been optimising capital utilisation and recalibrated their respective risk weighted assets. With clarity on the treatment of risk weighted assets for the Basel rules, banks started to raise dividends in 4Q17. Only OCBC did not raise dividends significantly, although we believe there is room to do so.

Valuation and recommendation

Back in the bull market zone. The last time we saw banks valuations at such levels was 10 years ago. In 2007, SIBOR hit a high of 3.5% while NIM averaged 2.1%. Loan growth was at double digits driven by the Integrated Resorts (IR) loans. Although NIM levels are lower now vs 10 years ago, we are nevertheless in a NIM uptrend era. With loan growth recovering, topline growth is a clear driver. Fee income has also changed structurally vs 10 years ago, with banks now relying more on wealth management income for growth. Expenses are well controlled and efficiency has improved, potentially bringing cost-to-income ratios to new lows. More importantly, credit costs are gradually shifting back to the pre-oil & gas NPL period. All these would seal expectations of strong 28% earnings growth for the banks in 2018 with ROEs heading to 11-12%. This clearly justifies higher valuations for the banks vs 5 years ago.

Singapore Banks: Earnings growth



Source: Bloomberg Finance L.P., Companies, DBS Bank

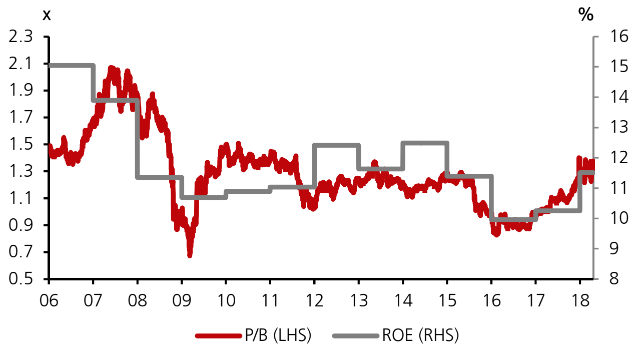
Trading slightly above10-year historical mean. The Singapore banks had a fantastic rally in 2017, starting from the first rate hike at end-2016. The banks have collectively appreciated by >30% over 2017, one of the best sector performances for the year. Sustained momentum of NIM, loan growth and lower credit costs with contained NPLs should lift valuations to at least to mean P/BV multiples. For a further re-rating, we would need to see stronger and sustainable revenue drivers and a clear path for asset quality improvement.

Second best performer among ASEAN peers. Singapore banks emerged the second best performer vs its ASEAN peers, just after Malaysian banks. In our view, the rally for Singapore banks stems from improved expectations of better years ahead especially with the rate hike story intact and asset quality issues a thing of the past.

Singapore Banks: Rolling forward P/BV band (10-year)

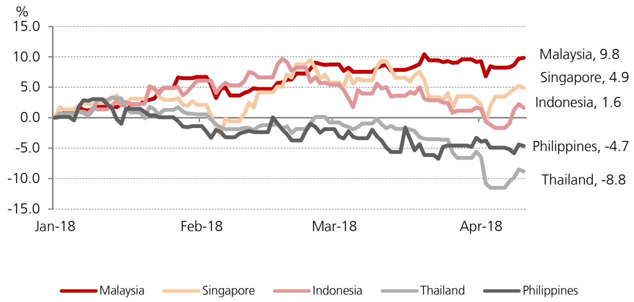
Source: Bloomberg Finance L.P., Companies, DBS Bank

Singapore Banks: Rolling forward P/BV band vs ROE



Source: Bloomberg Finance L.P., Companies, DBS Bank

ASEAN Banks: YTD relative performance



Source: Bloomberg Finance L.P., Companies, DBS Bank

Prefer UOB. The stars are all aligned for UOB, hence our shift in preference to UOB now from OCBC. UOB's key catalysts are clearly entrenched in its NIM and loan growth, but more importantly, lower credit cost after years of hoarding a 32 bps credit cost level be it rain or shine. UOB has also raised its dividends and S$1.00 full year DPS is expected to be sustainable. While we expect OCBC to do well in 1Q18, it might see some volatility in its insurance income arising from the new accounting standard and it is still awaiting a higher dividend proposal. Elsewhere, we continue to wait for its decision on its insurance operations in Malaysia, where it is expected to lower its stake to 70% from 100%.

Key Risks

Relapse of oil & gas woes. While the banks have articulated that the oil & gas NPL issues are largely behind them, risks of these companies running out of cash flow as their funding instruments (bonds) mature remain a risk. We understand that most of these have been restructured or are undergoing restructuring, which means these accounts would have been classified as NPLs. The remnants of these may still trickle into some NPL formation in 2018.

NIM and loan growth fail to deliver. We have been positive on NIM uplift and new loan growth. A disappointment in macro indicators could temper the better loan growth expectations. Although loan growth is less sensitive to earnings, sentiment of loan deceleration could dent top-line prospects. A slower-than-expected pass-through of Fed rate hikes to SIBOR/SOR could also derail the NIM uptrend. Competition in loan rates could be an added dent to NIM.

Singapore Banks: Peer comparison

Banking Group	Market cap	Price 26 Apr	12-mth Target Price	Rating	PE (x)			CAGR	PBV (x)			ROE (%)	Net div (%)
	(US$bn)	(S$/s)	(S$/s)		FY17A	FY18F	FY19F	^ (%)	FY17A	FY18F	FY19F	FY18F	FY18F
DBS*	57,378	29.74	NA	NR	17.5x	13.4x	11.9x	21.3	1.6x	1.6x	1.5x	12.0%	3.9%
OCBC	43,308	13.76	15.30	BUY	14.0x	11.3x	10.3x	16.4	1.5x	1.4x	1.3x	12.8%	2.9%
UOB	36,732	29.39	33.20	BUY	14.3x	11.7x	10.7x	15.6	1.4x	1.3x	1.2x	11.4%	3.4%
Weighted average					15.5x	12.3x	11.1x		1.5x	1.4x	1.3x	12.1%	3.5%
Simple average					15.2x	12.2x	11.0x		1.5x	1.4x	1.3x	12.1%	3.4%

* Based on Bloomberg consensus

^ Refers to 2-year EPS CAGR for FY17-19F

Source: Companies, Bloomberg Finance L.P., DBS Bank

OCBC

BUY

Last Traded Price (26 Apr 2018): S$13.76 (**STI :** 3,570.02)
Price Target 12-mth: S$15.30 (11% upside) (Prev S$14.00)

Analyst
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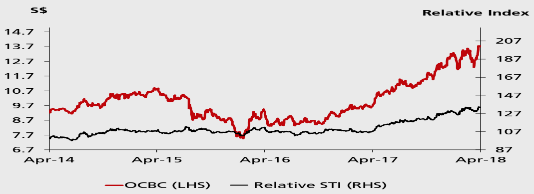
What's New

- NIM improvement across operations expected; credit cost should be back to pre-oil & gas era
- Strong and sustainable non-interest income trends; slight glitch in insurance contribution from new accounting rules
- FY18-19F earnings raised by 4% each year on higher NIM and lower credit costs
- Maintain BUY, TP lifted to S$15.30; a much anticipated catalyst would be higher dividends

Price Relative



Forecasts and Valuation

FY Dec (S$ m)	2017A	2018F	2019F	2020F
Pre-prov. Profit	5,498	6,556	7,199	7,741
Net Profit	4,106	5,079	5,561	5,969
Net Pft (Pre Ex.)	4,106	5,079	5,561	5,969
Net Pft Gth (Pre-ex) (%)	19.6	23.7	9.5	7.3
EPS (S cts)	98.2	121	133	143
EPS Pre Ex. (S cts)	98.2	121	133	143
EPS Gth Pre Ex (%)	17	24	9	7
Diluted EPS (S cts)	98.2	121	133	143
PE Pre Ex. (X)	14.0	11.3	10.3	9.6
Net DPS (S cts)	36.7	40.4	40.2	40.2
Div Yield (%)	2.7	2.9	2.9	2.9
ROAE Pre Ex. (%)	11.1	12.8	12.8	12.6
ROAE (%)	11.1	12.8	12.8	12.6
ROA (%)	1.0	1.1	1.2	1.2
BV Per Share (S cts)	909	990	1,083	1,185
P/Book Value (x)	1.5	1.4	1.3	1.2
Earnings Rev (%):		4	4	new
Consensus EPS (S cts):		110.0	123.1	133.0
Other Broker Recs:		B: 14	S: 0	H: 8

Source of all data on this page: Company, DBS Bank, Bloomberg Finance L.P.

