



#### **UOB** Group **Fixed Income Investor Presentation**

#### September 2022

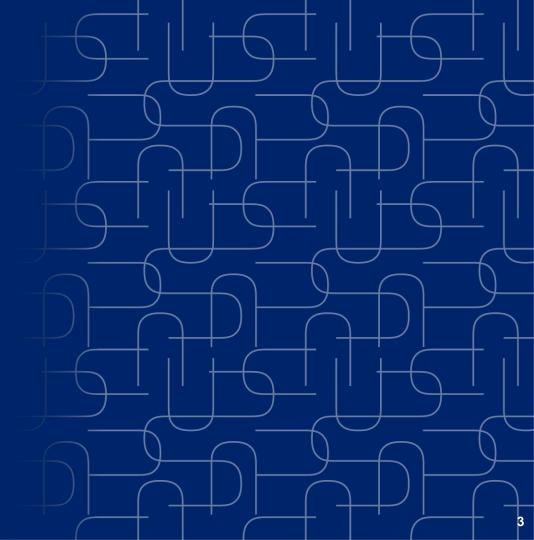
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# Agenda

1. Strong UOB Fundamentals 2. Latest Financials 3. Resilience of the Singapore Housing Market & UOB's Cover Pool 4. Sustainability Bond Allocation and Impact Report Appendices: A. Our Growth Drivers B. Additional Information on UOB's Covered Bond Program C. UOB's Sustainability Approach D. UOB's Sustainable Bond Framework E. Macroeconomic Outlook and Banking Regulations



### Strong UOB Fundamentals



### **UOB** Overview

### **#UOB**

#### 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 around 500 branches and offices in 19 countries and territories.

Note: Financial statistics as at 30 June 2022

- 1. USD 1 = SGD 1.391 as at 30 June 2022
- 2. Average for 2Q22
- 3. Calculated based on profit attributable to equity holders of the Bank, net of perpetual capital securities distributions

	Ney Statistic		- 2	
	Gross loans	: SGI	D322b	(USD231b <sup>1</sup> )
	Customer deposits	: SGI	D358b	(USD257b1)
	Loan / Deposit ratio	: 88.7	%	
	Net stable funding ratio	: 1119	%	
	All-currency liquidity coverage	ratio : 141	% <sup>2</sup>	
	Common Equity Tier 1 ratio	: 13.1	%	
	Leverage ratio	: 6.6%	6	
	Return on equity <sup>3</sup>	: 9.9%	6	
	Return on assets	: 0.85	5%	
	Net interest margin	: 1.63	8%	
	Non-interest income / Total inco	ome : 29.9	)%	
	Cost / Income	: 44.3	8%	
	Non-performing loan ratio	: 1.7%	6	
	Credit Ratings	Moody's	S&P	Fitch
lss	suer rating (Senior unsecured)	Aa1	AA–	AA-

Stable

P-1

Stable

A-1+

Outlook

Short-term rating

Key Statistics for 1H22

#### 4

Negative

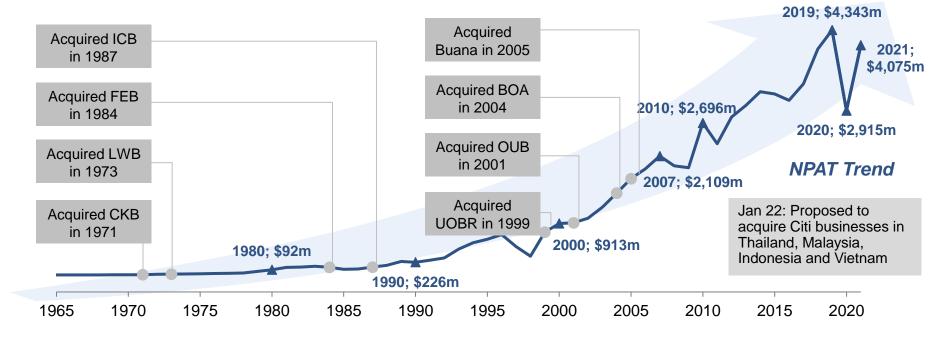
F1+

#### A leading Singapore bank; Established franchise in **UOB** core market segments



## 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") 6

**UOB** 

## **Comprehensive 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
- Comprise Mainland China, Hong Kong SAR and Taiwan
- Refers to Privilege Banking, Privilege Reserve and Private Bank

