### **WOB**

### UOB Group Fixed Income Investor Presentation

Steady Business Momentum Backed by Solid Balance Sheet

September 2019

Disclaimer: The material in this presentation contains general background information about United Overseas Bank Limited ("UOB") and its activities as at the date of the presentation. The information is given in summary form and is therefore not necessarily complete. Information in this presentation is not intended to be relied upon as advice or as a recommendation to investors or potential investors to purchase, hold or sell securities and other financial products and does not take into account the investment objectives, financial situation or needs of any particular investor. When deciding if an investment is suitable, you should consider the appropriateness of the information, any relevant offer document and seek independent financial advice. All securities and financial product transactions involve risks such as the risk of adverse or unanticipated market, financial or political developments and currency risk. UOB does not accept any liability including in relation to the use of the material and its contents.

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### **HUOB**

### Agenda

- 1. Overview of UOB Group
- 2. Strong UOB Fundamentals
- 3. Our Growth Drivers
- 4. Resilience of Singapore Housing Market and UOB's Cover Pool

### Appendix:

- A. Latest Financials
- B. Macroeconomic Outlook and Banking Regulations

# **WOB**

### **Overview of UOB Group**

# **UOB** Overview

### **WOB**

### Founding

Founded in August 1935 by a group of Chinese businessmen and Datuk Wee Kheng Chiang, grandfather of the present UOB Group CEO, Mr. Wee Ee Cheong

### Expansion

UOB has grown over the decades organically and through a series of strategic acquisitions. It is today a leading bank in Asia with an established presence in the Southeast Asia region. The Group has a global network of more than 500 branches and offices in 19 countries and territories.

Note: Financial statistics as at 30 June 2019.

- 1. USD 1 = SGD 1.3528 as at 30 June 2019.
- 2. Average for 2Q19.
- 3. Calculated based on profit attributable to equity holders of the Bank, net of perpetual capital securities distributions.
- 4. Computed on an annualised basis.

### **Key Statistics for 1H19**

<ul> <li>Total assets</li> </ul>	: SGI	D406b	(USD300b1)			
<ul> <li>Shareholders' equity</li> </ul>	: SGI	D39b	(USD29b <sup>1</sup> )			
<ul> <li>Gross loans</li> </ul>	: SGI	D273b	(USD202b1)			
<ul> <li>Customer deposits</li> </ul>	: SGI	D305b	(USD225b1)			
<ul> <li>Loan/Deposit ratio</li> </ul>	: 88.5	5%				
<ul> <li>Net stable funding ratio</li> </ul>	: 108	%				
<ul> <li>Average all-currency liquidit coverage ratio</li> </ul>	y : 147	% <sup>2</sup>				
<ul> <li>Common Equity Tier 1 CAR</li> </ul>	: 13.9	9%				
<ul> <li>Leverage ratio</li> </ul>	: 7.59	: 7.5%				
<ul> <li>Return on equity <sup>3, 4</sup></li> </ul>	: 12.0	: 12.0%				
<ul> <li>Return on assets <sup>4</sup></li> </ul>	: 1.12	: 1.12%				
<ul> <li>Return on risk-weighted ass</li> </ul>	sets <sup>4</sup> : 1.98	5%				
<ul> <li>Net interest margin <sup>4</sup></li> </ul>	: 1.80	: 1.80%				
<ul> <li>Non-interest income/ Total income</li> </ul>	: 35.0	: 35.0%				
<ul> <li>Cost / Income</li> </ul>	: 44.1	: 44.1%				
<ul> <li>Non-performing loan ratio</li> </ul>	: 1.59	%				
<ul> <li>Credit Ratings</li> </ul>	Moody's	S&P	Fitch			
Issuer Rating (Senior Unsecured)	Aa1	AA–	AA–			
Outlook	Stable	Stable	e Stable			
Short Term Debt	P-1	A-1+	F1+			

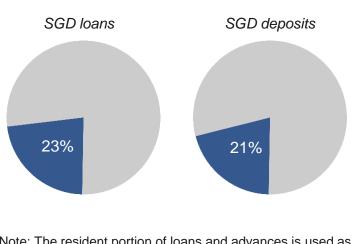




Source: Company reports.

 The Asian Banker "International Excellence in Retail Financial Service Awards": 2019 (Best SME Bank in Asia Pacific & Singapore), 2017 & 2016 (SME Bank of the Year), 2014 (Best Retail Bank in Asia Pacific & Singapore).

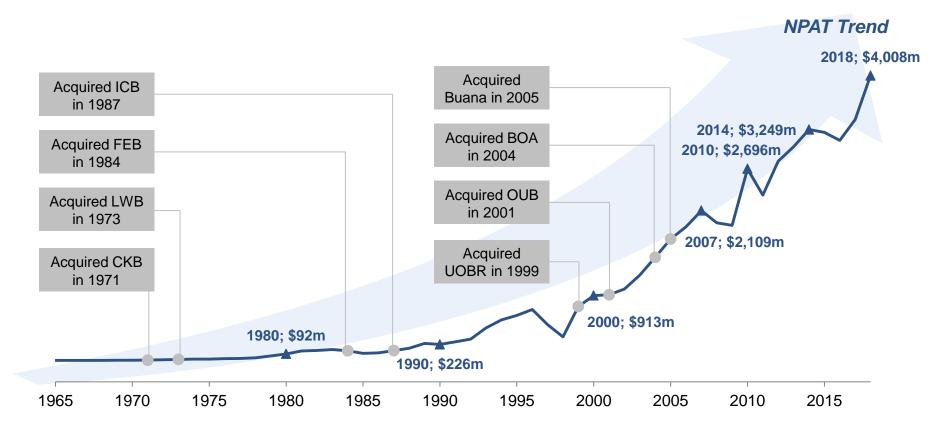
### UOB's sizeable market share in Singapore



Note: The resident portion of loans and advances is used as a proxy for total SGD loans in Singapore banking system. Source: UOB, MAS data as of 30 Jun 19

# **Proven Track Record of Execution**

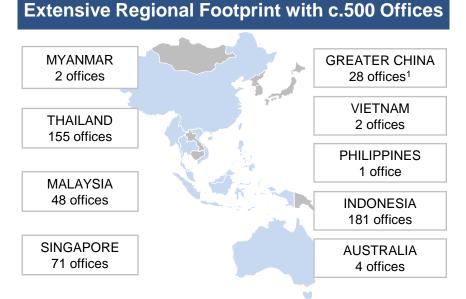
- UOB Group's management has a proven track record in steering the Group through various global events and crises.
- Stability of management team ensures consistent execution of strategies
- Disciplined management style which underpins the Group's overall resilience and sustained performance



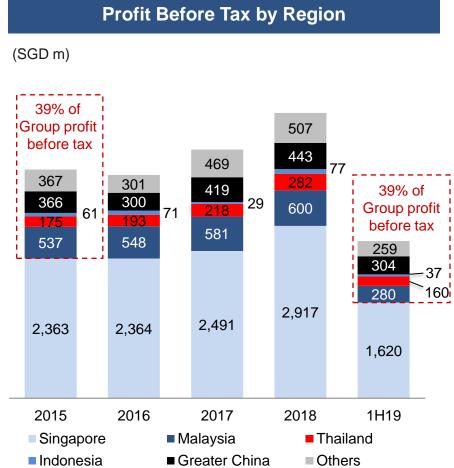
Note: Bank of Asia Public Company Limited ("BOA"), Chung Khiaw Bank Limited ("CKB"), Far Eastern Bank Limited ("FEB"), Industrial & Commercial Bank Limited ("ICB"), Lee Wah Bank Limited ("LWB"), Overseas Union Bank Limited ("OUB"), Radanasin Bank Thailand ("UOBR").

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# Expanding Regional Banking Franchise



- Most diverse regional franchise among Singapore banks; effectively full control of regional subsidiaries
- Integrated regional platform improves operational efficiencies, enhances risk management and provides faster time-to-market and seamless customer service
- Organic growth strategies in emerging/new markets of China and Indo-China



Established regional network with key Southeast Asian pillars, supporting fast-growing trade, capital and wealth flows

1. UOB owns c13% in Hengfeng Bank (formerly Evergrowing Bank) in China.

**# UOB** 

# Why UOB?

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	_		

Stable Management	<ul> <li>Proven track record in steering the bank through various global events and crises</li> <li>Stability of management team ensures consistent execution of strategies</li> </ul>
Integrated Regional Platform	<ul> <li>Entrenched local presence. Ground resources and integrated regional network allow us to better address the needs of our targeted segments</li> <li>Truly regional bank with full ownership and control of regional subsidiaries</li> </ul>
Strong Fundamentals	<ul> <li>Sustainable revenue channels as a result of carefully-built core businesses</li> <li>Strong balance sheet, sound capital &amp; liquidity position and resilient asset quality – testament of solid foundation built on the premise of basic banking</li> </ul>
Balance Growth with Stability	<ul> <li>Continue to diversify portfolio, strengthen balance sheet, manage risks and build core franchise for the future</li> <li>Maintain long-term perspective to growth for sustainable shareholder returns</li> </ul>

Proven track record of financial conservatism and strong management committed to the long term

# **WOB**

### **Strong UOB Fundamentals**

# **Strong UOB Fundamentals**

Strong Management with Proven Track Record	<ul> <li>Proven track record in steering the bank through various global events and crises</li> <li>Stability of management team ensures consistent execution of strategies</li> </ul>
Consistent and Focused Financial Management	<ul> <li>Prudent income growth amid the subdued business environment</li> <li>Continued investment in talent and technology to build long-term capabilities in a disciplined manner</li> <li>Total credit costs expected to be below long-term trend of 28bp</li> </ul>
Disciplined Management of Balance Sheet	<ul> <li>Strong capital base; Common Equity Tier 1 capital adequacy ratio of 13.9% as at 30 June 2019</li> <li>Liquid and well diversified funding mix with loan/deposits ratio at 88.5%</li> <li>Stable asset quality, with a diversified loan portfolio</li> </ul>
Delivering on Regional Strategy	<ul> <li>Holistic regional bank with effectively full control of subsidiaries in key markets</li> <li>Focus on profitable niche segments and intra-regional needs of customers</li> <li>Entrenched local presence: ground resources and integrated regional network to better address the needs of our targeted segments</li> </ul>

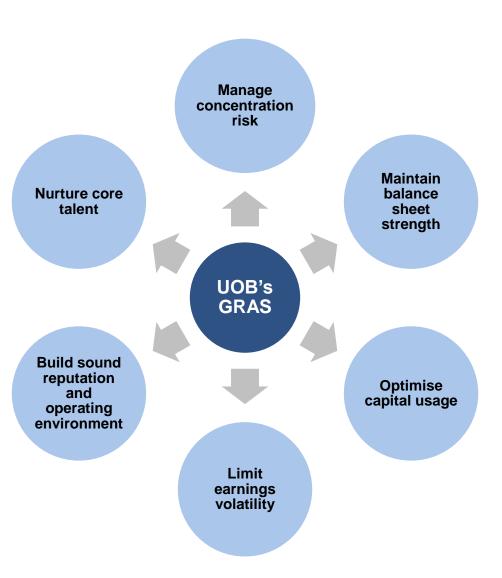
UOB is focused on the basics of banking; Stable management team with proven execution capabilities

Source: Company's reports.