Staying above the rest

Staying positive; maintain BUY. NIM uptrend is a given in this current operating environment. Management guided for 7-8% loan growth for FY18. Wealth management and insurance operations are holding up well, and will remain a key differentiator of growth vs peers. However, a change in accounting treatment for insurance income may cause a glitch in earnings. We have only assumed that insurance income contribution increases by 5% y-o-y. Management did guide that credit costs should be back to pre-oil & gas levels which ranged from 15-17bps over FY10-14; OCBC started providing for its oil & gas exposure from as early as 3Q15. At this juncture, we have conservatively assumed credit cost will hover around 21-22bps over FY18-20F (previously assumed 26bps across FY18-20F). Further earnings upside could be possible. What remains an overhang would be the much anticipated higher dividend payout. OCBC was the only bank that did not raise dividends in FY17.

Where we differ: Staying above the rest. We have tuned our credit cost lower to 21-22bps; we believe this is where we could differ significantly from consensus. Management indicated that credit cost would remain benign in this current operating environment and possibly reflect the pre-oil & gas crisis levels. Our earnings forecasts remain above consensus after further raising FY18-19F earnings by 4% each year largely on lower credit cost.

Potential catalyst: Sustained positive deliveries, minimal surprise in insurance income trends, higher dividends. Asset quality issues are a thing of the past. Lower-than-expected credit cost could further boost earnings. In the meantime, sustained positive deliveries from NIM and loan growth should support valuations. We remain hopeful that the change in accounting rules would not dampen its insurance income contribution too much. A much anticipated catalyst would be higher dividends, which we think would be announced as early as its 1H18 results.

Valuation:

Maintain BUY, TP raised to S$15.30. Our TP of S$15.30 (12.5% ROE, 4% growth, 9.4% cost of equity) following our earnings adjustments is equivalent to 1.5x FY18 BV, above its 10-year mean P/BV multiple.

Key Risks to Our View:

Faltering NIM and non-interest income traction. Inability to see revenue generation from improved NIM as well as better wealth management and insurance income contribution could pose downside to our earnings forecasts.

At A Glance

Issued Capital (m shrs)	4,183
Mkt. Cap (Sm/USm)	57,552 / 43,308
Major Shareholders (%)	
Selat Pte Ltd	11.1
Free Float (%)	88.9
3m Avg. Daily Val (US$m)	64.6
ICB Industry : Financials / Banks	

WHAT'S NEW

Higher highs

Highlights:

Trends to watch in 1Q18. OCBC is expected to book an improved quarter in 1Q18. Key trends to watch include:

(1) **NIM improvement** across locations of its operations. Notable uplift should be seen in its Singapore operations, followed by Malaysia and Hong Kong. OCBC-WHB should see the gapping spread between its loan and deposit pricing easing and would mean its HK operational NIM should also improve. Contrary to peers, OCBC has its Indonesian operations which is doing well (expecting double-digit loan growth, stable asset quality).

(2) **Strong loan growth** across the region (vs deposit growth) which could drive loan-to-deposit ratio higher could further lift NIM. OCBC has guided for 7-8% loan growth in FY18F.

(3) **Strong quarter for non-interest income.** Expect strong treasury flows and sustained wealth management income uptrend. We understand that assets under management (AUM) should have easily surpassed US$100bn (Dec 17: US$99bn). However, there might be some volatility for its insurance income contribution. While we expect Great Eastern Holdings (GEH) to post strong 1Q18 figures, its non-operational profit (from its non-par fund profit) could be stripped out and placed under other comprehensive income, under a new accounting rule (IFRS4 for insurance companies; which is equivalent to IFRS9 for banks).

(4) **Significantly lower provisions.** OCBC did not guide for any credit cost range. But if we were to assume that credit cost should fall back to the pre-oil & gas crisis levels, it could well dip below 20bps (OCBC's credit cost ranged from 15-17bps over FY10-14; OCBC started providing for its oil & gas exposure from as early as 3Q15).

(5) **Slightly higher (seasonal) costs** in 1Q18.

Room for higher dividend payout. A much anticipated catalyst would be higher dividends, which we think would be announced as early as its 1H18 results. OCBC was the only bank that did not raise dividends in FY17. Although its capital ratios stack the lowest among peers currently, assuming OCBC sticks to a minimum of its 40% payout on core earnings and is comfortable with a minimum CET1 ratio of 12.5%, we believe there could be room for some dividend upside from here. We have nevertheless assumed that dividend per share would increase slightly to 40 Scts (FY17: 37 Scts) for now, with a corresponding 31% payout ratio based on our FY18F earnings.

Earnings revision:

Raising NIM, lowering credit costs. With a sustained SOR/SIBOR uptrend expected, we are now forecasting NIM to accelerate by 8bps in FY18F (from 6bps) and 3bps in FY19F. Our loan growth forecasts are largely in line with guidance, hence no change to that. Management indicated that credit cost should remain benign based on current operating environment. Note that OCBC does not have a habit of buffering up general provisions.

We had previously assumed that credit cost would decline marginally to 26bps in FY18F from 27bps in FY17F. But reassessing the current operating environment, our previous assumption may be too high. We now expect credit cost to hover around 21-22bps over FY18-20F (from 26bps across FY18-20F previously).

All in, this led us to raise our FY18-19F earnings by 4% for each year. We have introduced FY20F earnings estimates. Note that OCBC's pre-oil & gas crisis credit cost ranged from 15-17bps over FY10-14; OCBC started providing for its oil & gas exposure from as early as 3Q15. There could be further upside to our earnings forecasts should such trends revert.

Valuation and recommendation

Maintain BUY, TP raised to S$15.30. With our earnings revisions, our TP is now raised to S$15.30. OCBC is currently trading at 1.4x FY18F BV which is equivalent to the 10-year mean P/BV, already above the 10-year mean P/BV of 1.3x. Our revised TP is equivalent to 1.5x FY18F BV, above the 10-year mean P/BV and is based on the Gordon Growth Model assuming 12.5% ROE, 9.4% cost of equity and 4% growth.

CRITICAL DATA POINTS TO WATCH

Critical Factors

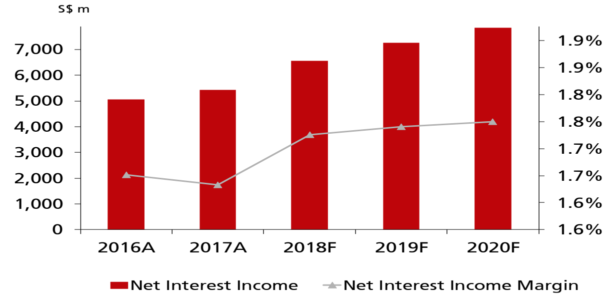
NIM uplift more visible in FY18. It is possible for the Fed rate hike pass-through to eventually spill over to SIBOR, hence positively repricing loans but the caveat to this is that competitive pressures are there and credit spreads are unlikely to widen, therefore limiting any significant positive impact on NIM. OCBC's loan profile is largely variable rate based 90%, with one-third prime-rate based, one-third SIBOR based and 25% SOR based. Our sensitivity analysis implies that for every 25-bp increase in SIBOR/SOR, HK$ and US$ loan rates (collectively), OCBC's NIM could rise by 2bps with an accompanying 1.4% impact on net profit, holding everything else constant. The bonus to its NIM uplift could lie in its treasury operations, where in a rising rate environment, there would be more opportunities to rebalance its securities portfolio given the steepened yield curve.

Loan growth to pick up; guiding for 7-8% in FY18F. Management is guiding for loan growth of 7-8% for FY18. Loan demand appears apparent for Singapore companies investing abroad. Every 1-ppt rise in loan growth leads to a 0.9% increase in net profit. We are forecasting loan growth at 8% across FY18-20F.

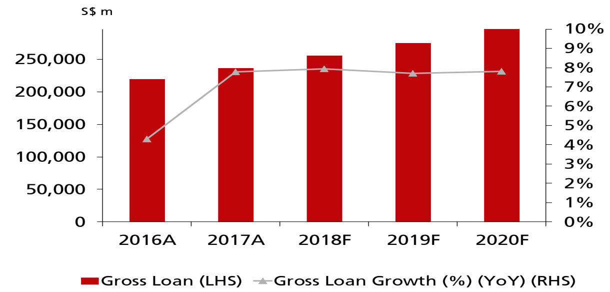
Non-interest income drivers remain its key differentiator, especially wealth management and insurance. OCBC differentiates itself from peers when looking at its non-interest income composition. Its focus is on growing its non-interest income franchise, especially its wealth management business. Its insurance business, 87.75%-owned subsidiary, Great Eastern Holdings (GEH), remains a dominant part of its non-interest income. OCBC has no plans to sell its stake in GEH as it remains complementary to its non-interest income franchise. Management believes it is still logical and beneficial to keep the insurance product manufacturing in-house. However, in view of the need to meet regulatory requirements in Malaysia, GEH may look to divest part of its operations in Malaysia. It is currently exploring options to meet this requirement. GEH tends to exhibit earnings volatility due to fluctuations of interest rates. It is best to track GEH's underlying business trends i.e. total weighted new sales and new business embedded values. These metrics have been growing robustly for GEH. Since the acquisition of Bank of Singapore in 2010, its wealth management income has been growing steadily; and this trend is expected to be sustainable. The acquisition of the wealth and investment business of Barclays Bank in Singapore and Hong Kong, completed in December 2016, added US$13bn to OCBC's AUM. In May 2017, OCBC further acquired National Bank of Australia's wealth business in Singapore and Hong Kong.