+20% YoY

3. YTD May-2022

wholesale

banking

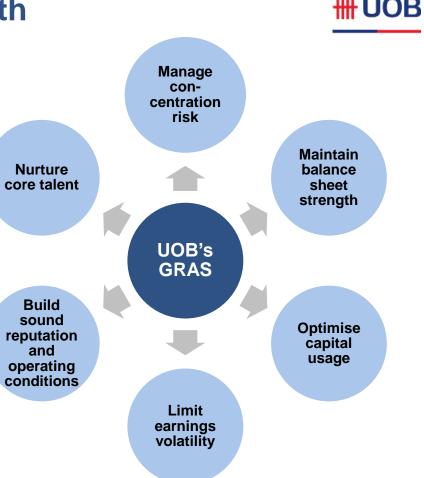
III UOB

to Group wholesale

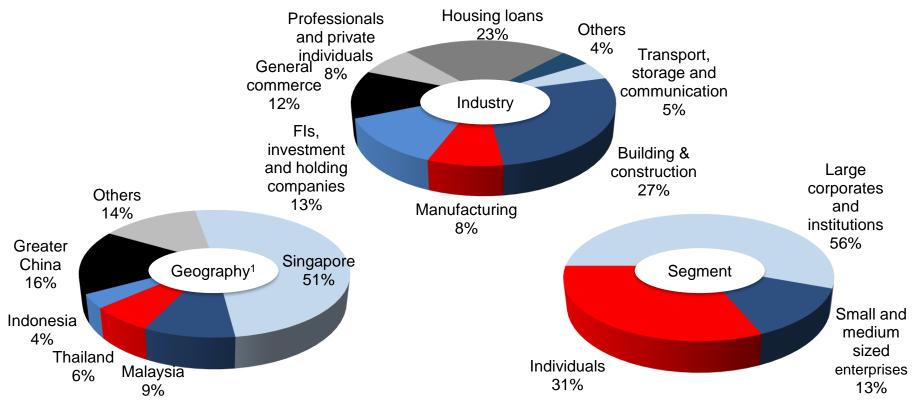
banking's income

### 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



## **Diversified loan portfolio**

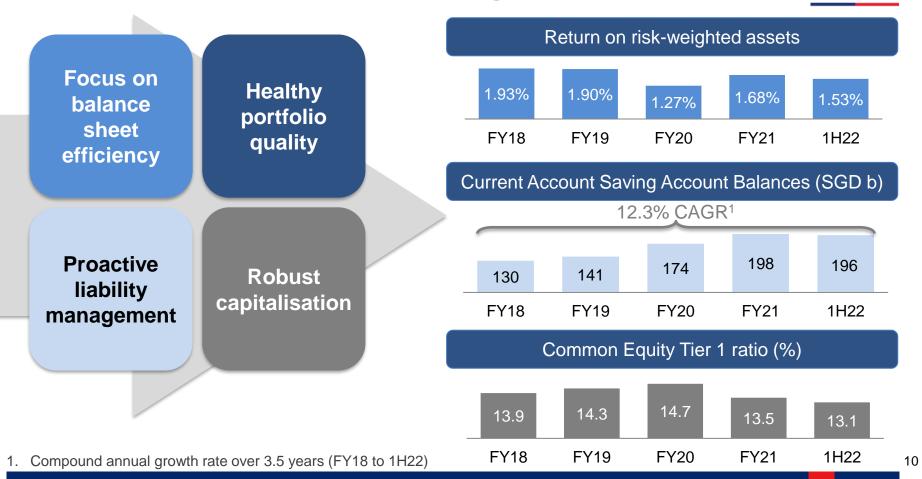


Note: Financial statistics as at 30 June 2022

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)

### **Disciplined balance sheet management**





## **Comparison against peers**

#### **HUOB**

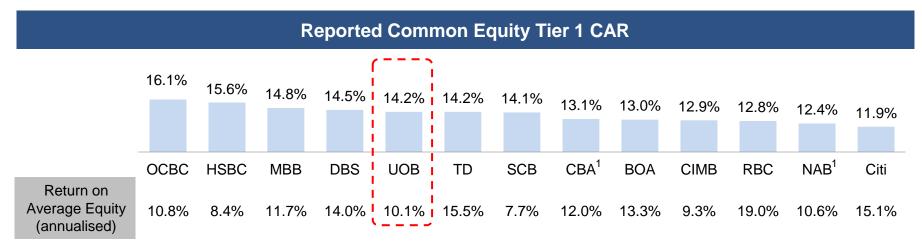
				Standalone Strength	Cost Management	Returns	Liquidity
Moody's	S&P	Fitch		Moody's baseline credit assessment	Costs/income ratio	Return on average assets (annualised)	Loan/deposit ratio
Aa1	AA-	AA-	UOB	a1	44%	0.9%	89%
Aa1	AA–	AA-	OCBC	a1	45%	1.3%	84%
Aa1	AA–	AA-	DBS	a1	44%	1.0%	80%
A3	A–	A+	HSBC	a3	65%	0.6%	62%
A3	BBB+	А	SCB	baa1	65%	0.3%	60%
Aa2	A–	AA-	BOA	a3	67%	0.8%	51%
Aa3	BBB+	А	Citi	baa1	61%	1.2%	49%
Aa3	AA–	A+	СВА	a2	47%	0.9%	104%
Aa3	AA–	A+	NAB	a2	45%	0.7%	123%
Aa1	AA–	AA-	RBC	a2	54%	0.9%	67%
Aa1	AA–	AA-	TD	a1	53%	0.8%	66%
Baa1	A–	n.r.	CIMB	baa2	47%	1.0%	87%
A3	A–	n.r.	MBB	a3	46%	0.9%	89%

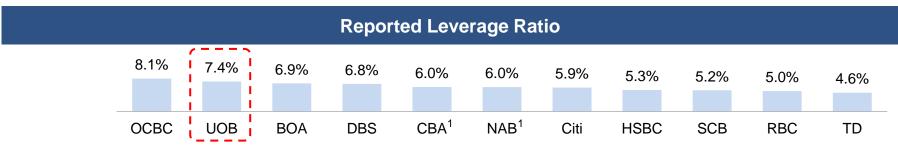
Source: Company reports, Credit rating agencies (updated as of 26 Jul 2022)

Financial data based on 30 Jun 22, except for CIMB/MBB (31 Mar 22), CBA (31 Dec 21), NAB (31 Mar 22) & RBC/TD (30 Apr 22)

### **Strong capital and leverage ratios**







Source: Company reports

Banks' financials were as of 30 Jun 21, except for those of RBC, TD (30 Apr 21), NAB, CIMB and Maybank (31 Mar 21)

1. NAB's and CBA's Tier 1 CARs based on APRA's standards; their respective internationally comparable ratio was 17.0% (31 Mar 21) and 19.4% (30 Jun 21)