**UOB** 

# Managing Risks for Stable Growth

- Prudent approach has been key to delivering sustainable returns over the years
- Institutionalised framework through Group Risk Appetite Statement (GRAS):
  - Outlines risk and return objectives to guide strategic decision-making
  - Comprises 6 dimensions and 14 metrics
  - Entails instilling prudent culture as well as establishing policies and guidelines
  - Invests in capabilities, leverage integrated regional network to ensure effective implementation across key markets and businesses





### **Competitive Against Peers**

### **WOB**

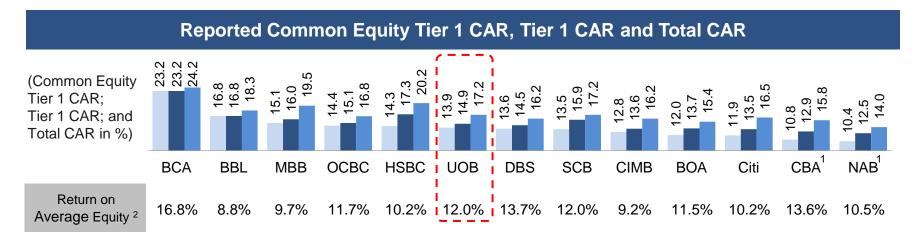
				Standalone Strength	Efficient Cost Management	Competitive ROAA <sup>1</sup>	Well-Maintained Liquidity
Moody's	S&P	Fitch		Moody's baseline redit assessment	Costs/income ratio	Return on average assets	Loan/deposit ratio
Aa1	AA–	AA–	UOB	a1	44.1%	1.12%	88.5%
Aa1	AA–	AA–	OCBC	a1	42.4%	1.27%	87.6%
Aa1	AA–	AA–	DBS	a1	41.9%	1.17%	89.6%
A2	А	AA-	HSBC	a3	57.0%	0.74%	74.1%
A2	BBB+	A+	SCB	baa1	67.7%	0.43%	63.7%
Baa1	A–	n.r.	CIMB	baa2	55.3%	0.88%	91.4%
A3	A–	A–	MBB	a3	47.9%	0.93%	92.4%
Baa1	BBB+	BBB+	BBL	baa1	45.3%	1.19%	85.7%
Baa2	n.r.	BBB–	BCA	baa2	46.2%	3.70%	79.0%
A2	A–	A+	BOA	a3	57.5%	1.24%	69.4%
A3	BBB+	А	Citi	baa1	56.5%	0.98%	64.7%
Aa3	AA–	AA–	СВА	a2	44.4%	0.94%	118.3%
Aa3	AA–	AA–	NAB	a2	47.0%	0.66%	142.6%

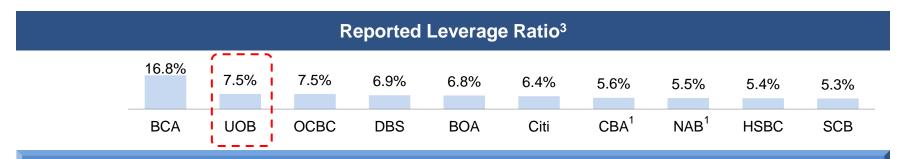
Source: Company reports, Credit rating agencies (updated as of 2 Aug 19).

Banks' financials were as of 30 Jun 19, except for those of HSBC, CIMB, Maybank and NAB (which were as of 31 Mar 19) and CBA (which were as of 31 Dec 18).

1. Computed on an annualised year-to-date basis.

# **Strong Capital and Leverage Ratios**





UOB is among the most well-capitalised banks, with capital ratios comfortably above regulatory requirements and high compared with some of the most renowned banks globally

Source: Company reports.

Banks' financials were as of 30 Jun 19, except for those of HSBC, CIMB, Maybank and NAB (which were as of 31 Mar 19) and CBA (which were as of 31 Dec 18).

- 1. NAB's and CBA's CARs are based on APRA's standards. Their internationally comparable CET1 CAR was 14.6% (31 Mar 19) and 16.5% (31 Dec 18), respectively.
- 2. Computed on an annualised year-to-date basis.
- 3. BBL, CIMB and MBB do not disclose their leverage ratio.

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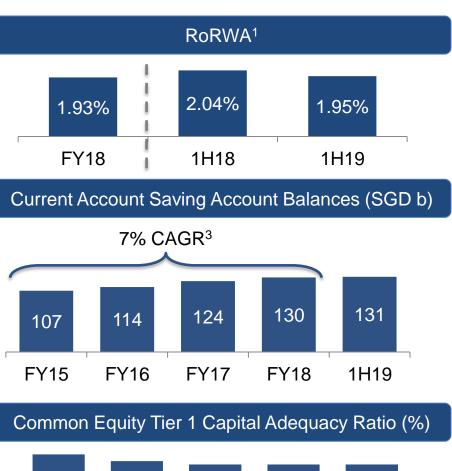
# Disciplined Balance Sheet Management <u>HUOB</u>

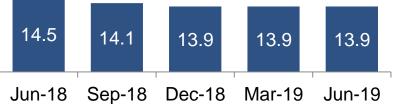
- Sustained balance sheet efficiency
  - Healthy RoRWA<sup>1</sup>
- Healthy portfolio quality
  - Non-performing loan ratio stable at 1.5%
  - 13bp credit cost on loans
  - Adequate non-performing assets reserve cover: 84%, or 191% after taking collateral into account
- Proactive liability management
  - Liquidity coverage ratios: SGD (312%<sup>2</sup>) and all-currency (147%<sup>2</sup>)
  - Net stable funding ratio: 108%
- Robust capitalisation
- Interim dividend / share 

   to 55 cents, vs 50 cents in 1H18

Note: All figures as at 30 June 2019 unless otherwise specified.

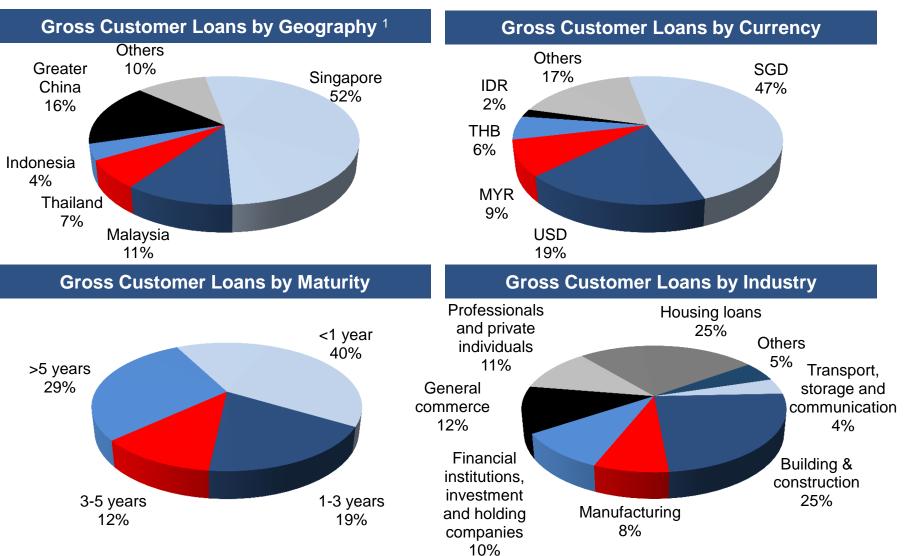
- 1. Return on average risk-weighted assets.
- 2. Average liquidity coverage ratios over 2Q19.
- 3. Compound annual growth rate over 3 years (2015 to 2018).





# **Diversified Loan Portfolio**





Note: Financial statistics as at 30 June 2019.

1. Loans by geography are classified according to where credit risks reside, largely represented by the borrower's country of incorporation / operation (for non-individuals) and residence (for individuals).

# Strong Investment Grade Credit Ratings

#### MOODY'S INVESTORS SERVICE

- Capital good by global standards
- Deposit-funded and liquid balance sheet
- Traditional banking presence in Singapore, Malaysia and other markets

Aa1 / Stable / P-1

#### STANDARD & POOR'S RATINGS SERVICES AA- / Stable / A-1+

- Well-established market position, strong funding and prudent management record
- Will maintain its capitalisation and asset quality while pursuing regional growth

### FitchRatings AA- / Stable / F1+

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- Sound capital and high loan-loss buffers
- Disciplined funding strategy, supported by its strong domestic franchise

			Debt	t Issuance Hist	ory				Debt	Matu	rity Pr	ofile (	SGD	m)	
	Issue Date	Structure	Call	Coupon	Amount	Ratings (M/S/F)		2019	2020	2021	2022	2023	2024	2025	2026
	Jul-19	Perpetual	2026	3.58%	SGD750m	Baa1/BBB-/BBB		-	-	-	-	-	-	-	750
7	Oct-17	Perpetual	2023	3.875%	USD650m	Baa1 / – /BBB		-	-	-	-	879	-	-	-
AT	May-16	Perpetual	2021	4.00%	SGD750m	Baa1 / – /BBB		-	-	750	-	-	-	-	-
	Nov-13	Perpetual	2019	4.75%	SGD500m	Baa1/BBB-/BBB		500	-	-	-	-	-	-	-
	Apr-19	10NC5	2024	3.75%	USD600m	A2 / BBB+ / A+		-	-	-	-	-	812	-	-
-	Feb-17	12NC7	2024	3.50%	SGD750m	A2 / _ / A+		-	-	-	-	-	750	-	-
r 2	Sep-16	10½NC5½	2022	2.88%	USD600m	A2 / _ / A+		-	-	-	812	-	-	-	-
Tier	Mar-16	10½NC5½	2021	3.50%	USD700m	A2 / _ / A+		-	-	947	-	-	-	-	-
	May-14	12NC6	2020	3.50%	SGD500m	A2 / BBB+ / A+		-	500	-	-	-	-	-	-
	Mar-14	10½NC5½	2019	3.75%	USD800m	A2 / BBB+ / A+		1,082	-	-	-	-	-	-	-
eq	Jul-19	3yr FRN		BBSW 3m+0.53%	AUD500m	Aa1 / AA- / AA-		-	-	-	475	-	-	-	-
	Mar-19	3yr FXN	-	3.49%	RMB2b	Aa1 / AA- / AA-		-	-	-	403	-	-	-	-
Unsecur	Jul-18	3½yr FRN	-	BBSW 3m+0.81%	AUD600m	Aa1 / AA- / AA-		-	-	-	569	-	-	-	-
- Su	Apr-18	3yr FRN	-	3m LIBOR+0.48%	USD500m	Aa1 / AA- / AA-		-	-	676	-	-	-	-	-
	Apr-18	3yr FXN	-	3.20%	USD700m	Aa1 / AA- / AA-		-	-	947	-	-	-	-	-
enior	Apr-17	4yr FRN	-	BBSW 3m+0.81%	AUD300m	Aa1 / AA- / AA-		-	-	285	-	-	-	-	-
s,	Sep-14	51∕₂yr FXN	-	2.50%	USD500m	Aa1 / AA- / AA-		-	676	-	-	-	-	-	-
	Sep-19	3yr FXN	-	1.625%	USD500m	Aaa/AAA/-		-	-	-	676	-	-	-	-
-	Sep-18	5yr FXN	-	0.250%	EUR500m	Aaa/AAA/-		-	-	-	-	770	-	-	-
eq	Feb-18	5yr FRN	-	3m LIBOR+0.24%	GBP350m	Aaa/AAA/-		-	-	-	-	600	-	-	-
Covered	Jan-18	7yr FXN	-	0.500%	EUR500m	Aaa/AAA/-		-	-	-	-	-	-	770	-
ŝ	Mar-17	3yr FXN	-	2.125%	USD500m	Aaa/AAA/-		-	676	-	-	-	-	-	-
-	Mar-17	5yr FXN	-	0.125%	EUR500m	Aaa/AAA/-		-	-	-	770	-	-	-	-
	Mar-16	5yr FXN	-	0.250%	EUR500m	Aaa/AAA/-		-	-	770	-	-	-	-	-
1		nal Tier 1 secu	urition				Total	1,582	1,853	4,375	3,705	2,250	1,562	770	750

1. AT1: Additional Tier 1 securities.

2. The table comprises UOB's public rated issues; Maturities shown at first call date for AT1 and T2 notes; FXN: Fixed Rate Notes; FRN: Floating Rate Notes; Updated as of 5 Sep 2019.