Regionalisation is a key item on its agenda. Malaysia remains OCBC's second largest contributor. Its business proposition in Malaysia has a track record of over 80 years and its added advantage lies in its Islamic banking franchise. Management feels bullish about its operations in Indonesia. While still a small contributor, opportunities are aplenty for further growth. We see the wealth management income line as the key indicator to watch for sustained synergies in OCBC-Wing Hang.

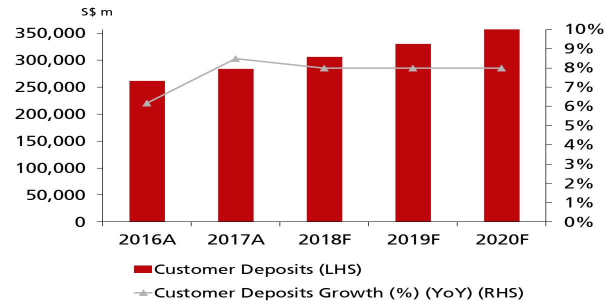
Margin Trends



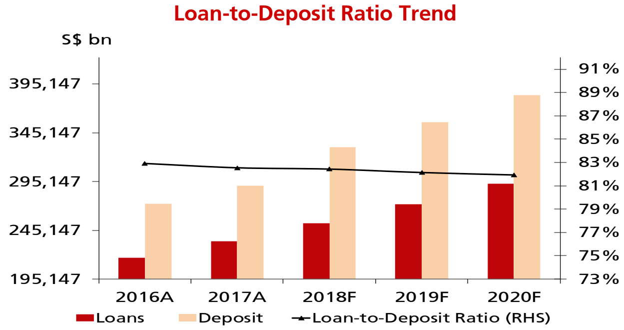
Gross Loan& Growth



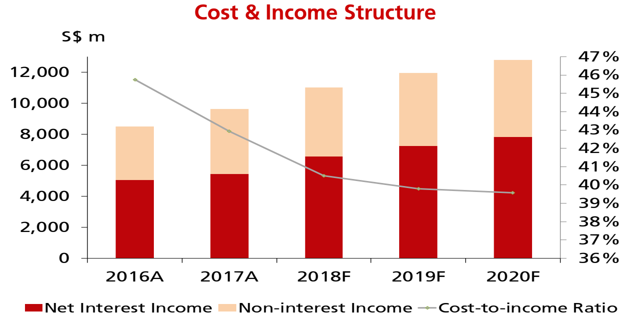
Customer Deposit & Growth



Loan-to-Deposit Ratio Trend



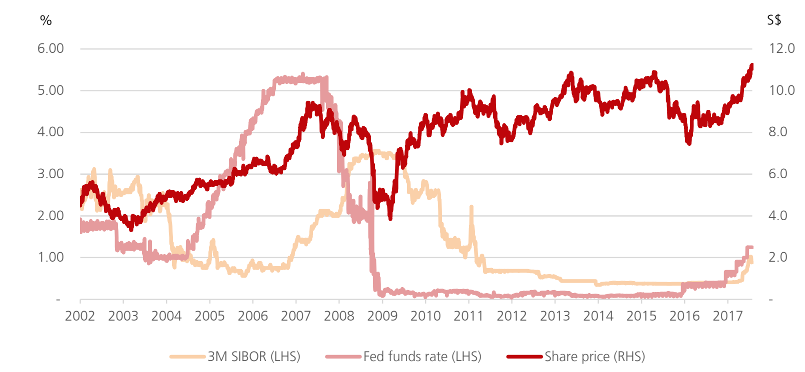
Cost & Income Structure



Source: Company, DBS Bank

Appendix 1: A look at Company's listed history – what drives its share price?

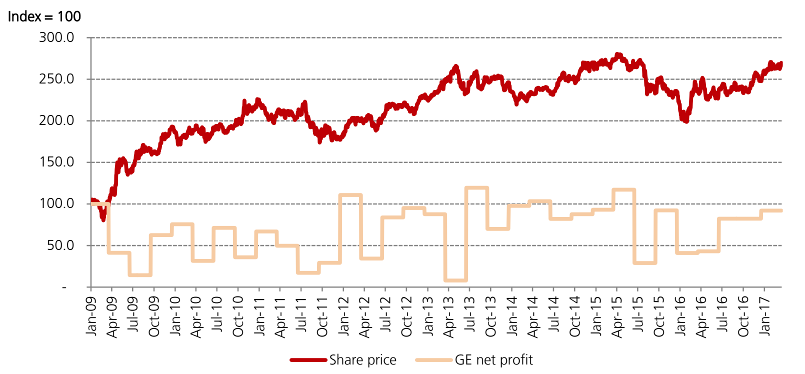
Interest rates as critical factor



Remarks

Interest rates, particularly SIBOR, is linked to loan pricing and hence NIM, which in turn drives earnings and share price performance. The Fed rate hikes which should lead to SIBOR uplift was historically 60% correlated. The relationship has somewhat broken down since late 2016 due to the relative strength of the SGD. Nevertheless, expectations of Fed rate hikes, which are expected to pass through to SIBOR does have a positive correlation to banks' share prices.

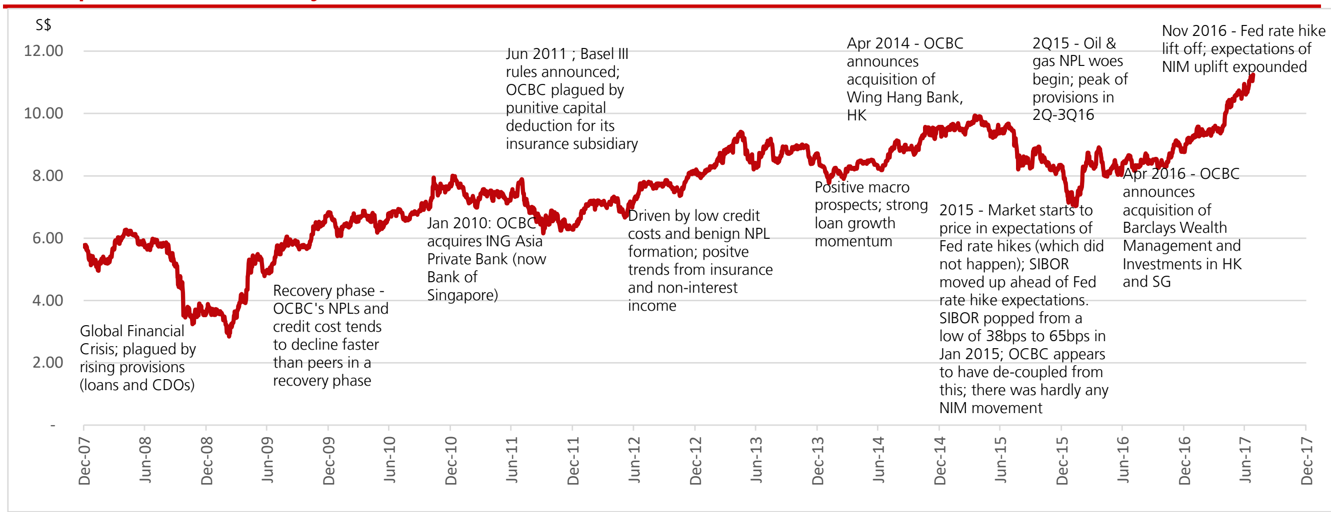
GEH's earnings as critical factor



Remarks

GEH's profit contributes approximately 20-25% of non-interest income, translating into 8-10% of OCBC's net profit. While not being directly correlated, GEH's profits do indicate OCBC's overall non-interest income trends. GEH also forms part of OCBC's wealth management offerings.

Share price movement (10-year historical trends)



Source: Bloomberg Finance L.P., DBS Bank

Balance Sheet:

Asset quality concerns a thing of the past. OCBC's NPL ratio stood at 1.5% as at end-December 2017 largely from the oil & gas segment (6% of total loans). We understand collaterals have been written down to 30% of market value. Its credit cost has stayed lower compared to peers. Despite concerns of an unsustainably low credit cost level, OCBC has successfully weathered through the storm as seen during several crises over the past ten years.