### **Strong UOB fundamentals**

#### **#UOB**

Strong management with proven track record

#### Consistent and focused financial management

ent and financial ement

Disciplined management of balance sheet strengths

#### Delivering on regional strategy



- Proven track record in steering UOB through various global events and crises
- Stability of management team ensures consistent execution of strategies



- Responsible yet prudent approach in extending loan relief to customers
- Continued investment in talent and technology to build capabilities in a disciplined manner
- At least 50% of Group earnings from home market of Singapore (AAA sovereign rating)

- Strong Common Equity Tier 1 capital adequacy ratio of 13.1% as at 30 June 2022
- Diversified funding and sound liquidity, with 88.7% loan/deposit ratio
- Strengthened coverage, with general allowance on loans covering 0.9% of performing loans



- Holistic regional bank, with full control of overseas subsidiaries
- Focus on profitable niche segments and intraregional flows
- Entrenched domestic presence and deep local knowledge to address needs of our targeted segments

## 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

STANDARD & POOR'S RATINGS SERVICES McGRAW HILL FINANCIAL

AA-/A-1+

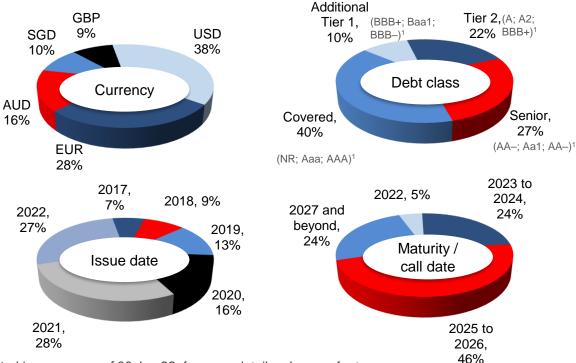
Aa1 / P-1

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

#### **Fitch**Ratings

AA- / F1+

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



A regular issuer in key debt capital markets globally

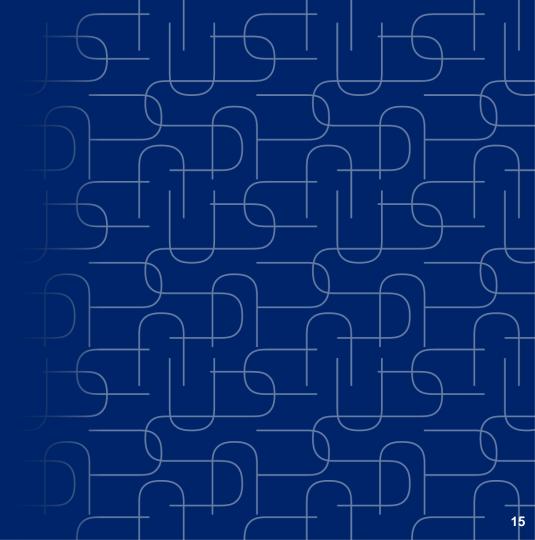
#### Source: Credit rating agencies

**Note:** The pie charts represent outstanding UOB's public rated issuances as of 30 Jun 22; for more details, please refer to <a href="https://www.uobgroup.com/investor-relations/capital-and-funding-information/group-securities.html">https://www.uobgroup.com/investor-relations/capital-and-funding-information/group-securities.html</a>