FX rates at 30 Jun 2019: USD 1 = SGD 1.35; AUD 0.95 = SGD 1; 1 GBP = SGD 1.71; EUR 1 = SGD 1.54

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# **Our Sustainability Milestones**



Supporting Sustainable Development



### **Notable Recognitions**

### **1. FTSE4Good ASEAN 5 Index** UOB was ranked second by market capitalisation in 2019

**2. Bloomberg Gender-Equality Index** UOB was included in 2019 based on disclosure in 2018.

### 3. Sustainable Banking Assessment

UOB was ranked second among the Southeast Asian banks in 2018.

**4. ASEAN Corporate Governance Scorecard** UOB was ranked fifth in Singapore in 2018.

**5. Singapore Governance and Transparency Index** UOB was ranked eighth out of 589 companies listed in Singapore in 2018.

### 6. Singapore Corporate Awards

UOB won the Silver Awards for both Best Managed Board and Best Risk Management for listed companies with market capitalisation of above SGD1 billion in 2019.

1. BCA-IMDA: Building and Construction Authority - Infocomm Media Development Authority.

Source: UOB, FTSE Russell, Bloomberg, World Wildlife Fund (WWF), Centre for Governance, Institutions and Organisations (CGIO) of the National University of Singapore (NUS) Business School; Singapore Corporate Awards.

# **WOB**

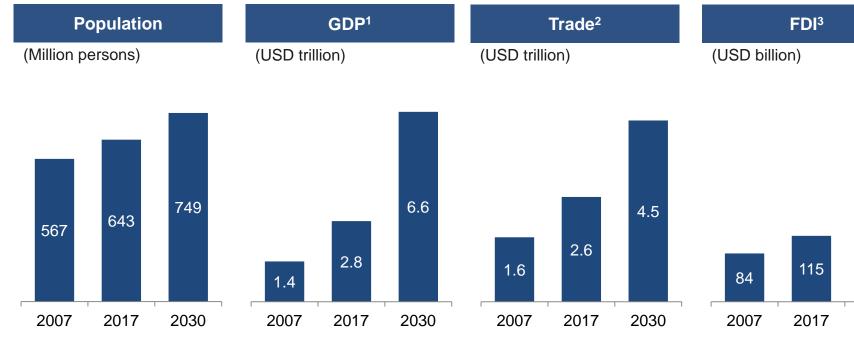
# **Our Growth Drivers**

### **Our Growth Drivers**

Realise Full Potential of our Integrated Platform	<ul> <li>Provides us with ability to serve expanding regional needs of our customers</li> <li>Improves operational efficiency, enhances risk management, seamless customer experience and faster time to market</li> </ul>
Sharpen Regional Focus	<ul> <li>Global macro environment remains uncertain but the region's long-term fundamentals continue to remain strong</li> <li>Region is our growth engine in view of growing intra-regional flows and rising consumer affluence, leveraging digitalisation and partnerships</li> </ul>
Reinforce Fee Income Growth	<ul> <li>Grow fee income to offset competitive pressures on loans and improve return on risk weighted assets</li> <li>Increase client wallet share size by intensifying cross-selling efforts, focusing on service quality and expanding range of products and services</li> </ul>
Long-term Growth Perspective	<ul> <li>Disciplined approach in executing growth strategy, balancing growth with stability</li> <li>Focus on risk adjusted returns; ensure balance sheet strength and robust capital through economic cycles</li> </ul>

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# Southeast Asia's Immense Long-term Potential



- Third largest globally, • after China and India
- Young demographics, ٠ with 384 million below 35 years old
- Fifth largest economic ٠ bloc globally
- GDP doubled over the last decade
- Fourth largest trading • group globally
- 23% are intra-ASEAN<sup>4</sup> • (European Union: 63%, NAFTA<sup>5</sup>: 41%)
- 328 2030

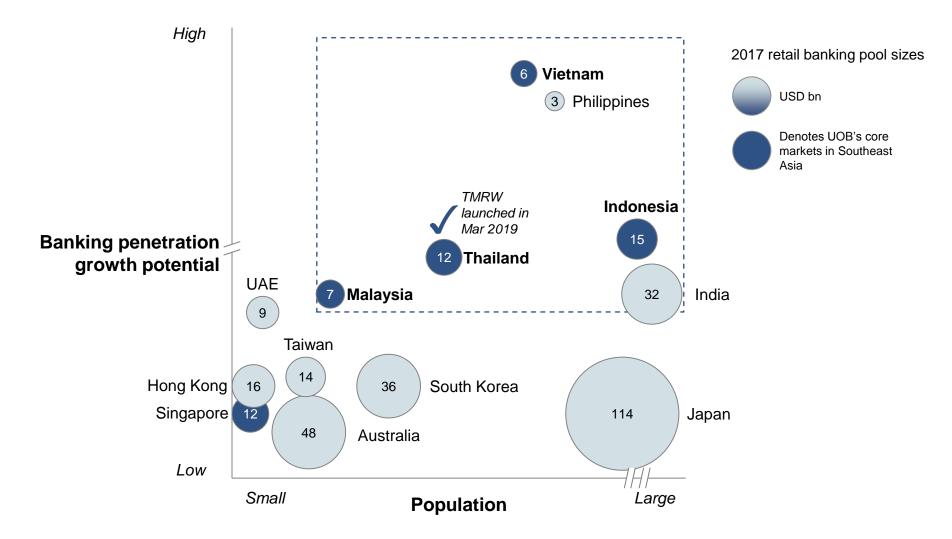
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- Third largest recipient ٠ of inward FDI globally
- Grown 1.4x over the • last decade

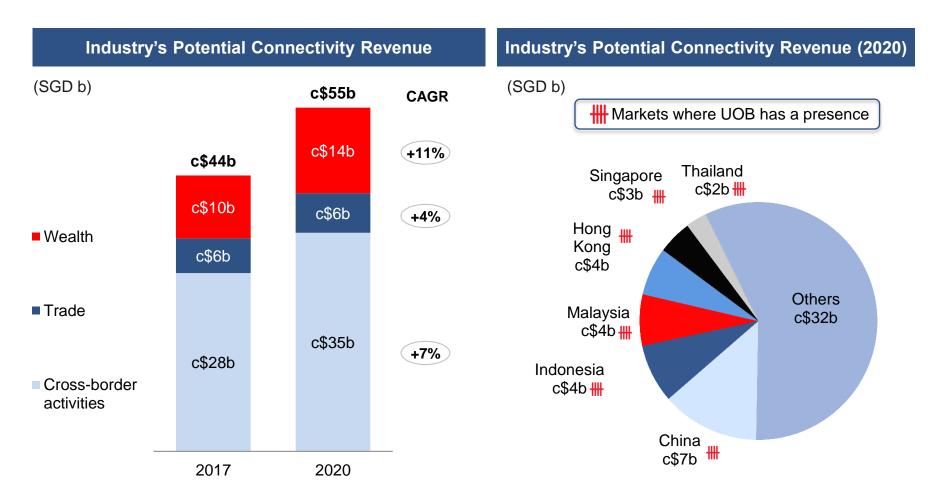
- GDP: Gross domestic product. 1.
- Comprises exports and imports. 2.
- 3. FDI: Foreign direct investments.
- ASEAN: Association of South East Asian Nations. 4.
- NAFTA: North America Free Trade Agreement. 5.

Source: Macrobond, Visual Capitalist, UOB Economic-Treasury Research

### Strong Retail Presence in High Potential #UOB Regional Markets



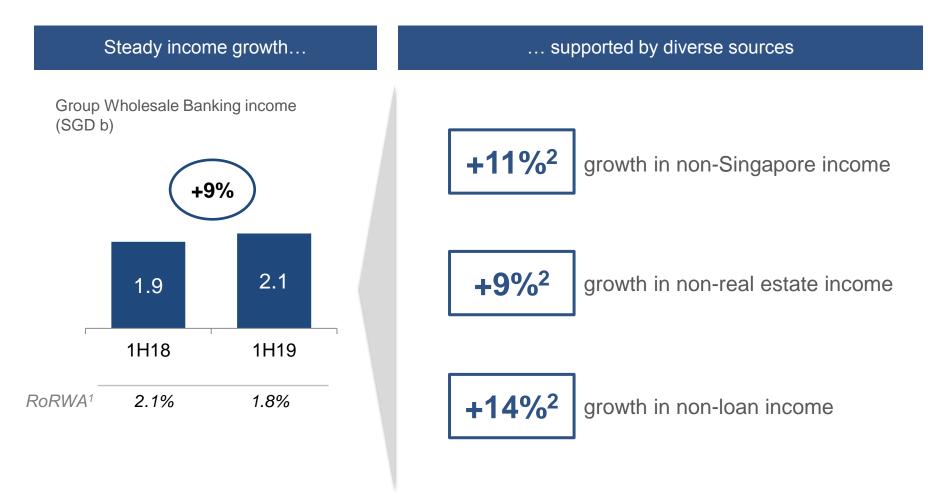
### Revenue Potential from 'Connecting the **HUOB** Dots' in the Region



Note: *'Trade'* and *'cross-border activities'* capture both inbound and outbound flows of Southeast Asia, with *'trade'* comprising exports and imports while *'cross-border activities'* comprising foreign direct investments and M&A. *'Wealth'* captures offshore and onshore assets booked in Singapore as a wealth hub. Incorporating BCG analysis, these are converted into banking revenue potential.

Source: Boston Consulting Group's analysis, Boston Consulting Group Global Banking Revenue pool.

### Group Wholesale Banking: Tapping Intra- <sup>#UOB</sup> Regional Flows through Diversification



1. Return on risk weighted assets (RoRWA), computed as a ratio of "Profit before tax" to "Average segment RWA".

2. Year on year growth for May 2019 year-to-date.

# **Group Wholesale Banking: Strategic Initiatives to Tap Intra-Regional Flows**



### Strengthen Connectivity

### Tapping Greater China / Southeast Asian flows

- Support regional needs of companies from Southeast Asia & Greater China
- Singapore remains attractive as hub for region
- Open second Vietnam
   branch in Hanoi

Cross-border revenue: +19% growth<sup>1</sup> and 27%<sup>2</sup> of GWB income



# Offering tailored solutions for customers

- Improve customer engagement with insights and sectoral benchmarking
- Well-positioned to bank opportunities from trade diversion and re-shoring arising in the region

Non-loan income: +14%<sup>1</sup> Non-real estate income:

**+9%**<sup>1</sup>



Products and Platforms

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# Building new capabilities

- Platform integrated into national payment system
- API<sup>4</sup> solutions powering real time transactions
- Re-designed customer journeys
- Faster speed to market

API<sup>4</sup> solutions: Powering **>0.5m** payment transactions every month

Targeted cost productivity improvement<sup>3</sup>: ~10%

- 1. Year on year growth for May 2019 year-to-date (ytd).
- 2. As of May 19 ytd.
- 3. 2021 target.
- 4. Application programming interface.

### Group Retail: Serving the Rising Affluent <sup>#UOB</sup> via Our Extensive In-country Presence



# Income (Group Retail<sup>1</sup>) +7% YoY in 1H19 SGD b 4.0 FY18 1H18 1H19

~60% of AUM from overseas customers<sup>2</sup> Segment RoRWA<sup>3</sup>+0.2%pt YoY in 1H19 Assets under management (AUM: SGD b) 118 6.6% 6.4% 6.2% 111 108 1H18 **FY18** 1H18 1H19 **FY18** 1H19 SGD1.5 b SGD0.7 b SGD0.8 b Income

- 1. Includes Business Banking.
- 2. Through the Group's network of wealth management centres in Southeast Asia.
- 3. Return on risk weighted assets (RoRWA), computed as a ratio of "Profit before tax" to "Average segment RWA".