Capital ratios remain strong. OCBC halted its scrip dividend in 2Q16. It had previously used the scrip dividend to help shore up capital. Separately, while there are still some non-core assets the bank can divest, these are not large and not an immediate priority. There has been a continuous debate on whether OCBC should divest its insurance business, GEH, as it is perceived to be capital punitive once Basel III is fully enforced. But we believe that without majority control of the business, integrating it as part and parcel of its wealth management offerings would be challenging.

Share Price Drivers:

Rising interest rates lift NIM and possibly better insurance business revenues. Rising NIM and hence earnings will be key drivers to share price. Barring volatility in its insurance contribution due to accounting reasons, higher interest rates bode well for its life insurance business to build longer-term revenues. Successful credit costs and NPL containment could provide an added catalyst. Ability to demonstrate these should see the stock re-rate above its 5-year mean P/BV multiple.

Key Risks:

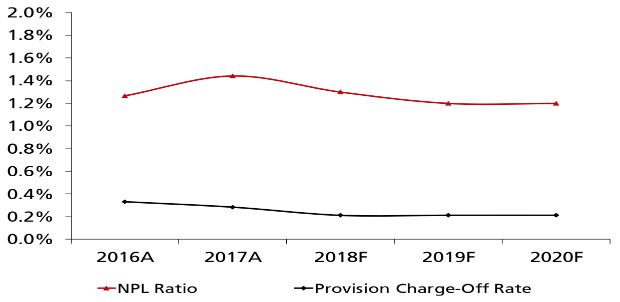
Inability to deliver NIM uplift. Expectations are rife that the Singapore banks will deliver strong NIM trends following sequential Fed rate hikes. Slower-than-expected SIBOR/SOR pass-through could upset NIM uplift trends.

Asset quality trend reversal. Banks are already on a recovery trend for their NPLs. A larger-than-expected NPL occurrence could unwind expectations of credit cost and NPL declines, posing risks to earnings.

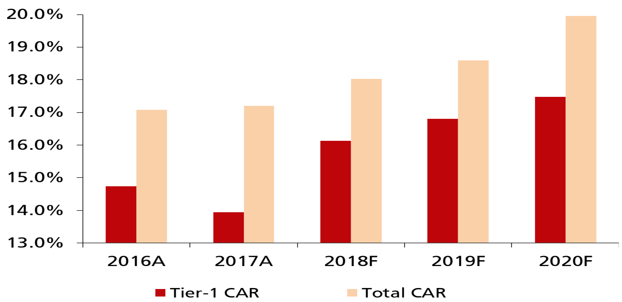
Company Background

The OCBC Bank group of businesses comprises a family of companies owned by Singapore's longest-established local bank. Its banking business franchise includes OCBC Bank, Bank OCBC NISP and Bank of Singapore, with branches in over 15 countries. OCBC has strategic stakes in other financial service businesses operating under independent brands such as Great Eastern, Bank of Singapore and Lion Global Investors.

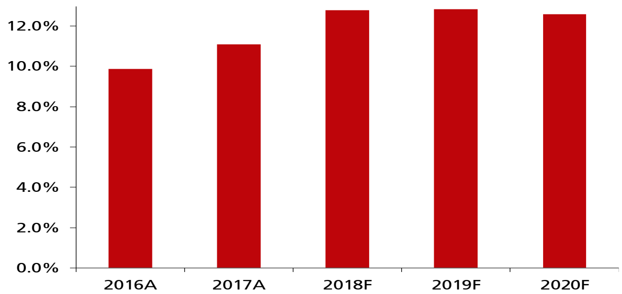
Asset Quality



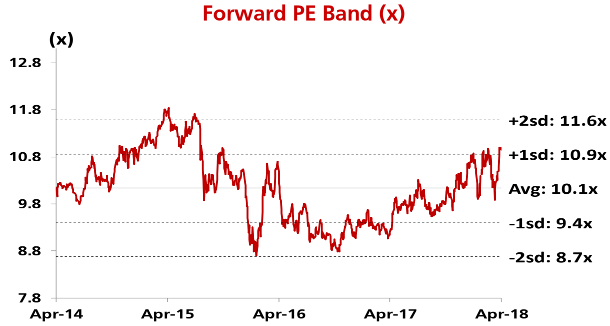
Capitalisation (%)



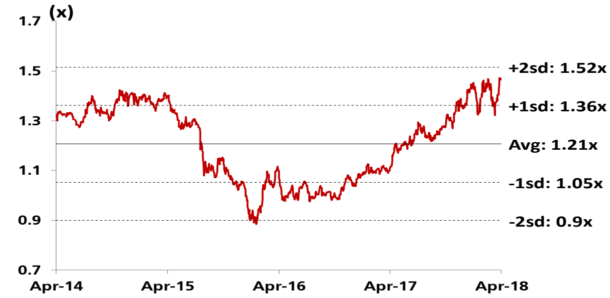
ROE (%)



Forward PE Band (x)



PB Band (x)



Source: Company, DBS Bank

Key Assumptions

FY Dec	2016A	2017A	2018F	2019F	2020F
Gross Loans Growth	4.3	7.8	7.9	7.7	7.8
Customer Deposits Growth	6.2	8.5	8.0	8.0	8.0
Yld. On Earnings Assets	2.8	2.8	2.8	2.9	2.9
Avg Cost Of Funds	1.2	1.2	1.2	1.2	1.2

Income Statement (S$ m)

FY Dec	2016A	2017A	2018F	2019F	2020F
Net Interest Income	5,052	5,423	6,567	7,253	7,839
Non-Interest Income	3,437	4,213	4,450	4,703	4,973
Operating Income	8,489	9,636	11,017	11,955	12,812
Operating Expenses	(3,884)	(4,138)	(4,461)	(4,756)	(5,071)
Pre-provision Profit	4,605	5,498	6,556	7,199	7,741
Provisions	(726)	(671)	(542)	(585)	(631)
Associates	396	389	397	405	413
Exceptionals	0	0	0	0	0
Pre-tax Profit	4,275	5,216	6,411	7,019	7,522
Taxation	(629)	(803)	(963)	(1,058)	(1,128)
Minority Interests	(173)	(267)	(328)	(359)	(385)
Preference Dividend	(40)	(40)	(40)	(40)	(40)
Net Profit	3,433	4,106	5,079	5,561	5,969
Net Profit before Except.	3,433	4,106	5,079	5,561	5,969
Growth (%)					
Net Interest Income Gth	(2.6)	7.3	21.1	10.4	8.1
Net Profit Gth bef Except	(10.2)	19.6	23.7	9.5	7.3
Margins, Costs & Efficiency (%)					
Spread	1.6	1.6	1.6	1.6	1.7
Net Interest Margin	1.7	1.6	1.7	1.8	1.8
Cost-to-Income Ratio	45.8	42.9	40.5	39.8	39.6
Business Mix (%)					
Net Int. Inc / Opg Inc.	59.5	56.3	59.6	60.7	61.2
Non-Int. Inc / Opg inc.	40.5	43.7	40.4	39.3	38.8
Fee Inc / Opg Income	19.3	20.3	18.9	18.7	18.6
Oth Non-Int Inc/Opg Inc	21.2	23.5	21.4	20.7	20.2
Profitability (%)					
ROAE Pre Ex.	9.9	11.1	12.8	12.8	12.6
ROAE	9.9	11.1	12.8	12.8	12.6
ROA Pre Ex.	0.9	1.0	1.1	1.2	1.2
ROA	0.9	1.0	1.1	1.2	1.2

Provisions to stay relatively benign

Sustainable uplift to NIM

Source: Company, DBS Bank

Quarterly / Interim Income Statement (S$ m)

FY Dec	4Q2016	1Q2017	2Q2017	3Q2017	4Q2017
Net Interest Income	1,251	1,272	1,345	1,382	1,424
Non-Interest Income	926	977	1,053	978	1,205
Operating Income	**2,177**	**2,249**	**2,398**	**2,360**	**2,629**
Operating Expenses	(1,005)	(999)	(1,019)	(1,027)	(1,093)
Pre-Provision Profit	**1,172**	**1,250**	**1,379**	**1,333**	**1,536**
Provisions	(305)	(168)	(169)	(156)	(178)
Associates	82	114	119	127	28
Exceptionals	0	0	0	0	0
Pretax Profit	**949**	**1,196**	**1,329**	**1,304**	**1,386**
Taxation	(114)	(169)	(185)	(192)	(257)
Minority Interests	(46)	(54)	(61)	(55)	(96)
Net Profit	**789**	**973**	**1,083**	**1,057**	**1,033**
Growth (%)					
Net Interest Income Gth	1.4	1.7	5.7	2.8	3.0
Net Profit Gth	(16.3)	23.3	11.3	(2.4)	(2.3)

Higher taxation rate in 4Q17 dampened net profit

Balance Sheet (S$ m)