1. The issuance ratings are by Fitch Ratings, Moody's Investors Service and S&P Global Ratings, respectively

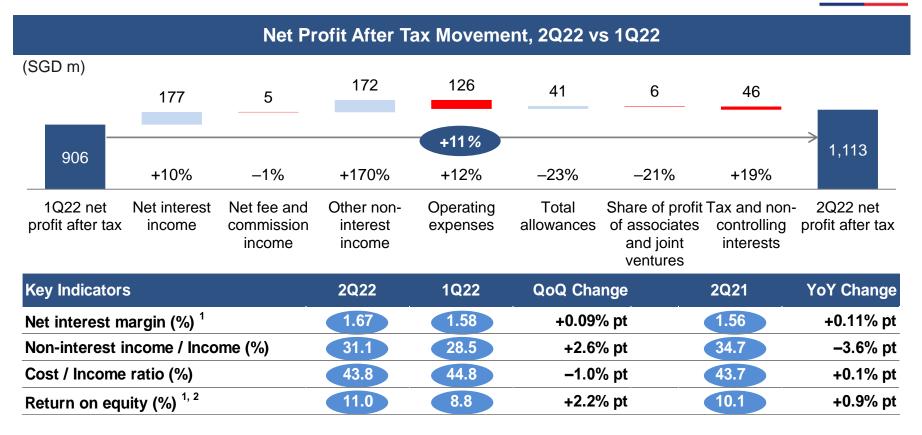


### Latest Financials



### 2Q22 financial overview



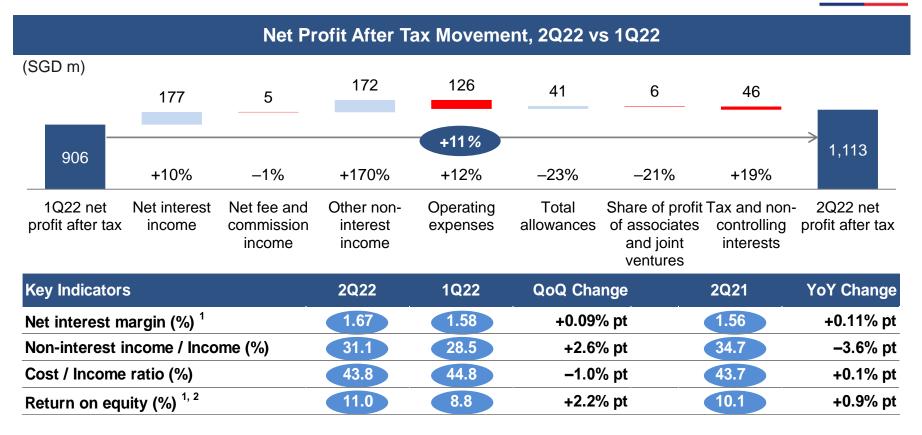


1. Computed on an annualised basis

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

### 2Q22 financial overview

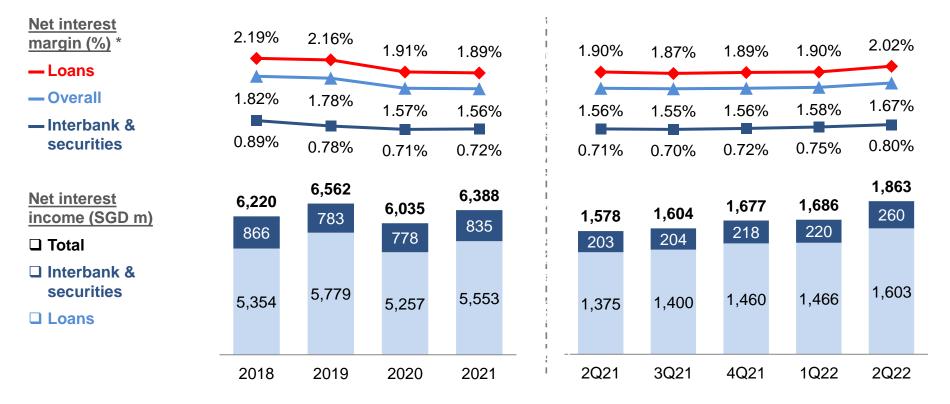




1. Computed on an annualised basis

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

# Net interest margin improved alongside rising interest rates and steady loan growth



\* Computed on an annualised basis, where applicable

**HUOB** 

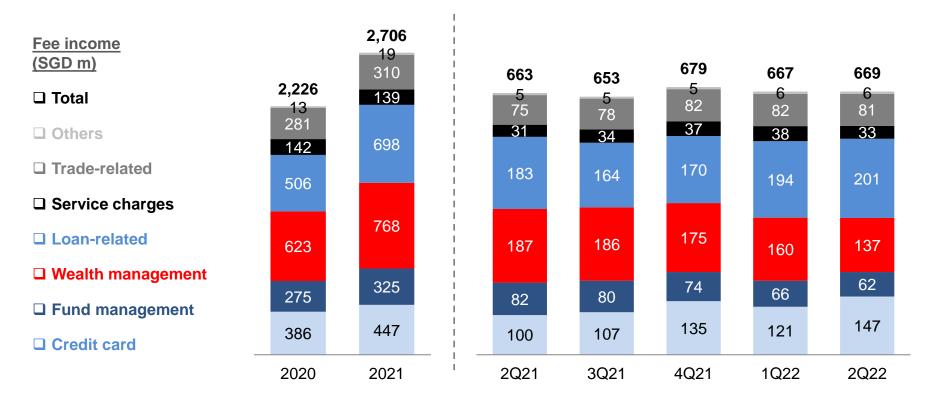
# Non-interest income supported by diversified revenue engines



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

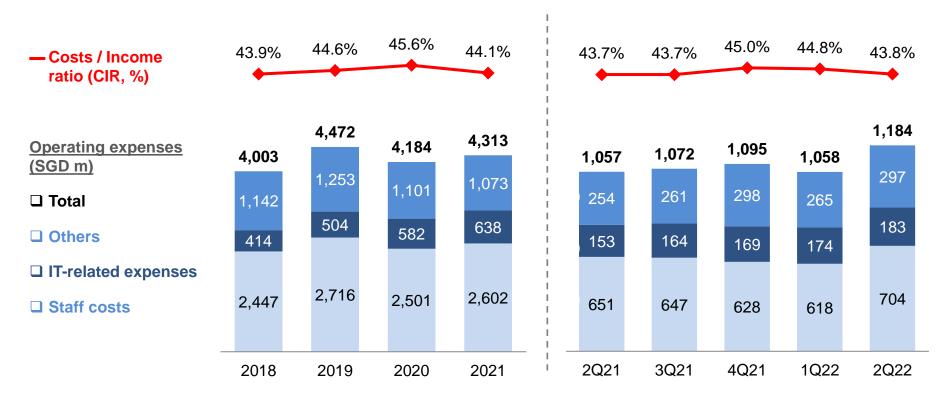
**UOB** 

# Loan-related and credit card fees at new high; **#**UOB wealth fees slowed on dampened market sentiment



Note: The amounts represent fee income on a gross basis

# Stable CIR as we pace investments in staff and **#**UOB technology



Note: Expenses have been restated where the amounts no longer include expenses directly attributable to fee income

### **Steady growth across Singapore and North Asia** franchise

	1H22	1H21	YoY +/(–)	2Q22	1Q22	QoQ +/(–)
Operating profit	SGD m	SGD m	%	SGD m	SGD m	%
Singapore	1,542	1,422	+9	845	697	+21
Rest of Southeast Asia	638	678	-6	318	320	-1
Malaysia	333	355	-6	162	171	-6
Thailand	193	201	-4	93	100	-7
Indonesia	104	118	-11	59	45	+30
Vietnam	5	0	>100	3	3	+8
Others	2	3	-17	1	1	-15
North Asia	320	298	+7	173	147	+18
Greater China	295	280	+6	165	130	+27
Others	24	19	+30	8	16	-52
Rest of the world	320	359	-11	183	137	+33
Total	2,820	2,757	+2	1,519	1,301	+17
Overseas contribution	45%	48%	-3%pt	44%	46%	–2%pt