# Group Retail: Leveraging Digitalisation & #UOB Partnerships for Stronger Customer Franchise



# Targeting Mobile-First & Mobile-Only Generation

- Launched TMRW in Thailand within 14 months
- Products: Payments, deposits and unsecured

Target 5 markets 3-5m customers Engagement Index >7 Steady-state cost-income ratio ~35%



### Traditional & affluent customers with universal banking needs

- Launched UOB Mighty 2 app with improved features for better experience
- Leveraging data analytics & machine learning across customer touch points

Ranked top in Singapore for quality of Branch Services<sup>1</sup>

RMs<sup>2</sup> at Orchard Wealth Centre: Higher sales productivity



# Forging collaborations to widen distribution reach

- Strengthening customer acquisition & deepening wallet share
- Improving banking access by integrated with lifecycle needs of consumers & small businesses

Launched Singapore's first online utilities marketplace with 10 partners

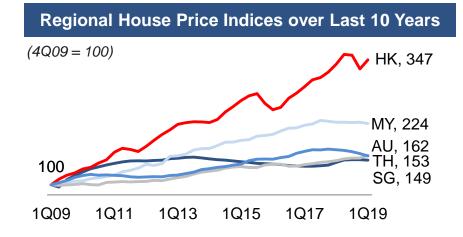
Supported ~20k SMEs with BizSmart<sup>3</sup> across the region

- 1. UOB was top bank in Singapore with best score in Branch Services in Customer Satisfaction Index of Singapore (CSISG) 2018.
- 2. Relationship Managers.
- 3. UOB BizSmart offers a suite of integrated account, payroll and business operational solutions. Data as of 30 June 2019.

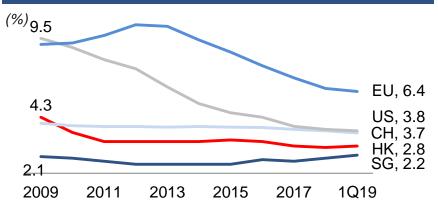
# **WOB**

### **Resilience of Singapore Housing Market and UOB's Cover Pool**

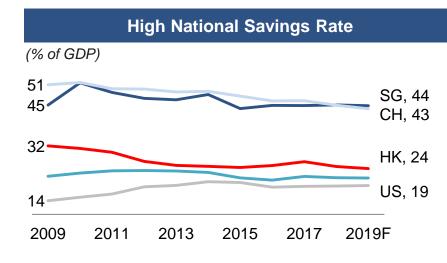
### **Conducive Macro Conditions Underpin Singapore Property Market**



Low Unemployment vs Global Peers



Sources: CEIC, UOB Economic-Treasury Research



### Sources: CEIC, UOB Economic-Treasury Research

### SG Household Income in Line with Property Prices

	2008	1Q19	+/()
Price <sup>1</sup> (SGD / sq ft)	895	1,120	+25%
Unit size (sq ft)	1,200	1,200	_
Unit costs (SGD m)	1.07	1.34	+25%
Interest rate (%)	2.80	2.45	
Household income <sup>2</sup> (SGD / mth)	12,763	17,492	+37%
Debt servicing ratio <sup>3</sup> (%)	49	23 <sup>4</sup>	

1. Reflects median price of non-landed private residential

2. Reflects median of resident households living in private properties

3. Based on a 30-year housing loan, with a loan-to-value of 75%

4. A housing loan with 5% interest rate would increase DSR to 31%

Sources: URA, CEIC, Singapore Statistics, UOB Economic-Treasury Research

#### Sources: IMF, UOB Economic-Treasury Research

Note: AU: Australia; CH: China, EU: European Union, HK: Hong Kong, SG: Singapore, TH: Thailand, UK: United Kingdom, US: United States

**#UOB** 

# Prudent Policies for Sustainable Prices

Residential Property Price Indices in Singapore								
(1Q09 = 100)								
160								
140								
120	_							
100								
100	2013: Introduction of							
80								
60		$\sim$				*		
						2011: Introduction of		
	7: Asian Crisis	2001: Dot Co Bubble Collaps		3: SARS	2008: Or of Cred	1.000	Dries Index	
		Bubble Collaps		utbreak	Crisis		dential Price Index	
20	20	002: HDB build	ling program	nme temporar	rily	2010: Introduction of		
0	1	suspende	d to clear un	sold flats	1	SSD	1 1	
Mar 91 Mar 93 Mar 95 Ma	r 97 I	Mar 99 Mar	01 Mar	03 Mar 0	5 Mar 07 M	Mar 09 Mar 11 Mar 13 Mar 15	Mar 17 Mar 19	
Regulatory Measures	2009	2010	2011	2012	2013	2016 / 2017	2018	
LTV Limit: 1 <sup>st</sup> property	90%	80%	80%		% / 60%¹		75%/55% <sup>1</sup>	
2 <sup>nd</sup> property	90%	70%	60%	60% /	50% / 30% <sup>1</sup>	No change	45%/25% <sup>1</sup>	
Subsequent property	90%	70%	60%	40% <sup>1</sup>	40% / 20% <sup>1</sup>		35%/15% <sup>1</sup>	
Non- individual buyers	90%	80% / 70% <sup>2</sup>	50%	40%	20%		15%	
Maximum Mortgage Tenor Total Debt Servicing Ratio	•	nating banks i enor and affo		35 years	No change 60% limit; 3.5%	No change	No change	
(TDSR) Framework	Owni		ruability gu		interest rate	No change <sup>3</sup>	No change	
• • •		Applicab	le for prop	erties purch	ased from 20	Reduced in Mar 17: 12% if sold		
Seller Stamp Duty (SSD): Percentage / Holding Period		February 20			is sold within t		No change	
i orodnago / norang i onou			applicable	holding per	riod <sup>4</sup>	3rd year: 4%; thereafter : nil		
Buyer's Stamp Duty			First S\$180	0k: 1%; Nex	t S\$180k: 2%;	Remaining: 3%	New Tier of 4% for prices > S\$1m	
Additional Buyer's Stamp Duty			Dei	pending on	the nationality a	and number of properties owned by t		
Additional Dayor 5 Otamp Daty			De	perioring off	and nationality a	and number of properties owned by t		

1. From 6 October 2012, the higher LTV limit applies if the mortgage tenor  $\leq$ 30 years and sum of mortgage tenor and age of borrower is  $\leq$ 65 years old, otherwise lower LTV limit will apply. 2. 80% LTV limit for 1<sup>st</sup> property and 70% LTV limit for subsequent properties. 3. Exemptions granted to certain borrowers if they meet exemption criteria. 4. Refer to IRAS website for more details. Source: Singapore Department of Statistics

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# **Covered Bond Program Summary**



### USD8,000,000,000 Global Covered Bond Programme

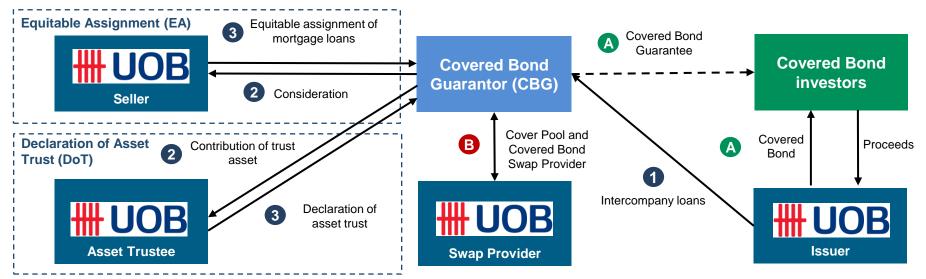
Issuer	United Overseas Bank Limited
Issuer Long Term Rating	Aa1 (stable) / AA- (stable) / AA- (stable) (Moody's / S&P / Fitch)
Issuer Short Term Rating	P-1 (stable) / A-1+ (stable) / F1+ (stable) (Moody's / S&P / Fitch)
Programme Limit	USD8,000,000
LCR Status / ECB Repo Eligibility	Expected Level 2A Eligible (EU) <sup>1</sup> / Not Eligible
Programme Rating	Aaa / AAA (Moody's / S&P)
Issuance Structure	Direct issuance covered bond regulated under MAS Notice 648, Senior unsecured claim against the Issuer and
(Dual Recourse)	senior secured claim against the Cover Pool
Covered Bond Guarantor (CBG)	Glacier Eighty Pte. Ltd., a newly set up orphan SPV incorporated in Singapore for the sole purpose of facilitating the activities under the Covered Bond Programme
Covered Bond Guarantee	The CBG has provided a guarantee as to payments of interest and principal under the Covered Bonds
Cover Pool	Eligible 1 <sup>st</sup> ranking SGD-denominated residential mortgages loans originated by UOB in Singapore (and other
	eligible assets)
Mortgage Loan-to-Value Cap	80% of latest Valuation of the Property, to be adjusted at least quarterly
Over-collateralisation (OC)	Legal minimum OC of 3% and committed OC of 15.90%
	Cover Pool Swap <sup>2</sup> to hedge against possible variances between the interest received from the residential
Hedging	mortgage loans to the CBG's SGD interest/swap payments; Covered Bond Swap to hedge against the currency
	risk between the amount received by the CBG against its payment in other currency
Listing	Singapore Stock Exchange (SGX – ST)
Governing Law	English law (bond & swap documents) and Singapore law (asset documents)
Servicer, Cash Manager and Seller	United Overseas Bank Limited
Asset Monitor	Ernst & Young LLP
Trustee	DB International Trust (Singapore) Limited
Issuing and Paying Agent	Deutsche Bank AG, Singapore Branch
Arrangers	BNP Paribas and United Overseas Bank Limited and Hong Kong and Shanghai Banking Corporation

Please refer to http://ec.europa.eu/finance/bank/docs/regcapital/acts/delegated/141010\_delegated-act-liquidity-coverage\_en.pdf and check for details. At the time of this presentation and subject to any relevant matters which are within the control of a relevant EU investor (including its compliance with the transparency requirement referred to in article 129(7) of Regulation (EU) 575/2013) and to the issuer and the covered bonds being regarded to be subject to supervisory and regulatory arrangements regarded to be at least equivalent to those applied in the EU, this bond should satisfy the eligibility criteria for its classification as a Level 2A asset in accordance with Chapter 2 of Regulation (EU) 2015/61 supplementing Regulation (EU) 575/2013. Notwithstanding the foregoing, it should be noted that whether or not a bond is a liquid asset for the purposes of the Liquidity Coverage Ratio under Regulation (EU) 575/2013 is ultimately to be determined by a relevant investor institution and its relevant supervisory authority and neither the issuer nor the manager accept any responsibility in this regard

2. Only entered into if and when required by either Rating Agency in order to ensure that the then current rating of the Covered Bonds would not be downgraded

# **Covered Bond Structure**

Notwithstanding that CPF's consent is required for the transfer or assignment of mortgages relating to CPF Loans, no such consent is required for a declaration of trust over mortgages relating to CPF Loans. The Seller is acting as the Assets Trustee and the CPF Loans are held on trust for the benefit of the Covered Bond Guarantor (CBG). Both EA and DOT mechanisms are permissible under MAS Notice 648 and such hybrid structure has been used in Covered Bond programmes in other jurisdiction



### **Credit Structure (Dual Recourse)**

- Covered Bond issued directly from UOB constitutes direct, unsecured and unsubordinated obligations of the Issuer
  - CBG guarantees the payment of interest and principal on the Covered Bonds, secured by the Cover Pool

### Hedging

- B Cover Pool Swap<sup>1</sup> to hedge interest rate risk between the mortgage loans and CBG's SGD interest/swap payments<sup>1</sup>
  - Covered Bond Swap (if necessary) to hedge against the currency risk between the amount received by the CBG against its payment in other currency