FY Dec	2016A	2017A	2018F	2019F	2020F
Cash/Bank Balance	16,559	19,594	30,633	33,084	35,731
Government Securities	24,364	27,471	28,845	30,287	31,801
Inter Bank Assets	39,801	49,377	55,555	59,784	64,401
Total Net Loans & Advs.	216,830	234,141	252,524	271,743	292,730
Investment	23,157	25,329	30,303	32,609	35,128
Associates	2,415	2,352	2,749	3,153	3,566
Fixed Assets	4,572	4,281	4,419	4,562	4,708
Goodwill	5,473	5,160	5,160	5,160	5,160
Other Assets	14,740	13,306	15,151	16,305	17,564
Life Ass Fund Inv Assets	61,973	73,927	73,927	73,927	73,927
Total Assets	**409,884**	**454,938**	**499,267**	**530,613**	**564,715**
Customer Deposits	261,486	283,642	306,333	330,840	357,307
Inter Bank Deposits	10,740	7,485	23,968	25,216	26,736
Debts/Borrowings	19,947	32,235	32,235	32,235	32,235
Others	16,107	16,045	17,481	18,834	20,276
Minorities	2,635	2,768	3,096	3,455	3,840
Shareholders' Funds	37,007	39,008	42,398	46,278	50,565
Life Ass Fund Liabs	61,962	73,755	73,755	73,755	73,755
Total Liab& S/H's Funds	**409,884**	**454,938**	**499,267**	**530,613**	**564,715**

Loan growth sustainable at 7-8%

Source: Company, DBS Bank

Financial Stability Measures (%)

FY Dec	2016A	2017A	2018F	2019F	2020F
Balance Sheet Structure					
Loan-to-Deposit Ratio	82.9	82.5	82.4	82.1	81.9
Net Loans / Total Assets	52.9	51.5	50.6	51.2	51.8
Investment / Total Assets	5.6	5.6	6.1	6.1	6.2
Cust . Dep./Int. Bear. Liab.	89.5	87.7	84.5	85.2	85.8
Interbank Dep / Int. Bear.	3.7	2.3	6.6	6.5	6.4
Asset Quality					
NPL / Total Gross Loans	1.3	1.4	1.3	1.2	1.2
NPL / Total Assets	0.7	0.8	0.7	0.6	0.6
Loan Loss Reserve Coverage	102.7	77.7	91.7	105.4	111.3
Provision Charge-Off Rate	0.3	0.3	0.2	0.2	0.2
Capital Strength					
Total CAR	17.1	17.2	18.0	18.6	20.0
Tier-1 CAR	14.7	13.9	16.1	16.8	17.5

Credit costs back to pre-oil & gas levels

Source: Company, DBS Bank

Target Price & Ratings History

S.No.	Date of Report	Closing Price	12-mth Target Price	Rating
1:	09 May 17	10.46	10.30	HOLD
2:	27 Jul 17	11.49	12.80	BUY
3:	20 Sep 17	11.01	12.80	BUY
4:	25 Oct 17	11.55	12.80	BUY
5:	26 Oct 17	11.57	13.50	BUY
6:	22 Nov 17	12.01	13.50	BUY
7:	04 Jan 18	12.95	14.00	BUY
8:	15 Feb 18	12.78	14.00	BUY

***Note** : Share price and Target price are adjusted for corporate actions.*

Source: DBS Bank

Analyst: Sue Lin LIM
Rui Wen LIM

UOB

Version 14 | Bloomberg: UOB SP | Reuters: UOBH.SI

DBS Group Research . Equity

26 Apr 2018

BUY

Last Traded Price (26 Apr 2018): S$29.39 (STI : 3,570.02)
Price Target 12-mth: S$33.20 (13% upside) (Prev S$29.50)

Analyst
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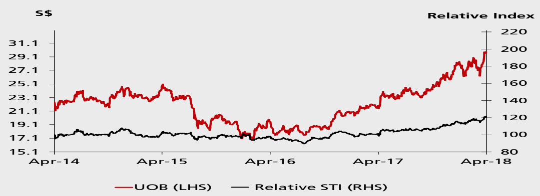
Rui Wen LIM +65 66823720 ruiwenlim@dbs.com

What's New

- NIM and loans to drive topline growth; NIM uptrend clearly in sight; loan growth at high single digit
- Lower credit costs; no longer buffering general provisions; expecting 25bps credit cost ahead
- FY18-19F earnings raised by 4% each year on adjustments to NIM, loan growth and provisions
- Maintain BUY, TP raised to S$33.20 (1.5x FY18 BV); dividends should be sustainable at S$1.00 per year

Price Relative



Forecasts and Valuation

FY Dec (S$m)	2017A	2018F	2019F	2020F
Pre-prov. Profit	4,824	5,445	5,963	6,394
Net Profit	3,280	3,986	4,384	4,712
Net Pft (Pre Ex.)	3,280	3,986	4,384	4,712
Net Pft Gth (Pre-ex) (%)	9.8	21.5	10.0	7.5
EPS (S cts)	208	253	278	299
EPS Pre Ex. (S cts)	208	253	278	299
EPS Gth Pre Ex (%)	10	22	10	7
Diluted EPS (S cts)	197	240	264	283
PE Pre Ex. (X)	14.1	11.6	10.6	9.8
Net DPS (S cts)	100.0	100.0	100.0	100
Div Yield (%)	3.4	3.4	3.4	3.4
ROAE Pre Ex. (%)	10.1	11.4	11.6	11.6
ROAE (%)	10.1	11.4	11.6	11.6
ROA (%)	1.0	1.1	1.2	1.2
BV Per Share (S cts)	2,151	2,304	2,483	2,681
P/Book Value (x)	1.4	1.3	1.2	1.1
Earnings Rev (%):		4	4	new
Consensus EPS (S cts):		234	259	285
Other Broker Recs:		B: 17	S: 1	H: 3

Source of all data on this page: Company, DBS Bank, Bloomberg Finance L.P.

All engines cranking

Getting more bullish; maintain BUY. This is the first time in a decade that all income items for the Singapore banks are positive. For UOB, NIM uptrend is clearly in sight. With expectations of an intact SOR/SIBOR uptrend, we are now forecasting NIM to accelerate by 9bps in FY18F (from 6bps) and 5bps in FY19F. Loan growth should also stand tall. With guidance at high single digit for FY18F, we have also raised our loan growth forecast to 8% (from 7%). With IFRS9/SFAS109, banks will no longer be able to continuously build up general provisions. In the case of UOB, this is a new positive. We now expect credit cost to hover around 25bps over FY18-20F (from 26-28bps previously). NPL issues should be a thing of the past with the last brunt of impairments and provisions done in 4Q17. Capital levels remain high and strong with fully loaded CET1 ratio at 14.7% as at Dec 17. Although scrip dividends will prevail, the shares would be issued without a discount. We believe a full year dividend of S$1.00 per share is sustainable and do not discount further upside from here.

Where we differ. Staying above consensus. Our earnings remain above consensus with a further boost from NIM, loan growth and lower provisions resulting in 4% p.a. earnings uplift for FY18-19F. Our TP is also at the higher end of consensus.

Potential catalyst: Sustained positive deliveries. Further improvement in NIM and more importantly, a pickup in loan growth due to the recovery of the property market should support earnings strongly. Lower credit cost is a new trend for UOB and should be viewed positively.

Valuation:

Maintain BUY, TP raised further to S$33.20. Our revised TP of S$33.20 is based on the Gordon Growth Model (12% ROE, 4% growth and 9.5% cost of equity), equivalent to 1.5x FY18 P/BV, which is above its 10-year average P/BV multiple (1.4x BV).

Key Risks to Our View:

Relapse in NIM and asset quality trends. A relapse in SIBOR movement could also pose risks to our NIM forecast. If NPL issues start to spread further from here, more specific provisions might be required.

At A Glance

Issued Capital (m shrs)	1,661
Mkt. Cap (Sm/USm)	48,813 / 36,732
Major Shareholders (%)	
Wee Investment Pte Ltd	7.7
Wah Hin & Co Pte Ltd	5.0
Free Float (%)	87.2
3m Avg. Daily Val (US$m)	67.0
ICB Industry : Financials / Banks	

WHAT'S NEW

New norms

Highlights:

Trends to watch in 1Q18 results. This should be a strong quarter for UOB. This is first time in years that topline growth will be driven by both NIM and loan growth.

(1) **NIM clearly on an uptrend** following SOR/SIBOR spurts observed in 4Q17 (guidance of 5-10bps).

(2) **Loan growth 1Q18 is expected to pick up**, estimated at 2-3% y-o-y (FY18F loan growth guided at high single digit; FY17: 4.6%). UOB remains optimistic about Thailand and Greater China, as domestic loan growth continues to grow.

(3) **Decent trends on fee income**. While there is strong growth in wealth management, fee income should still be largely driven by loan-related fees.