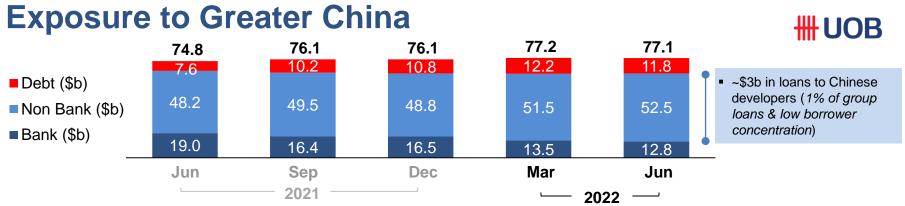
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### **Broad based growth across geographies**



	Jun-22	Mar-22	QoQ +/(–)	Jun-21	YoY +/(–)
Gross Loans	SGD b	SGD b	%	SGD b	%
Singapore	163	162	_	153	+7
Rest of Southeast Asia	64	64	+1	62	+4
Malaysia	30	30	_	29	+2
Thailand	21	21	-2	20	+5
Indonesia	11	10	+8	11	+6
Vietnam	2	2	-5	2	+1
Others	1	1	-3	1	+36
North Asia	56	56	_	51	+9
Greater China	53	51	+2	48	+9
Others	4	5	-21	3	+14
Rest of the world	38	38	+1	32	+18
Total	322	320	+1	299	+8

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)



#### As at 30 Jun 2022:

#### Mainland China exposure

(\$24.8b or 5% of total assets)

#### Hong Kong SAR exposure

(\$42.4b or 9% of total assets)

#### Bank exposure (\$8.2b)

- ~35% of total exposure to Mainland China, with top 5 domestic banks and 3 policy banks accounting for ~70% of total bank exposure
- 98% with <1 year tenor and mostly for trade, which accounts for ~50% of total bank exposure

#### Non-bank exposure (\$12.6b)

- Client base include top-tier state-owned enterprises, large local corporates and foreign investment enterprises
- ~60% denominated in RMB and ~55% with <1 year tenor</li>
- NPL ratio at 0.5%

#### Bank exposure (\$1.5b)

• ~60% are to foreign banks

#### Non-bank exposure (\$35.6b)

- Exposure mainly to corporate and institutional clients
- ~55% with <1 year tenor</li>
- NPL ratio at 2.1%, QoQ increase attributable to a major real estate client downgraded in 2Q22

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.

### **Exposure to Commodities**



	Oil and G	as (O&G)	Other Commodity	Total	
Jun 22	Upstream industries	Traders / downstream industries <sup>1</sup>	Segments <sup>2</sup>		
Outstanding loans	S\$2.5b	S\$9.0b	S\$10.3b	S\$21.8b	
% of total loans	4%		3%	7%	

As of 30 June 2022, outstanding loans to commodities remain modest and represented 7% of total loans. In particular, outstanding O&G loans represented 4% of total loans as compared to 5% as at 30 June 2018.

Outstanding O&G exposure is to downstream players and traders which are mainly national oil companies (NOCs) and global firms, while short-term structured loans account for a significant share of the remainder.

A considerable portion of upstream exposure is to NOCs and international oil companies, while vulnerable accounts were already classified and their collateral value marked down (by as much as 90%) by end 2017.

<sup>(1)</sup> O&G upstream industries include offshore service companies.

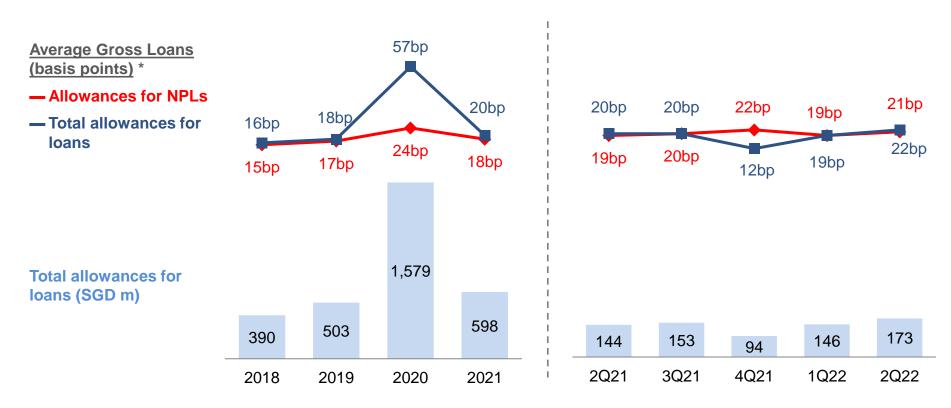
<sup>(2)</sup> Other commodity segments refer to agribusiness, metals and mining.