#### Segregation of mortgage loans

- 1 UOB provides an intercompany loan to the CBG
- 2 CBG pays UOB consideration for the purchase of the mortgage loans
- A dual ring-fencing structure which uses both equitable assignment (EA) and declaration of assets trust (DOT) mechanisms:
  - DOT for the sale of DOT loans<sup>2</sup>
  - EA for the sale of EA Loans<sup>3</sup> via equitable assignment
- 1. Only entered into if and when required by either Rating Agency to ensure that the then current rating of the Covered Bonds would not be downgraded
- 2. DOT Loans mean: (1) the borrowers had used CPF funds in connection with a residential property (CPF Loan) or (2) the required documentation for the borrowers' use of CPF funds, in connection with a residential property, is prepared
- 3. EA Loans mean a non-CPF Loan and the required documentation for the borrowers' use of CPF funds, in connection with a residential property, is not prepared 31

# **UOB's Cover Pool Profile**

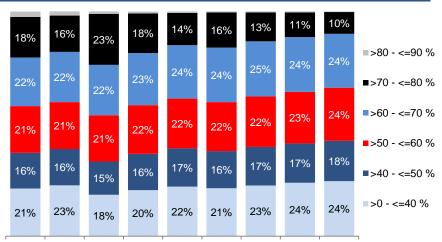


Overview of Cover Pool (as of Jul'19)							
Number of Mortgage Accounts	12,335						
Total Current Balance (SGD)	7.6 billion						
Average Current Loan Balance (SGD)	616,754						
Maximum Current Loan Balance (SGD)	9,115,303						
Weighted Average Current Interest Rate	2.47%						
Weighted Average Seasoning	65 months						
Weighted Average Remaining Tenor	240 months						
Weighted Average Indexed Current LTV <sup>1</sup>	51%						
Weighted Average Unindexed <sup>2</sup> Current LTV <sup>1</sup>	55%						

1. Loan to value

2. Current loan balance divided by the original property value

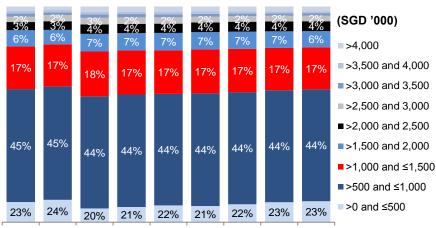
### Current LTV mainly ≤60%



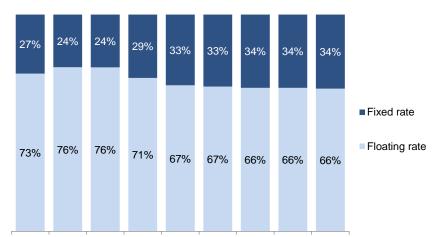
Sep '17 Dec '17 Mar '18 Jun '18 Sep '18 Dec '18 Mar '19 Jun '19 Jul '19

Note: Percentages less than 2% are not shown due to immateriality.

### **Current Loan Balances Mainly <SGD1m**



Sep '17 Dec '17 Mar '18 Jun '18 Sep '18 Dec '18 Mar '19 Jun '19 Jul '19



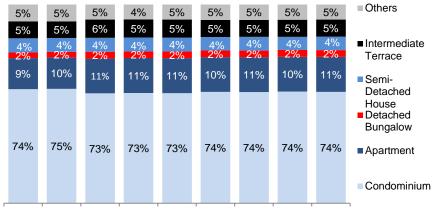
Sep '17 Dec '17 Mar '18 Jun '18 Sep '18 Dec '18 Mar '19 Jun '19 Jul '19

### Largely Floating Rate Mortgages

### **Cover Pool has Been Stable**

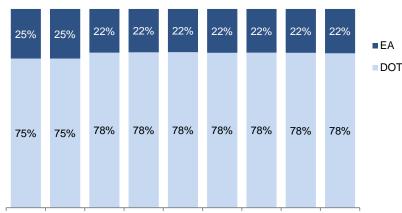


### **Primarily Apartments / Condominums**



Sep '17 Dec '17 Mar '18 Jun '18 Sep '18 Dec '18 Mar '19 Jun '19 Jul '19

### Strong Legal Protection by EA<sup>1</sup> / DOT<sup>2</sup>

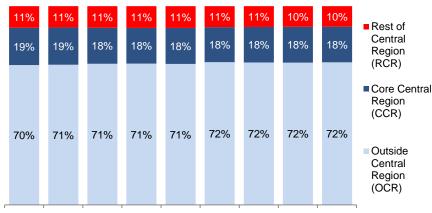


Sep '17 Dec '17 Mar '18 Jun '18 Sep '18 Dec '18 Mar '19 Jun '19 Jul '19

1. Equitable assignment 2. Declaration of asset trust

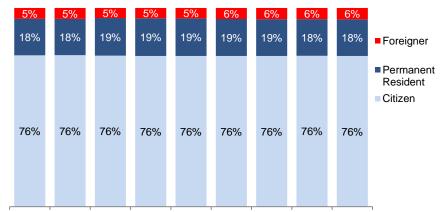
Note: Percentages less than 2% are not shown due to immateriality.

### **Diversified Geographical Distribution**



Sep '17 Dec '17 Mar '18 Jun '18 Sep '18 Dec '18 Mar '19 Jun '19 Jul '19

### **Borrowers mainly Citizens / PRs**

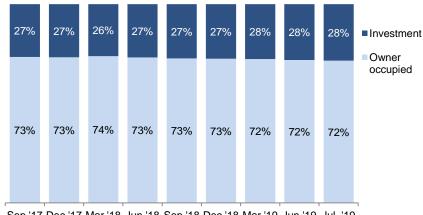


Sep '17 Dec '17 Mar '18 Jun '18 Sep '18 Dec '18 Mar '19 Jun '19 Jul '19

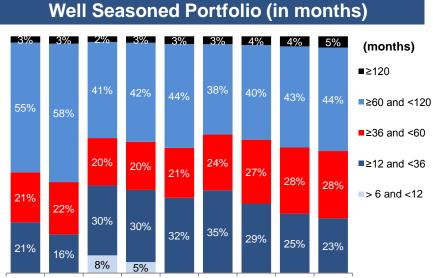
### **Cover Pool has Been Stable**



### Majority Owner Occupied

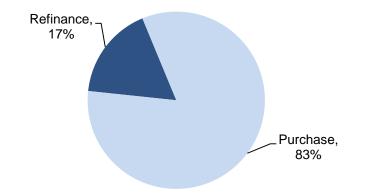


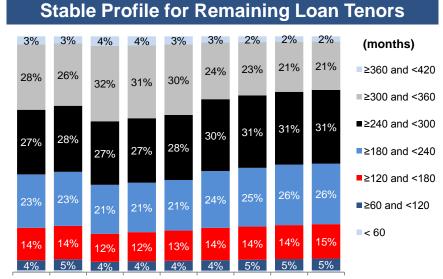
Sep '17 Dec '17 Mar '18 Jun '18 Sep '18 Dec '18 Mar '19 Jun '19 Jul '19



Sep '17 Dec '17 Mar '18 Jun '18 Sep '18 Dec '18 Mar '19 Jun '19 Jul '19 Note: Percentages less than 2% are not shown due to immateriality.

### Loans Mainly for Purchases





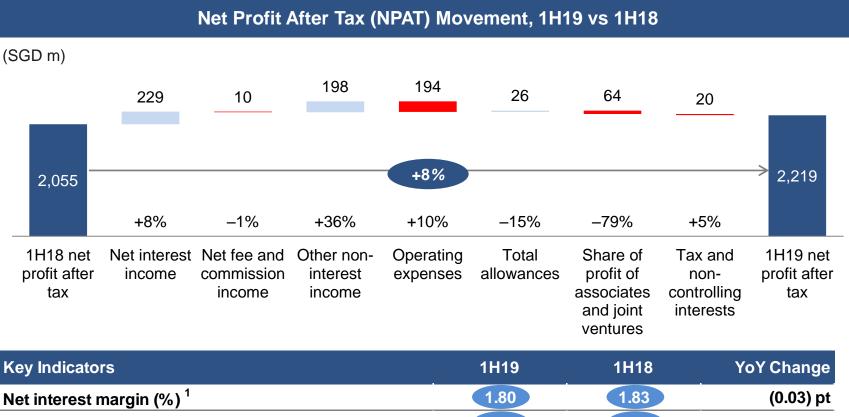
Sep '17 Dec '17 Mar '18 Jun '18 Sep '18 Dec '18 Mar '19 Jun '19 Jul '19

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# **Appendix A: Latest Financials**

# **1H19 Financial Overview**





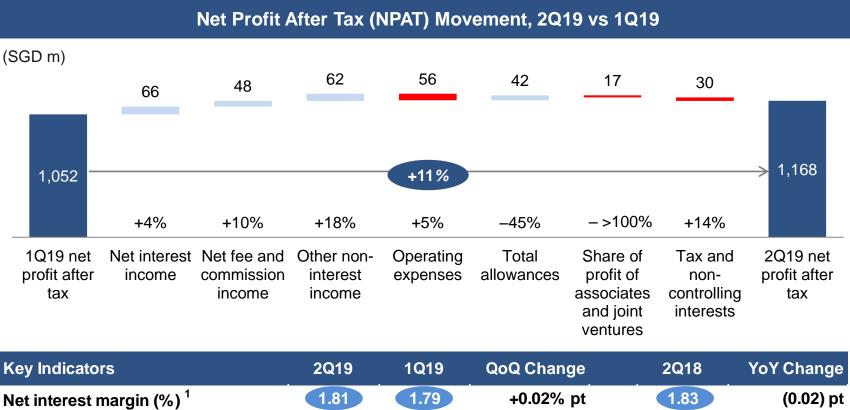
Non-interest income / Income (%)	35.0	34.1	+0.9% pt
Cost / Income ratio (%)	44.1	43.9	+0.2% pt
Return on equity (%) <sup>1,2</sup>	12.0	11.6	+0.4% pt
Return on risk-weighted assets (%) <sup>1</sup>	1.95	2.04	(0.09) pt

1. Computed on an annualised basis.

2. Calculated based on profit attributable to equity holders of the Bank, net of perpetual capital securities distributions.

### **2Q19 Financial Overview**



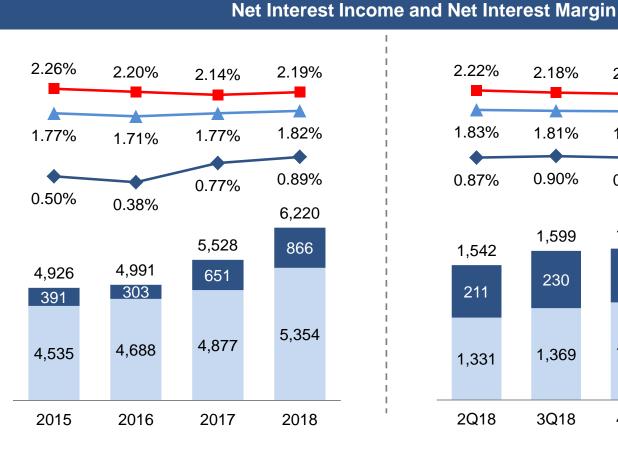


Net interest margin (70)			····= /• p·		(••••=) [••
Non-interest income / Income (%)	36.0	34.0	+2.0% pt	34.2	+1.8% pt
Cost / Income ratio (%)	43.7	44.6	(0.9) pt	43.6	+0.1% pt
Return on equity (%) <sup>1,2</sup>	12.5	11.4	+1.1% pt	12.1	+0.4% pt
Return on risk-weighted assets (%) <sup>1</sup>	2.02	1.88	+0.14% pt	2.13	(0.11) pt

1. Computed on an annualised basis.

2. Calculated based on profit attributable to equity holders of the Bank, net of perpetual capital securities distributions.