(4) **Cost-to-income ratio should hover around 44%**. With effect from FY18, UOB will be netting attributable expenses directly against its related fees, in line with peers' practices. This would reduce cost-to-income ratio from 45.5% in FY17 to 43.7% on an adjusted basis. We are forecasting UOB's cost-to-income ratio to be at c.44% for FY18F.

(5) **Credit cost at a new low.** With the IFRS9/SFAS109 in place, days of general provision buffers are over. Credit cost is guided at 20-25bps for FY18F.

(6) **Stable NPLs** from here. The worst is over for the oil & gas asset quality episode. UOB deems that it now has a comfortable level of allowances to meet the new requirements after the reversal of S$0.6bn of general provisions. Going forward, UOB expects new NPL formation to be at S$300-400m a quarter.

Opportunities abound in the region. Specifically, UOB highlighted two key priorities: (1) boost fee income, and (2) tap connectivity flow. UOB has launched a new Financial Institution segment as it attempts to focus on sectors with high trade and connectivity flows as it continues to eye opportunities in the flow business, which will add to both loan and non-loan income.

High capital levels – possible outcomes. Compared to its peers, UOB may require a higher capital buffer as it relies more on asset growth. There remains a possibility for UOB to take on acquisitions in the near term as it seeks to optimise healthy returns on its capital.

Higher dividends are here to stay. The S$1.00 full year dividend per share is here to stay. Expect 40 S cts interim dividend in 1H18, with a combination of 40 S cts final plus 20 S cts special dividend in 2H18. Over time, this could normalise to 50 S cts per share for interim and final dividends. With ample capital buffer, further dividend upside is still possible. Management stated that it will be comfortable with CET1 of >12.5%. UOB's fully loaded CET1 ratio as at end Dec 2017 was at 14.7%.

Earnings revision

Raising NIM, loan growth and lowering credit costs. With a sustained SOR/SIBOR uptrend expected, we are now forecasting NIM to accelerate by 9bps in FY18F (from 6bps) and 5bps in FY19F. Loan growth should also stand tall. With guidance at high single digit for FY18F, we have also raised our loan growth assumption to 8% (from 7%). With IFRS9/SFAS109, banks will no longer be able to continuously build up general provisions. We now expect credit cost to hover around 25bps over FY18-20F (from 26-28bps previously). All in, this led us to raise our FY18-19F earnings by 4% for each year. We have introduced FY20F earnings estimates.

Valuation and recommendation:

Maintain BUY, TP raised to S$33.20. With our earnings revisions, our TP is now raised to S$33.20. UOB is currently trading at 1.4x FY18F BV which is equivalent to the 10-year mean P/BV, lagging peers which have exceeded mean levels. Our revised TP is equivalent to 1.5x FY18F BV, above the 10-year mean P/BV and is based on the Gordon Growth Model assuming 12% ROE, 9.5% cost of equity and 4% growth.

CRITICAL DATA POINTS TO WATCH

Critical Factors

Improved loan growth and NIM. Our FY18-19F loan growth forecast is now tuned up closer to 8% in light of a better operating environment. We expect UOB's NIM to rise by 9bps in FY18F and another 5bps in FY19F, taking into account some element of competition. Our sensitivity analysis indicates that for every additional 25 bps increase in SIBOR, UOB's NIM will rise by 1bp, holding other variables constant, and this would lead to a further 1.1% uplift to earnings. We note that UOB's S$ loan-to-deposit ratio remains the highest among peers and that itself could pressure S$ funding cost; S$ deposits forms close to half of UOB's total deposit base.

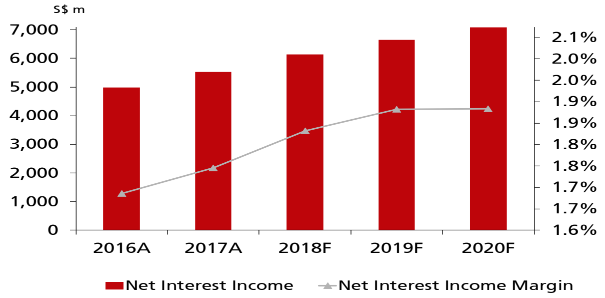
Non-interest income driven more by loan activities. Contrary to peers, UOB's non-interest income focuses more on loan activities, which is its core business. While there is increasing traction from wealth management income, it remains small vs peers. Fee income should be consumer-business driven from credit cards and private banking rather than from capital markets. UOB's wealth management business continues to pick up albeit makes up a smaller proportion of non-interest income vs its peers.

Costs skewed to business growth. We expect operating expenses to stay high with costs skewed towards business expansion and technology which is required particularly for digital banking and cyber security. Other investments to further enhance regional operations are still ongoing but the increase should not be high. Cost-to-income ratio may ease with stronger revenue growth amid its tight cost control strategies despite having to invest to grow its business but the target is 40% over the longer term. We forecast a 44% cost-to-income ratio in FY18F.

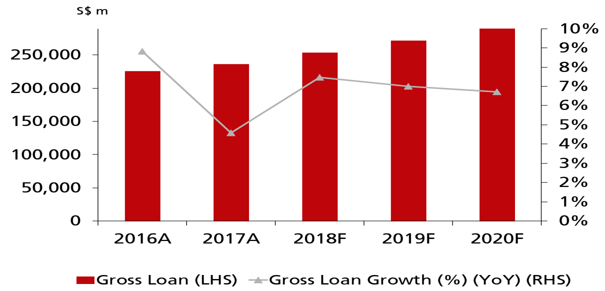
Expect lower credit costs; reversal in trends with IFRS9. Compared to peers, UOB's credit costs tend to hover at higher levels largely due to its conservative stance towards setting aside higher general provisions (1.2% of total loans). With IFRS9 implemented, banks will no longer be allowed to build general provision buffers. This is a new positive for UOB. Management is guiding for 20-25bps credit cost at the moment. We are assuming 25bps credit cost over FY18-20F (previously 26-28bps), which is at the higher end of guidance.

Regionalisation remains core to UOB's strategy. UOB's regionalisation agenda remains intact. The bank is relooking at its operations in Indonesia, given the current challenging operating environment. In Malaysia, growth remains cautious but asset quality is at a comfortable position. Its Thai operations remain small, while its Greater China operations are still smaller than peers. UOB has not been aggressively acquiring to add new revenue streams but has chosen to grow organically.

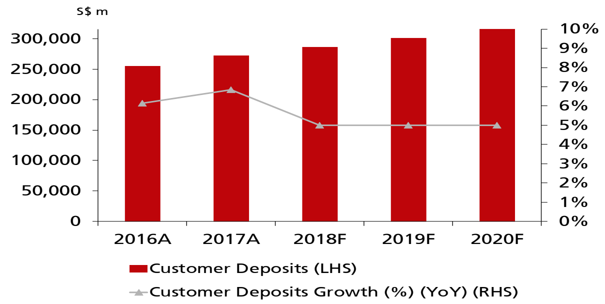
Margin Trends



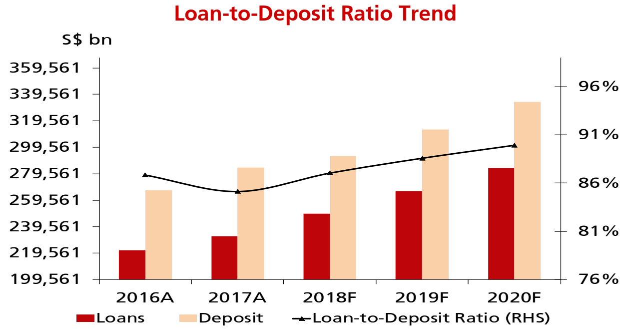
Gross Loan& Growth



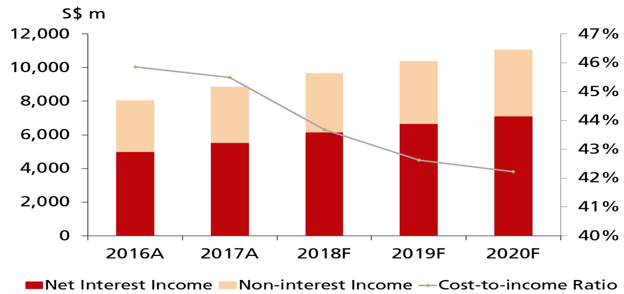
Customer Deposit & Growth



Loan-to-Deposit Ratio Trend



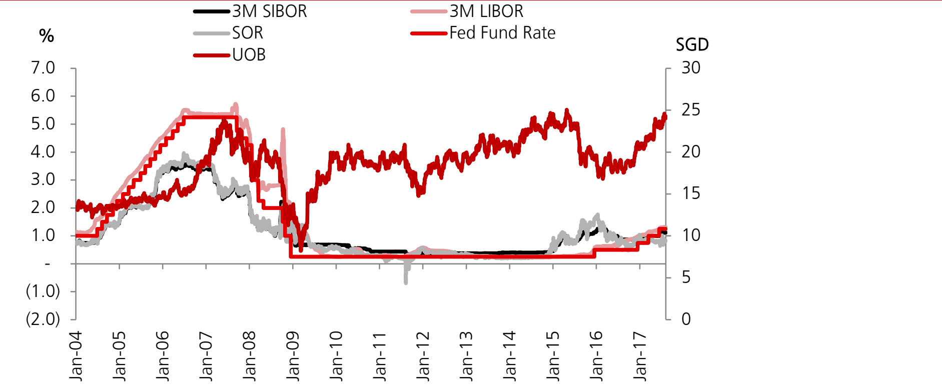
Cost & Income Structure



Source: Company, DBS Bank

Appendix 1: A look at Company's listed history – what drives its share price?