### New NPA formation rose due to a major but nonsystemic corporate account; NPL ratio stable



(SGD m)	2Q21	3Q21	4Q21	1Q22	2Q22		
NPAs at start of period	4,544	4,547	4,772	5,077	5,289		
Non-individuals:							
New NPAs	360	251	670	462	661		
Upgrades and recoveries	(158)	(73)	(172)	(207)	(363)		
Write-offs	(202)	(42)	(205)	(36)	(123)		
	4,544	4,683	5,065	5,296	5,464		
Individuals (Net)	3	89	12	(7)	(42)		
NPAs at end of period	4,547	4,772	5,077	5,289	5,422		
NPL ratio (%)	1.5%	1.5%	1.6%	1.6%	1.7%		

## Steady credit costs as asset quality remains benign **#**UOB



\* Computed on an annualised basis, where applicable

### Allowances sufficient amid ongoing macro uncertainties

#### Coverage ratios (%)

- Total allowances\* / NPAs
- Specific allowances / NPAs
- General allowance on loans\* / performing loans (%)

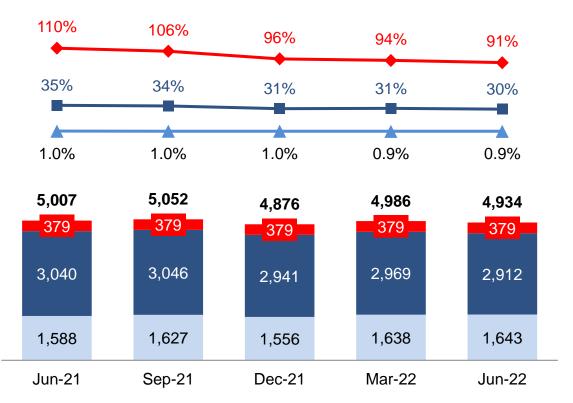
Allowances (SGD m)

Total

Regulatory loss allowance reserve

□ Specific allowance

General allowance



\* Total allowances include regulatory loss allowance reserve pursuant to MAS Notice No. 612

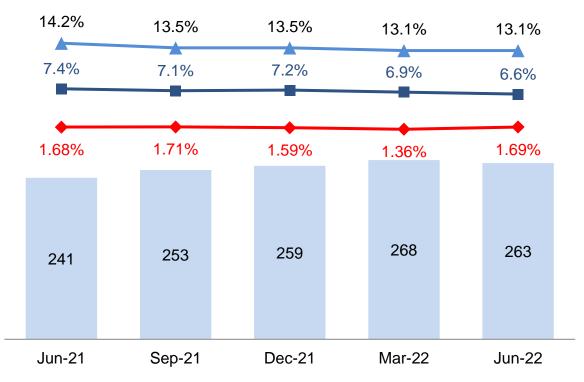
**UOB** 

### **Capital and leverage ratios**



- Common equity Tier 1 capital adequacy ratio (%)
- Leverage ratio (%)
- Return on risk-weighted assets (%) \*





# Sound funding and liquidity positions

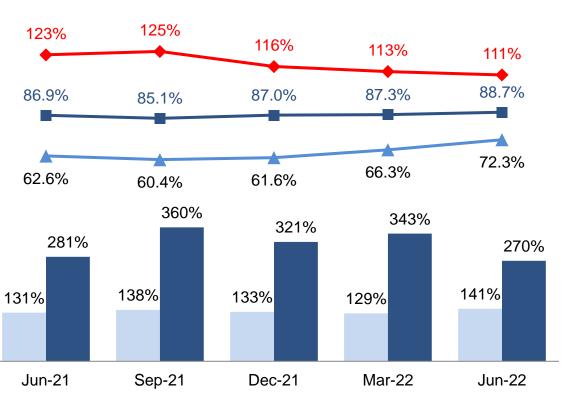




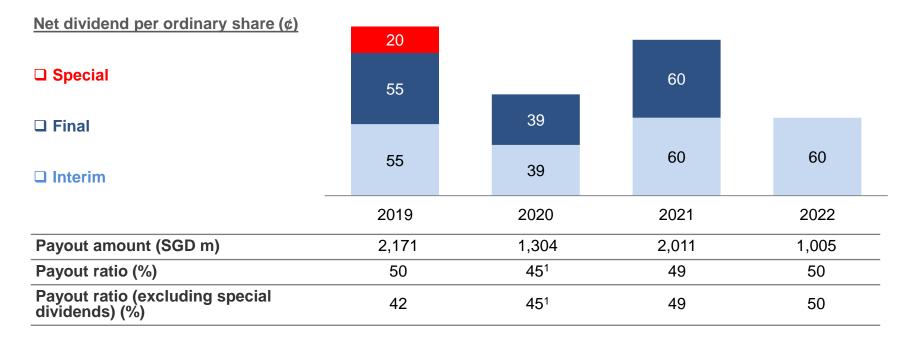
- Group Ioan-deposit ratio (%)
- USD loan-deposit ratio (%)

Liquidity coverage ratio (%) \*

□ All-currency



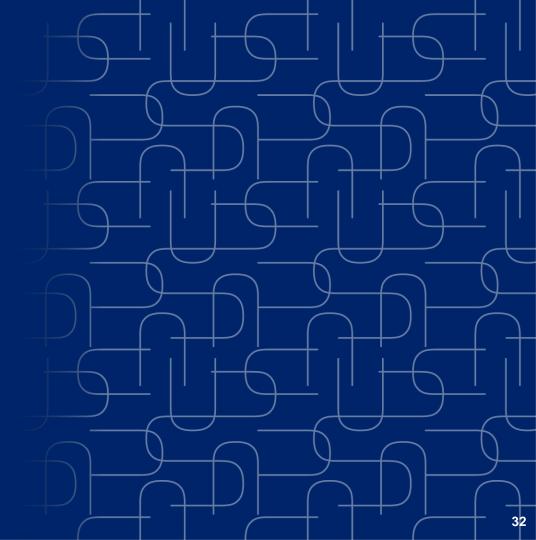
# Dividends in line with stable earnings and strong **#**UOB capital position