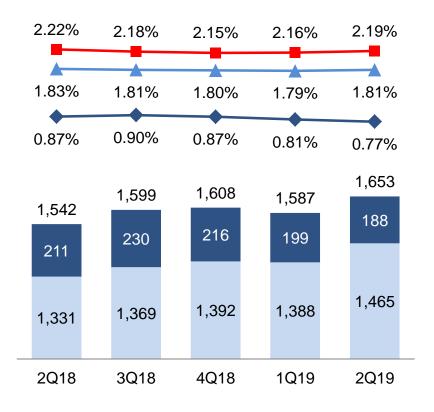
#### Net Interest Income Supported by Loan Margin and Volume



Net interest income – loans (SGD m)

Net loan margin (%) \*

----Overall net interest margin (%) \*



Net interest income – interbank & securities (SGD m)
 Net interbank & securities margin (%) \*

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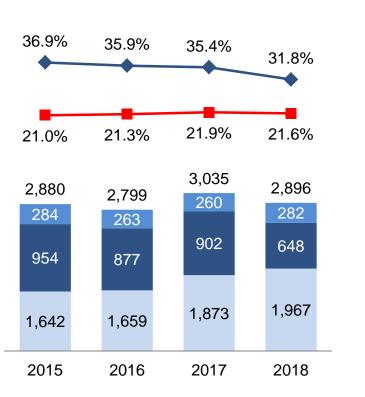
## Broad-based Increase in Loan Portfolio

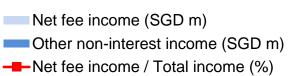
Gross Loans	Jun-19 SGD b	Mar-19 SGD b	QoQ +/(–) %	Jun-18 SGD b	YoY +/(–) %
By Geography					
Singapore	142	139	+2	131	+9
Regional:	101	101	_	94	+8
Malaysia	29	29	—1	29	_
Thailand	18	18	+3	16	+15
Indonesia	11	11	_	11	+4
Greater China	43	43	_	38	+12
Others	30	29	+2	25	+18
Total	273	270	+1	250	+9
By Industry					
Transport, storage and communication	11	11	–1	10	+12
Building and construction	68	67	+1	58	+18
Manufacturing	22	23	-4	22	+3
Financial institutions, investment & holding companies	27	23	+16	22	+24
General commerce	34	34	_	31	+7
Professionals and private individuals	29	29	_	29	+1
Housing loans	68	69	_	67	+2
Others	13	14	–1	12	+16
Total	273	270	+1	250	+9

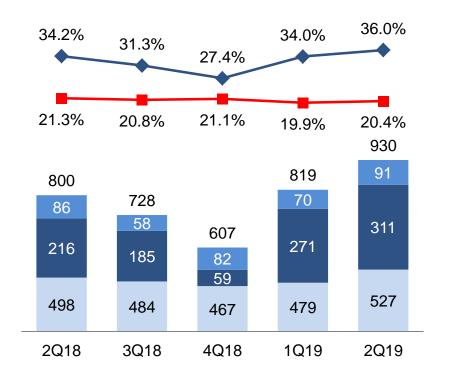
Note: Loans by geography are classified according to where credit risks reside, largely represented by the borrower's country of incorporation / operation (for non-individuals) and residence (for individuals).

#### Non-Interest Income Supported by Sustained Rebound in Financial Market

Non-Interest Income and as a % of Total Income





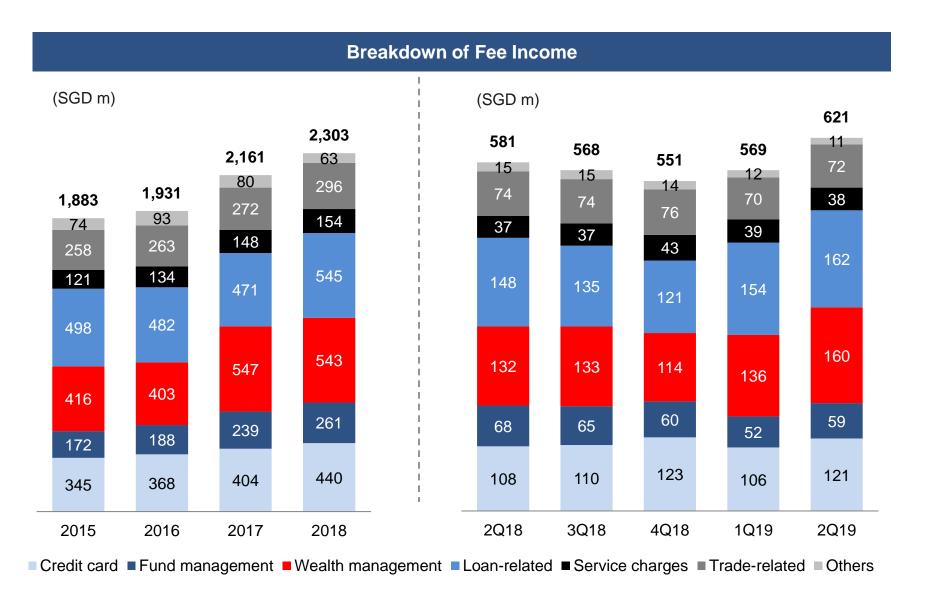


Trading and investment income (SGD m)

Non-interest income / Total income (%)

Note: Fee income has been restated where the amounts are net of expenses directly attributable to fee income.

#### **Broad-based Focus in Fee Income**



Note: The amounts represent fee income on a gross basis.

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#### Pacing Growth in Operating Expenses, with Maintaining a Stable CIR

**Operating Expenses and Costs / Income Ratio (CIR)** 



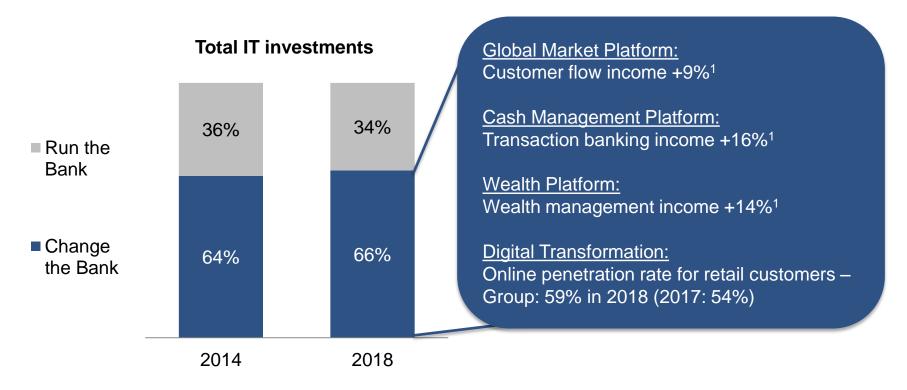
Staff costs (SGD m)
 Other operating expenses (SGD m)
 Costs / Income ratio (%)



IT-related expenses (SGD m)

# IT Investments Towards "Changing the Bank"

Focus	Centralisation and Standardisation	Connectivity and Digital for Growth	
Cumulative IT investments	<b>2009 to 2013</b> (cSGD0.6 b)	<b>2014 to 2018</b> (cSGD1.6 b)	



1. CAGR computed over 5 years (2013 to 2018)

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### **Exposure to China**

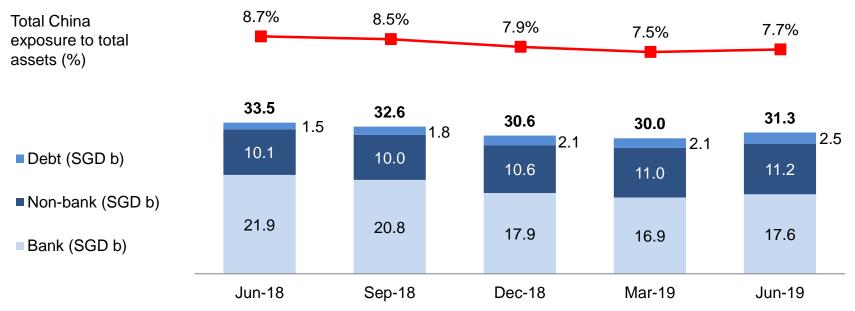
#### **WOB**

#### Bank exposure as of 30 June 2019

- Bank exposure accounted for 56% of total exposure to China
- Top 5 domestic banks and 3 policy banks accounted for 76% of total bank exposure
- 99% with <1 year tenor
- Trade exposures mostly with bank counterparties, representing about half of bank exposure

#### Non-bank exposure as of 30 June 2019

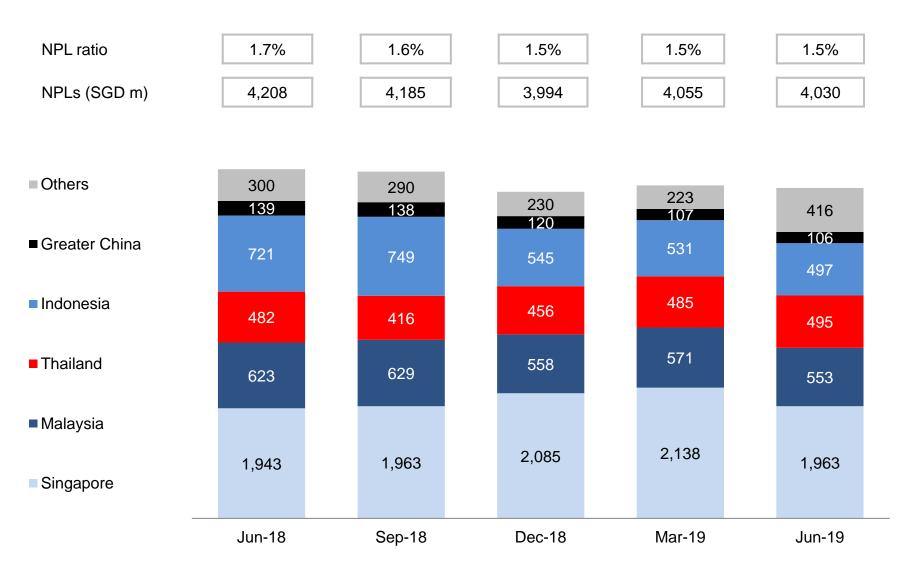
- Target customers include top-tier stateowned enterprises, large local corporates and foreign investment enterprises
- NPL ratio at 0.6%
- 50% denominated in RMB
- 50% with <1 year tenor



Note: Classification is according to where credit risks reside, largely represented by the borrower's country of incorporation / operation (for non-individuals) and residence (for individuals).

#### **NPL Ratio Stable at 1.5%**





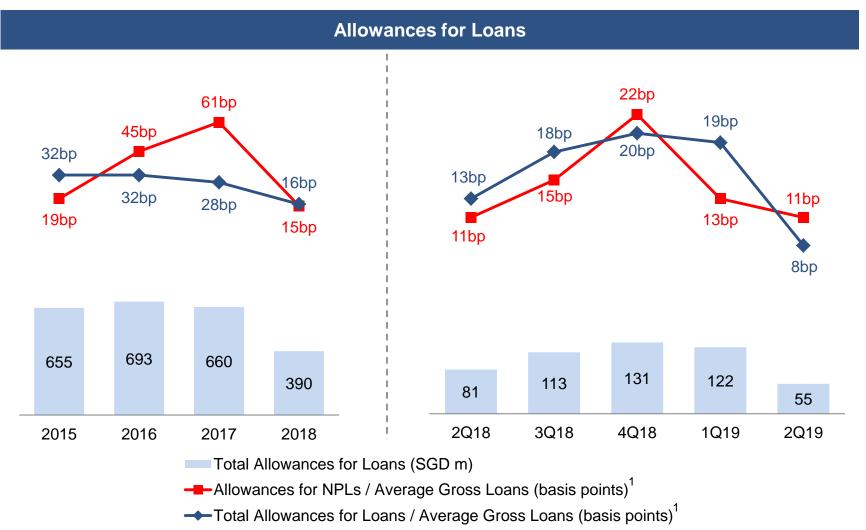
Note: NPLs by geography are classified according to where credit risks reside, largely represented by the borrower's country of incorporation / operation (for non-individuals) and residence (for individuals).