Interest rates as critical factor



Remarks

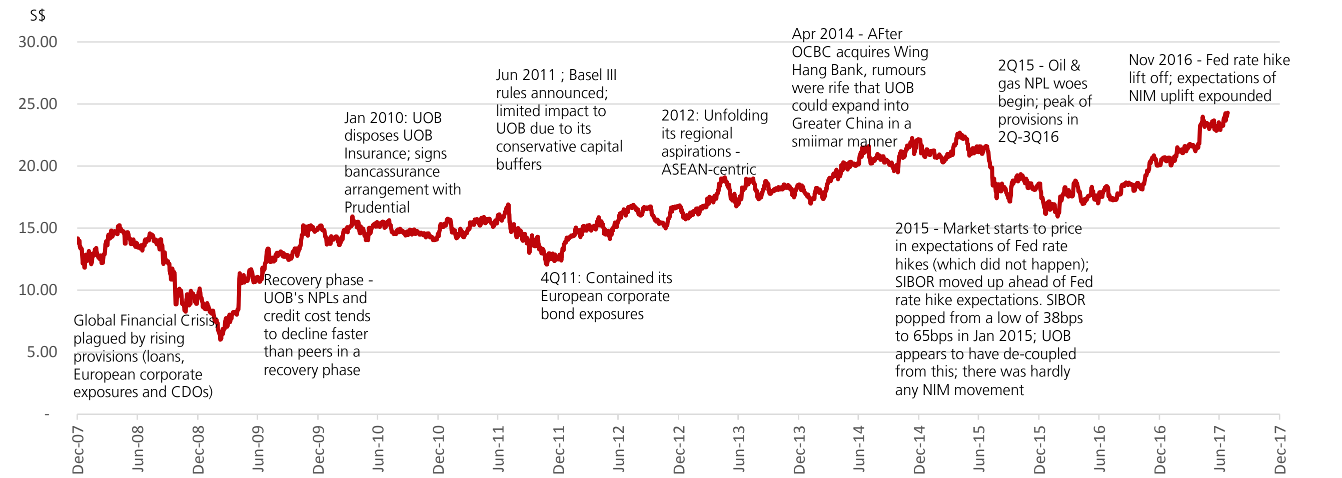
Interest rates, particularly SIBOR, are linked to loan pricing and hence NIM, which in turn drives earnings and share price performance. The Fed rate hikes, which should lead to SIBOR uplift, has been 60% correlated historically. The relationship has somewhat broken down since late 2016 due to the relative strength of the SGD. Nevertheless, expectations of Fed rate hikes, which are expected to pass through to SIBOR, do have a positive correlation to banks' share prices.

Property price index as critical factor

Remarks

UOB has the largest proportion of its loans related to mortgages, at 27% of total loans. Inclusive of building and construction loans at another 23%, UOB's total property-related loans make up 50% of total loans. Historically, UOB's share price has been correlating well with the property price index. The deviation in 2017 is due to the stronger influence of interest rate movements (the critical factor highlighted above).

Share price movement (10-year historical trends)



Source: Bloomberg Finance L.P., DBS Bank

Balance Sheet:

Asset quality concerns are a thing of the past. UOB's NPL ratio is higher vs peers, sitting at 1.8% as at end-Dec 2017. Issues pertaining to the oil & gas exposure have largely been taken care of. UOB's exposure to oil & gas comprises 5% of total loans while other commodity segments make up another 3%. Collectively, these account for 8% of total loans. These accounts are mostly secured; hence the impact on P/L should be limited. UOB is the only bank that has disclosed that it has taken a 70-80% haircut to the value of its oil & gas collateral. Other commodity segments include metal, mining and agriculture. There is little concern on these.

Strong capital position. Its CET1 ratio's comfort zone is >12.5%. We expect absolute DPS to be sustainable at S$1.00. UOB will likely keep its scrip dividend programme but new shares will be issued without a discount. The take-up of its scrip dividend has been relatively low. With its strong capital position (fully loaded CET1 ratio at 14.7% as at end Dec 2017), we would not discount a further uplift in dividends going forward.

Share Price Drivers:

Strong property market recovery. The strong property market recovery would bode well for UOB's share price as it is seen to be a proxy. UOB has the largest proportion of property-related loans vs peers.

Sustained NIM and loan growth prospects. With asset quality issues largely to be dealt with by end-FY17, all eyes are on topline growth. With a sustained SOR/SIBOR uptrend, NIM uplift is here to stay. Sustained strong loan growth also adds to a boost in net interest income.

Key Risks:

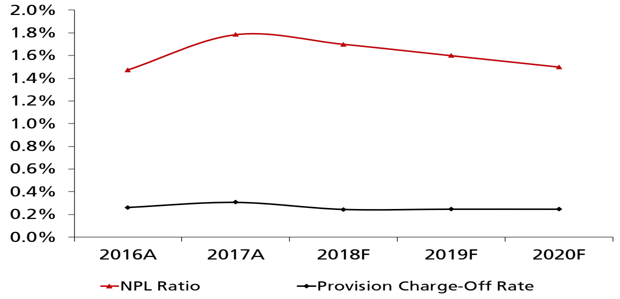
NIM trend reversal. Hopes on NIM improvement could dissipate if SIBOR/SOR movements turn south from here. NIM movements are more sensitive to earnings compared to loan growth. If NIM trends stop improving, earnings growth would be at risk.

Asset quality upsets. While unlikely at this juncture, any NPL formation above the normal levels of S$300-400m could upset trends and raise provisions, which could lead to earnings disappointment.

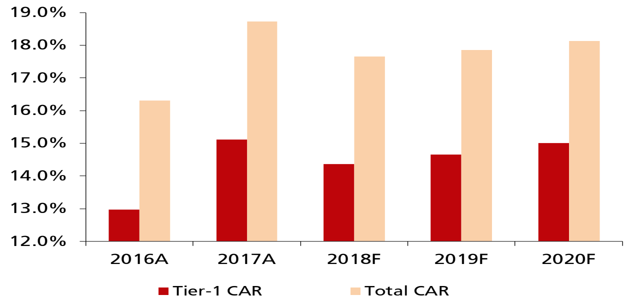
Company Background

UOB provides a wide range of financial services through its global network of branches, offices, subsidiaries and associates: personal financial services, private banking, commercial and corporate banking, investment banking, corporate finance, capital market activities, treasury services, futures broking, asset management, venture capital management, insurance and stockbroking services.

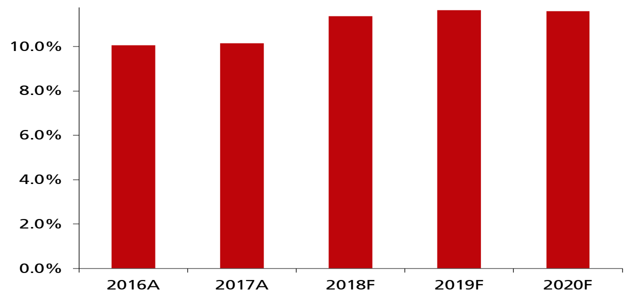
Asset Quality



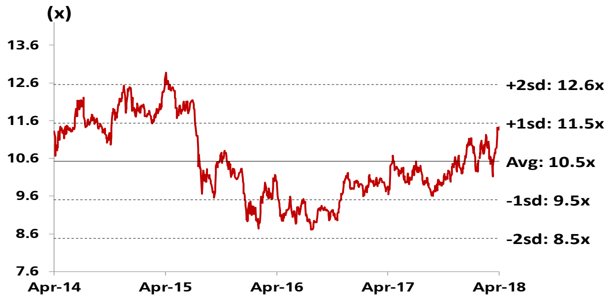
Capitalisation (%)