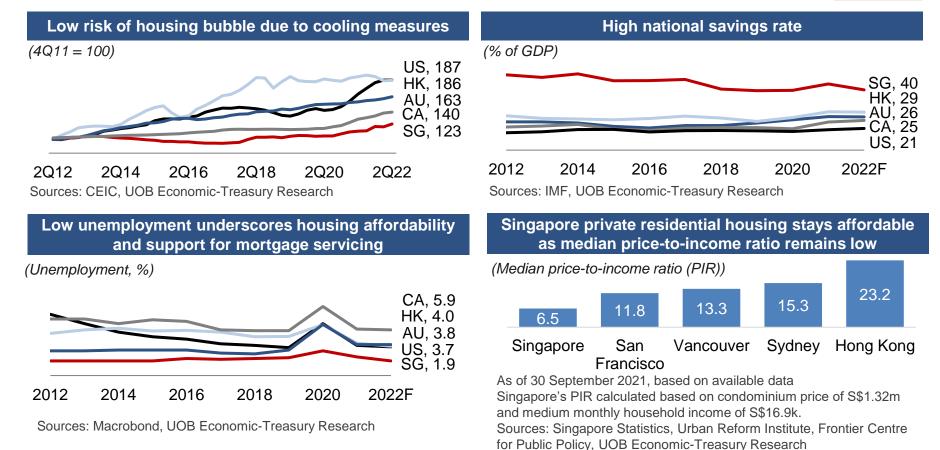
FY20 dividends were in line with Monetary Authority of Singapore's call for banks to cap dividends at 60% of 2019 dividends.
 Note: The Scrip Dividend Scheme was applied to all the dividends for the financial years ended 2020
 The Scheme provides shareholders with the option to receive Shares in lieu of the cash amount of any dividend declared on their holding of Shares. For more details, please refer to <a href="http://www.uobgroup.com/investor-relations/shares-and-dividends/dividends.html">www.uobgroup.com/investor-relations/shares-and-dividends/dividends.</a>



### Resilience of the Singapore Housing Market & UOB's Cover Pool



# Singapore mortgages remain a low-risk asset class **#**UOB



Note: AU: Australia; CA: China; HK: Hong Kong; SG: Singapore; US: United States

# USD15,000,000,000 Global Covered Bond Programme HUOB

Issuer	United Overseas Bank Limited					
Issuer Long Term Rating	Aa1 (stable) / AA- (stable) / AA- (negative) (Moody's / S&P / Fitch)					
Issuer Short Term Rating	P-1 / A-1+ / F1+ (Moody's / S&P / Fitch)					
Programme Limit	USD15,000,000					
LCR Status / ECB Repo Eligibility	Expected Level 2A Eligible (EU)^ / Not Eligible					
Programme Rating	Aaa / AAA (Moody's / S&P)					
Issuance Structure (Dual	Direct issuance covered bond regulated under MAS Notice 648, Senior unsecured claim against the Issuer and senior secured					
Recourse)	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%					
Hedging	Cover Pool Swap <sup>1</sup> to hedge against possible variances between the interest received from the residential 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, United Overseas Bank Limited and Hong Kong and Shanghai Banking Corporation					

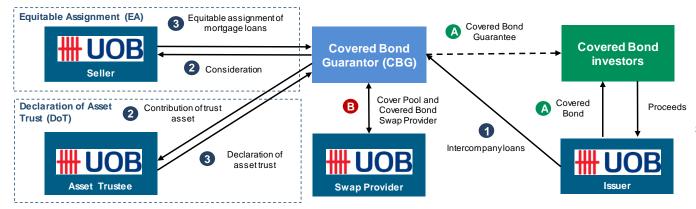
<sup>^</sup>Please refer to http://ec.europa.eu/finance/bank/docs/regcapital/acts/delegated/141010\_delegated-act-liquidity-coverage\_en.pdf and check for details. At the time of this presentation and subject to any relevant matters which are within the control of a relevant EU investor (including its 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

<sup>1</sup>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**

### **#UOB**

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

- 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
- 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

<sup>1</sup> 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

- <sup>2</sup> 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
- <sup>3</sup> 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

### **UOB's cover pool profile**

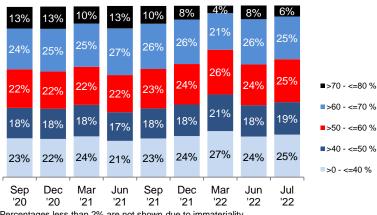
### **WOB**

Overview of Cover Pool	(as of Jul'22)

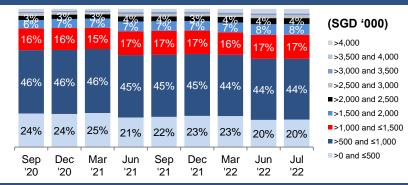
Number of Mortgage Accounts	25,757			
Total Current Balance (SGD)	17.3 billion			
Average Current Loan Balance (SGD)	670,552			
Maximum Current Loan Balance (SGD)	9,793,521			
Weighted Average Current Interest Rate	1.64%			
Weighted Average Seasoning	53 months			
Weighted Average Remaining Tenor	252 months			
Weighted Average Indexed Current LTV <sup>1</sup>	50.2%			
Weighted Average Unindexed <sup>2</sup> Current LTV <sup>1</sup>	56.4%			
1 Lean to volue 2. Current lean belance divided by the original property volue				

1. Loan to value 2. Current loan balance divided by the original property value

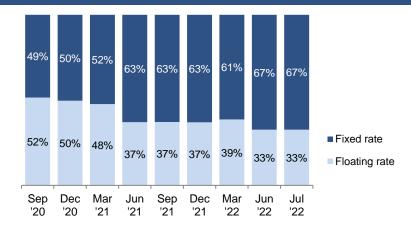
#### Current LTV mainly ≤60%



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



#### Largely Fixed Rate Mortgages

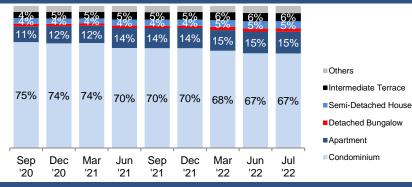


Note: Percentages less than 2% are not shown due to immateriality.