# New NPA Formation Stayed within Historical Norm

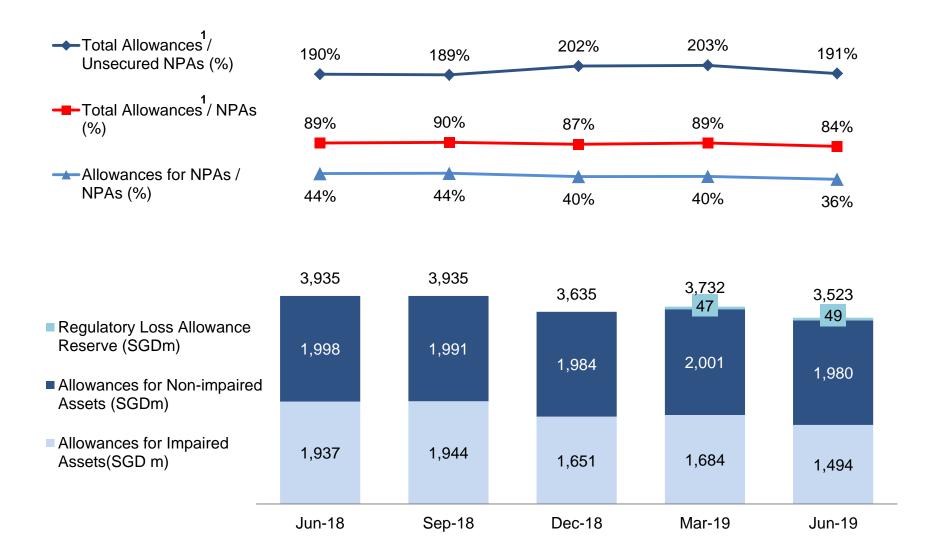
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(SGD m)	2Q18	3Q18	4Q18	1Q19	2Q19
NPA at start of period	4,323	4,404	4,374	4,166	4,215
Group wholesale and sn					
New NPA	252	275	370	230	357
Upgrades, recoveries and translations	(88)	(229)	(257)	(139)	(182)
Write-offs	(101)	(29)	(392)	(17)	(229)
	4,386	4,421	4,095	4,240	4,161
Group retail (personal customers only)	18	(47)	71	(25)	24
NPA at end of period	4,404	4,374	4,166	4,215	4,185

#### Credit Costs Still Supported by Benign #UOB Environment



### **Adequate Reserve Coverage Ratios**



1. Include regulatory loss allowance reserve (RLAR) as part of total allowances. RLAR is a non-distributable reserve appropriated through retained earnings to meet MAS Notice No. 612 Credit Files, Grading and Provisioning requirements.

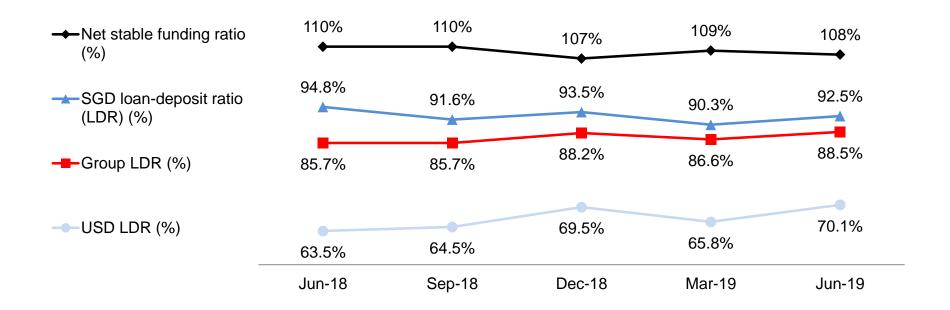
## **Strong Capital and Leverage Ratios**

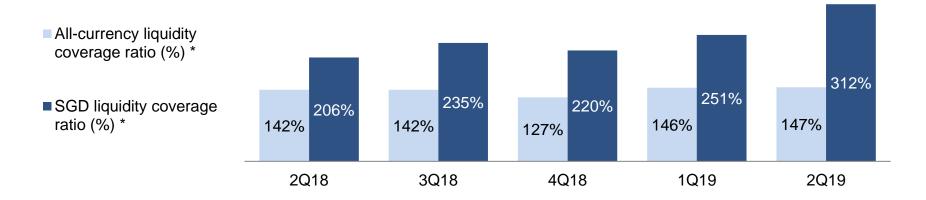
7.7%	7.4%	7.6%	7.6%	7.5%
18.4%	17.4%	17.0%	17.0%	17.2%
2.4% 1.5%	2.3% 1.0%	2.1% 1.0%	2.1% 1.0%	2.3% 1.0%
14.5%	14.1%	13.9%	13.9%	13.9%
Jun-18	Sep-18	Dec-18	Mar-19	Jun-19
2.13	1.99	1.68	1.88	2.02
30	30	31	32	32
30 33	30 32	31 33	32 34	32
	18.4% 2.4% 1.5% 14.5% Jun-18	18.4%       17.4%         2.4%       2.3%         1.5%       1.0%         14.5%       14.1%         Jun-18       Sep-18	18.4%       17.4%       17.0%         2.4%       2.3%       2.1%         1.5%       1.0%       1.0%         14.5%       14.1%       13.9%         Jun-18       Sep-18       Dec-18	18.4%       17.4%       17.0%       17.0%         2.4%       2.3%       2.1%       2.1%         1.5%       1.0%       1.0%       1.0%         14.5%       14.1%       13.9%       13.9%         Jun-18       Sep-18       Dec-18       Mar-19

- 1. Leverage ratio is calculated based on the revised MAS Notice 637.
- 2. CAR: Capital adequacy ratio.
- 3. Return on average risk weighted assets, computed on an annualised basis.

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# Stable Liquidity and Funding Position



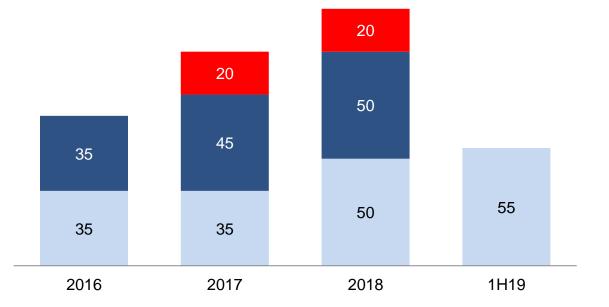


\* Liquidity coverage ratios are computed on a quarterly average basis.

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### **Higher Interim Dividend for 1H19**





Net dividend per ordinary share (¢)	■ Ir	nterim	■ Final	Special
Payout amount (SGD m)	1,135	1,661	2,000	918
Payout ratio (%)	37	49	50	41
Payout ratio (excluding special/one-off dividends) (%)	37	39	42	41

**Note**: The Scrip Dividend Scheme was applied to interim and final dividends for the financial year 2016; as well as interim, final and special dividends for the financial year 2017.

The Scheme provides shareholders with the option to receive Shares in lieu of the cash amount of any dividend declared on their holding of Shares. For more details, please refer to <u>http://www.uobgroup.com/investor/stock/dividend\_history.html</u>.

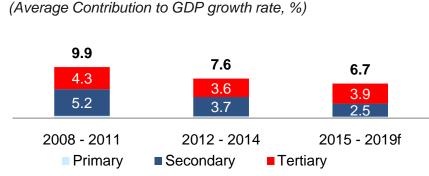
## **WOB**

#### Appendix B: Macroeconomic Outlook and Banking Regulations

#### Trade Tensions Cloud China's Outlook but Low Risk of Hard Landing

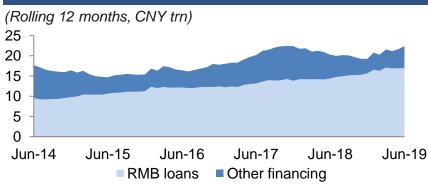
- ₩UOB
- Despite ongoing structural slowdown, the Chinese economy has its underlying momentum, supported by rebalancing reforms and steady jobs market.
- Low central government debt underpins China's fiscal capacity, which could help mitigate "black swan" events.
- Baseline GDP growth est for China at 6.2% in 2019 & 2020 (2018: 6.6%). Greatest near-term risk from protracted US-China trade negotiations (30% prob of talks breakdown). Growth to slow to 5.8% should all Chinese exports to the US be targeted in trade conflicts.

#### Structural Shift of China's Economy

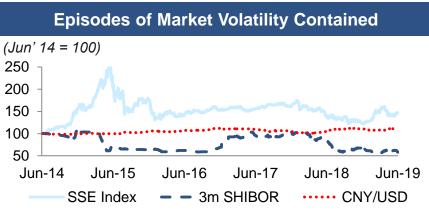


Source: IMF, CEIC, UOB Global Economics & Markets Research

#### New Financing Increasingly from Banking Sector



Source: PBOC, UOB Global Economics & Markets Research

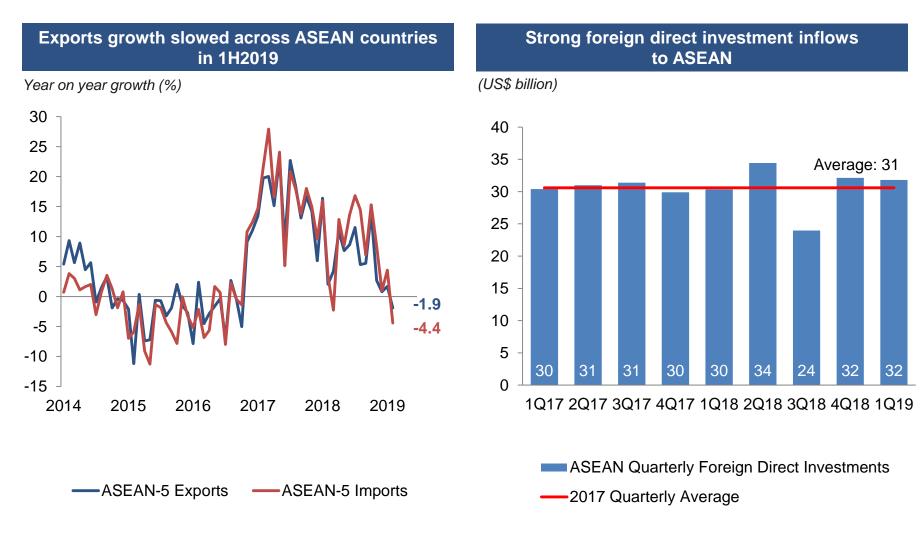


Source: Bloomberg, UOB Global Economics & Markets Research

	Source of China Debt Risk												
(As of 2018, % of GDP)													
		363											
	254	58	257	249									
	53	103	87	76	170								
	152	203	84	74	53 57								
	50		87	99	61								
	China	Japan	UK	US	Germany								
	Govern	ment debt	Corporate debt	Hous	ehold debt								

Source: BIS, Macrobond, UOB Global Economics & Markets Research 53

#### Global Trade Tension Negative for ASEAN #UOB but Some Silver Lining May Emerge



ASEAN = Indonesia, Malaysia, Myanmar, Thailand, Philippines, Vietnam Sources: CEIC, UOB Global Economics & Markets Research