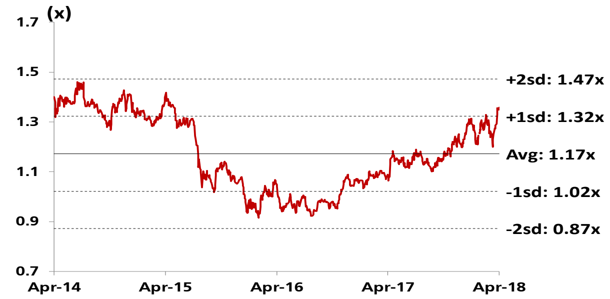
ROE (%)



Forward PE Band (x)



PB Band (x)



Source: Company, DBS Bank

Key Assumptions

FY Dec	2016A	2017A	2018F	2019F	2020F
Gross Loans Growth	8.8	4.6	7.5	7.0	6.7
Customer Deposits Growth	6.1	6.8	5.0	5.0	5.0
Yld. On Earnings Assets	2.8	2.9	3.0	3.0	3.1
Avg Cost Of Funds	1.2	1.2	1.2	1.2	1.2

Income Statement (S$m)

FY Dec	2016A	2017A	2018F	2019F	2020F
Net Interest Income	4,991	5,528	6,146	6,654	7,093
Non-Interest Income	3,071	3,323	3,523	3,741	3,974
Operating Income	8,061	8,851	9,669	10,395	11,067
Operating Expenses	(3,696)	(4,027)	(4,224)	(4,431)	(4,673)
Pre-provision Profit	4,365	4,824	5,445	5,963	6,394
Provisions	(593)	(727)	(621)	(671)	(715)
Associates	6.00	110	130	142	152
Exceptionals	0.0	0.0	0.0	0.0	0.0
Pre-tax Profit	3,778	4,207	4,953	5,435	5,831
Taxation	(669)	(800)	(842)	(924)	(991)
Minority Interests	(12.0)	(16.0)	(14.9)	(16.3)	(17.5)
Preference Dividend	(110)	(110)	(110)	(110)	(110)
Net Profit	2,986	3,280	3,986	4,384	4,712
Net Profit bef Except	2,987	3,281	3,986	4,384	4,712
Growth (%)					
Net Interest Income Gth	1.3	10.8	11.2	8.3	6.6
Net Profit Gth	(3.6)	9.8	21.5	10.0	7.5
Margins, Costs & Efficiency (%)					
Spread	1.7	1.7	1.8	1.8	1.8
Net Interest Margin	1.7	1.8	1.9	1.9	1.9
Cost-to-Income Ratio	45.9	45.5	43.7	42.6	42.2
Business Mix (%)					
Net Int. Inc / Opg Inc.	61.9	62.5	63.6	64.0	64.1
Non-Int. Inc / Opg inc.	38.1	37.5	36.4	36.0	35.9
Fee Inc / Opg Income	24.0	24.4	23.8	23.7	23.8
Oth Non-Int Inc/Opg Inc	14.1	13.1	12.6	12.3	12.1
Profitability (%)					
ROAE Pre Ex.	10.1	10.1	11.4	11.6	11.6
ROAE	10.1	10.1	11.4	11.6	11.6
ROA Pre Ex.	0.9	1.0	1.1	1.2	1.2
ROA	0.9	1.0	1.1	1.2	1.2

Lower provisions from FY18F in the absence of general provision buffers

NIM uptrend intact with rate hike expectations

Source: Company, DBS Bank

Quarterly / Interim Income Statement (S$m)

FY Dec	4Q2016	1Q2017	2Q2017	3Q2017	4Q2017
Net Interest Income	1,276	1,303	1,355	1,408	1,460
Non-Interest Income	752	819	828	829	846
Operating Income	**2,028**	**2,123**	**2,184**	**2,238**	**2,307**
Operating Expenses	(957)	(957)	(995)	(973)	(1,102)
Pre-Provision Profit	**1,071**	**1,166**	**1,189**	**1,265**	**1,205**
Provisions	(131)	(187)	(180)	(221)	(140)
Associates	(21.0)	34.0	24.0	29.0	22.0
Exceptionals	0.0	0.0	0.0	0.0	0.0
Pretax Profit	**919**	**1,013**	**1,033**	**1,073**	**1,087**
Taxation	(177)	(203)	(184)	(187)	(226)
Minority Interests	(3.0)	(3.0)	(4.0)	(3.0)	(6.0)
Net Profit	**739**	**807**	**845**	**883**	**855**
Growth (%)					
Net Interest Income Gth	3.7	2.1	4.0	3.9	3.7
Net Profit Gth	(6.5)	9.2	4.8	4.4	(3.2)

Dip in 4Q17 earnings from one last round of kitchen sinking for the oil & gas sector

Balance Sheet (S$m)

FY Dec	2016A	2017A	2018F	2019F	2020F
Cash/Bank Balance	24,322	26,625	34,368	36,087	37,891
Government Securities	17,515	15,976	16,775	17,614	18,494
Inter Bank Assets	40,033	52,181	37,395	39,963	42,601
Total Net Loans & Advs.	221,734	232,212	249,298	266,422	284,006
Investment	14,767	13,039	14,319	15,268	16,245
Associates	1,109	1,194	1,324	1,466	1,618
Fixed Assets	2,990	1,971	1,823	1,667	1,667
Goodwill	4,151	4,142	4,142	4,142	4,142
Other Assets	13,407	11,252	19,944	21,314	22,720
Total Assets	**340,028**	**358,592**	**379,387**	**403,942**	**429,385**
Customer Deposits	255,314	272,765	286,403	300,723	315,760
Inter Bank Deposits	11,855	11,440	6,468	12,398	18,155
Debts/Borrowings	26,143	25,178	25,178	25,178	25,178
Others	13,674	12,172	21,874	23,353	24,854
Minorities	169	187	202	218	236
Shareholders' Funds	32,873	36,850	39,262	42,072	45,203
Total Liab& S/H's Funds	**340,028**	**358,592**	**379,387**	**403,942**	**429,385**

Sustained 7-8% loan growth ahead

Source: Company, DBS Bank

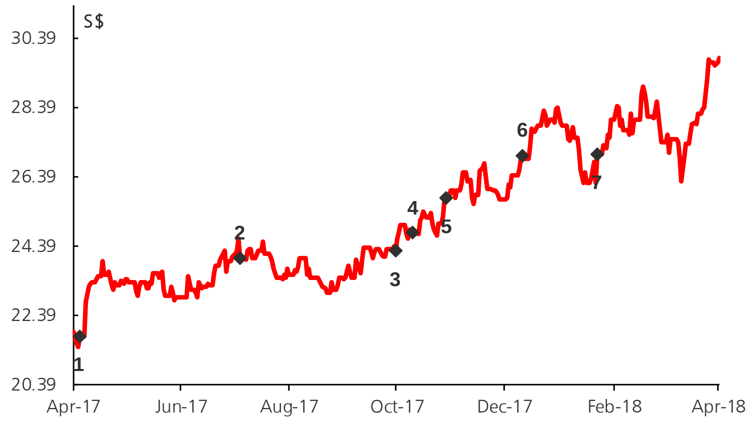
Financial Stability Measures (%)

FY Dec	2016A	2017A	2018F	2019F	2020F
Balance Sheet Structure					
Loan-to-Deposit Ratio	86.8	85.1	87.0	88.6	89.9
Net Loans / Total Assets	65.2	64.8	65.7	66.0	66.1
Investment / Total Assets	4.3	3.6	3.8	3.8	3.8
Cust . Dep./Int. Bear. Liab.	87.0	88.2	90.0	88.9	87.9
Interbank Dep / Int. Bear.	4.0	3.7	2.0	3.7	5.1
Asset Quality					
NPL / Total Gross Loans	1.5	1.8	1.7	1.6	1.5
NPL / Total Assets	1.0	1.2	1.1	1.1	1.0
Loan Loss Reserve Coverage	118.0	90.6	101.3	114.5	129.4
Provision Charge-Off Rate	0.3	0.3	0.2	0.2	0.2
Capital Strength					
Total CAR	16.3	18.7	17.7	17.9	18.1
Tier-1 CAR	13.0	15.1	14.4	14.7	15.0

Strong capital levels could hint towards higher dividends

Source: Company, DBS Bank

Target Price & Ratings History



S.No.	Date of Report	Closing Price	12-mth Target Price	Rating
1:	28 Apr 17	21.80	22.70	BUY
2:	28 Jul 17	24.05	24.80	HOLD
3:	24 Oct 17	24.25	26.90	BUY
4:	03 Nov 17	24.77	27.50	BUY
5:	22 Nov 17	25.77	27.50	BUY
6:	04 Jan 18	27.02	29.50	BUY
7:	15 Feb 18	27.04	29.50	BUY

***Note** : Share price and Target price are adjusted for corporate actions.*

Source: DBS Bank
Analyst: Sue Lin LIM
Rui Wen LIM

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HOLD (-10% to +15% total return over the next 12 months for small caps, -10% to +10% for large caps)
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Share price appreciation + dividends

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