Sources: Macrobond, UOB Global Economics & Markets Research

## **Implication on Regional Policy Rates**

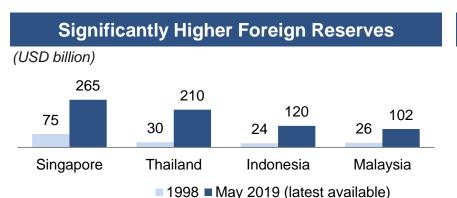
	4Q17	1Q18	2Q18	3Q18	4Q18	1Q19	2Q19	3Q19f	4Q19f	1Q20f
US 10-Year Treasury	2.40	2.74	2.86	3.06	2.68	2.41	2.00	2.00	1.90	1.80
US Fed Funds	1.50	1.75	2.00	2.25	2.50	2.50	2.50	2.25	2.00	2.00
SG 3M SIBOR	1.50	1.45	1.52	1.64	1.89	1.94	2.00	2.00	1.95	1.95
SG 3M SOR	1.30	1.48	1.59	1.64	1.92	1.93	1.83	2.00	1.95	1.95
MY Overnight Policy Rate	3.00	3.25	3.25	3.25	3.25	3.25	3.00	3.00	3.00	3.00
TH 1-Day Repo	1.50	1.50	1.50	1.50	1.75	1.75	1.75	1.75	1.75	1.75
ID 7-Day Reverse Repo	4.25	4.25	5.25	5.75	6.00	6.25	6.00	5.50	5.50	5.50
CH 1-Year Deposit Rate	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50

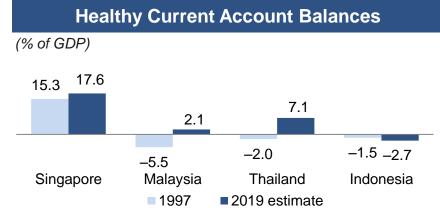
The FOMC cut its policy Fed Funds Target Rate by 25bps in its 31 Jul meeting, in light of the implications of global developments for the economic outlook as well as muted inflation pressures even with the view that US domestic conditions remaining robust. The FOMC did not commit to a further rate cut but said that it will continue to monitor the incoming economic data growth. We expect the Fed to go into a period of wait-and-see as more US data becomes available, and then to follow up with another 25bps cut only in Dec, bringing the upper bound of FFTR to 2.00% by end-2019. That said, an escalation of the US-China trade tensions may also influence the Fed's timeline for the next rate cut.

We see downside risk to our base call for MAS to keep policy unchanged in October. SG\$NEER is coming from a position of strength that is inconsistent with underlying weakness displayed in the domestic economy. Convergence of views towards MAS easing in October will reinforce downside pressure on SG\$NEER. Potential for weaker domestic currency will cause SORs to lag US rates when the latter is repricing lower.

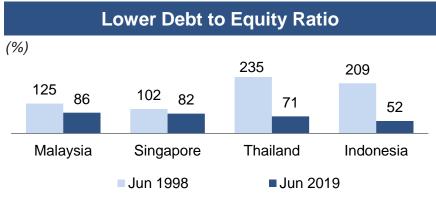
China's growth is expected to slow further due to its structural reforms and trade tensions with the US but policymakers have been able to manage downside risks with proactive fiscal and monetary measures. On balance, with China's growth within target (6-6.5%) and more dovish Fed, capital flight risk from Asia will remain low. Asian central banks are also likely to move towards easing monetary policy to support growth, albeit those with current account and fiscal deficits, would likely do so in a cautious approach.

### **Southeast Asia: Resilient Key Markets**





Sources: World Bank, International Monetary Fund



Total debt to equity ratio = total ST and LT borrowings divided by total equity, multiplied by 100; sources: MSCI data from Bloomberg

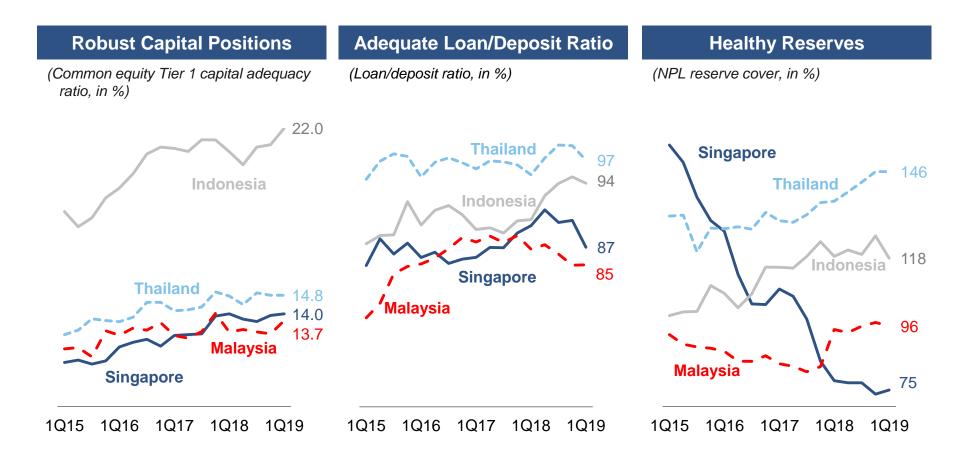
Source: International Monetary Fund



\* Foreign currency loans in 1996 approximated by using total loans of Asia Currency Units; sources: Central banks

Long-term fundamentals and prospects of key Southeast Asia have greatly improved since the 1997 Asian Financial Crisis. #UNR

#### Southeast Asia Banking Sectors: Strong Fundamentals Remain Intact



Note: For Singapore, common equity Tier 1 capital adequacy ratio and NPL reserve cover are based on the average of the three Singapore banking groups, while the loans/deposit ratio approximates that of Singapore dollar. Source: Central banks, banks

### **Basel III across the Region**



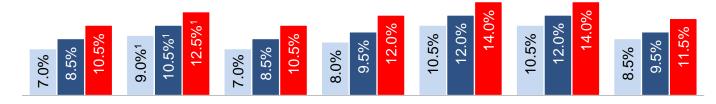
	BCBS	Singapore	Malaysia	Thailand	Indonesia	Hong Kong	China
Minimum CET1 CAR	4.5%	6.5% <sup>1</sup>	4.5%	4.5%	4.5%	4.5%	5.0%
Minimum Tier 1 CAR	6.0%	8.0% <sup>1</sup>	6.0%	6.0%	6.0%	6.0%	6.0%
Minimum Total CAR	8.0%	10.0% <sup>1</sup>	8.0%	8.5%	8.0%	8.0%	8.0%
Full Compliance	Jan-15	Jan-15	Jan-15	Jan-13	Jan-14	Jan-15	Jan-13
Capital Conservation Buffer	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Full Compliance	Jan-19	Jan-19	Jan-19	Jan-19	Jan-19	Jan-19	Jan-19
Countercyclical Buffer <sup>2</sup>	Up to 2.5%	Up to 2.5%	Up to 2.5%	Up to 2.5%	Up to 2.5%	Up to 2.5%	Up to 2.5%
2019 Requirement	n/a	0%	0%	0%	0%	2.5%	0%
D-SIB Buffer	n/a	2.0%	2.0%	1.0%	1.0%–3.5% <sup>3</sup>	1.0%–3.5%	1.0% <sup>4</sup>
G-SIB Buffer	1.0%–3.5%	n/a	n/a	n/a	n/a	n/a	1.0%–1.5 <sup>4</sup>
Minimum Leverage Ratio	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	4.0%
Full Compliance	2018	2018	2018	2022	2018	2018	2015/16
Minimum LCR	100%	100%	100%	100%	100%	100%	100%
Full Compliance	Jan-19	Jan-19	Jan-19	Jan-20	Dec-18	Jan-19	Dec-18
Minimum NSFR	100%	100%	100%	100%	100%	100%	100%
Full Compliance	Jan-18	Jan-18	Jan-20	Jul-18	Jan-18	Jan-18	Jul-18

#### % of risk weighted assets 5

Minimum CET1 CAR

Minimum Tier 1 CAR

Minimum Total CAR



Source: Regulatory notifications.

- 1. Includes 2% for D-SIB (domestic-systemically important banks) buffer for the three Singapore banks.
- 2. Each regulator determines its own level of countercyclical capital buffer.
- 3. According to the regulations, Indonesia D-SIBs will initially be subject to a D-SIB buffer of up to 2.5%.
- 4. In China, G-SIBs (global-systemically important banks) are only subject to the higher of G-SIB and D-SIB buffer.
- 5. Minimum ratios on fully-loaded basis, including capital conservation buffer and D-SIB surcharge, but excluding countercyclical capital buffer and G-SIB surcharge.

## **Banking Regulations Still Evolving**

Year	'13	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23	'24	'25	'26	'27
Basel III capital ratios	Phased-in					Full									
Leverage ratio			Discl	osure p	hase	Start			$\longrightarrow$	Revise	d <sup>7</sup>				
LCR <sup>1</sup>				Phas	ed-in		Full								
NSFR <sup>2</sup>					$\longrightarrow$	Start									
SACCR <sup>3</sup>					$\rightarrow$	Start									
MCRMR <sup>4</sup>									$\longrightarrow$	Start					
TLAC <sup>5</sup>							Р	hased-i	n	Full					
Basel IV <sup>6</sup>											P	hased-	in		Full
IFRS 9					$\longrightarrow$	Start									

Banks need to be profitable in order to be strong. Retained earnings are one of the major sources of equity – which is the highest quality capital that banks hold. Banks also need to be profitable to be able to support the real economy. They have to earn a decent return for intermediating credit, otherwise they will do less of it.

#### – Mr Ravi Menon, Managing Director, Monetary Authority of Singapore, 20 April 2017

#### Source: BCBS

- 1. Liquidity Coverage Ratio.
- 2. Net Stable Funding Ratio.
- 3. Standardised Approach for measuring Counterparty Credit Risk exposure (MAS has not announced implementation date).

...certain liabilities should be excluded from the scope of bail-in because their repayment is necessary to ensure the continuity of essential services and to avoid widespread and disruptive contagion to other parts of the financial system. The proposed scope of bail-in would hence exclude liabilities such as ... senior debt and all deposits.

#### – Consultation Paper by the Monetary Authority of Singapore, June 2015

- 4. Minimum Capital Requirements for Market Risk replaced Fundamental Review of the Trading Book (MAS has not announced implementation date).
- 5. Total Loss Absorbing Capacity (not applicable to Singapore banks).
- 6. Basel IV: Reducing variation in credit risk-weighted assets.
- 7. Revised definition on exposure measure.

# Impact of Basel IV<sup>1</sup> Likely to be Manageable



Retail credit

Wholesale credit

#### Others

LGD<sup>2</sup> floor of Retail Mortgage cut to 5% from 10%

Unsecured corporate FIRB<sup>5</sup> LGD<sup>2</sup> cut to 40% from 45%

CCF<sup>6</sup> for general commitments cut to 40% from 75%

Higher haircuts and lower FIRB<sup>5</sup> secured LGD

Removal of 1.06 multiplier for IRB<sup>8</sup> RWA<sup>7</sup>

Lower RWA

LGD<sup>2</sup> and PD<sup>3</sup> floors introduced for QRRE<sup>4</sup> and Other Retail

CCF<sup>6</sup> for unconditional cancellable commitments raised to 10% from 0%

PD<sup>3</sup> floor of bank asset class raised to 5bp from 3bp

RWA<sup>7</sup> output floor set at 72.5% of that of standardised approach

Fundamental review of the trading book

#### **Higher RWA**



Source: BCBS

- 1. Basel IV: Reducing variation in risk-weighted assets
- 2. Loss given default
- 3. Probability of default
- 4. Qualifying revolving retail exposures

- 5. Foundation internal rating-based approach
- 6. Credit conversion factor
- 7. Risk weighted assets
- 8. Internal rating-based approach

# **Thank You**