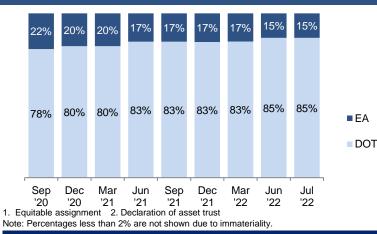
## **Cover pool has been stable**



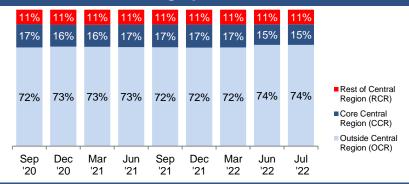
#### **Primarily Apartments / Condominiums**



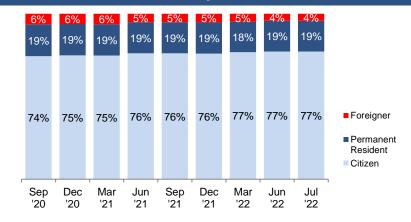
#### Strong Legal Protection by EA<sup>1</sup> / DOT<sup>2</sup>



#### **Diversified Geographical Distribution**

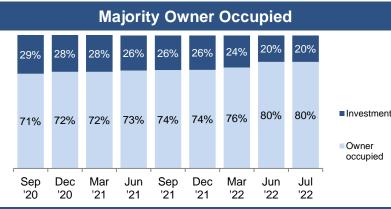


#### **Borrowers mainly Citizens / PRs**

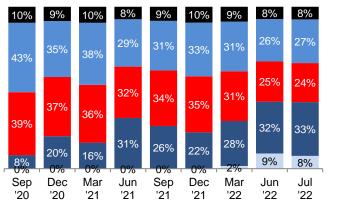


## **Cover pool has been stable**



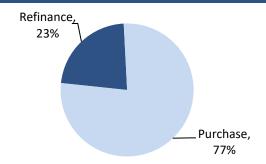


#### Well Seasoned Portfolio (in months)

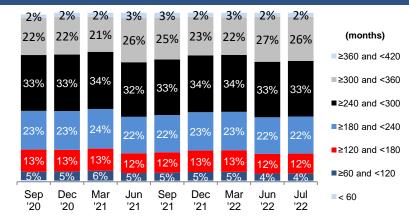


#### (months) ■≥120 ■≥60 and <120 ■≥36 and <60 ■≥12 and <36 ■> 6 and <12

#### **Loans Mainly for Purchases**



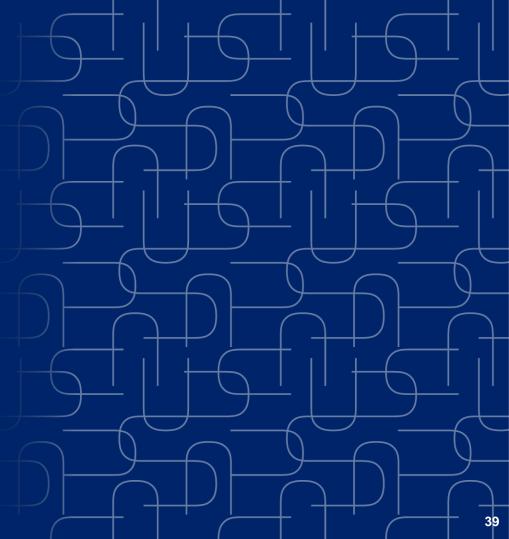
#### **Stable Profile for Remaining Loan Tenors**



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

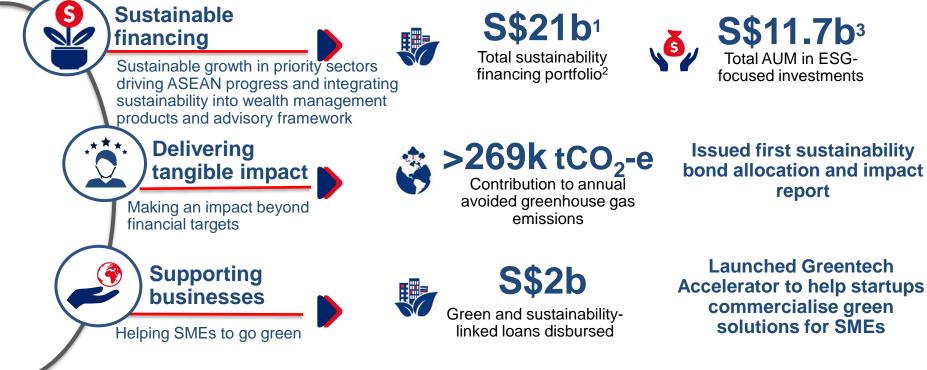


# Sustainability Bond Allocation and Impact Report



# Forging a sustainable future with our customers in ASEAN





40

## **ESG** ratings, rankings and indices



Recognised by extra-financial rating agencies and included in leading sustainability indices



Source: Bloomberg, CDP Worldwide, Centre for Governance and Sustainability at National University of Singapore Business School; FTSE Russell; MSCI Inc.; Singapore Exchange (SGX); Sustainalytics; and World Wide Fund for Nature.

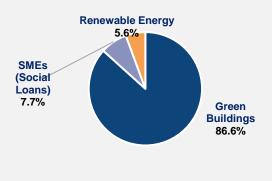
## **Sustainability Bond Allocation and Impact Report**



- One year anniversary report for UOB's inaugural US\$1.50 billion sustainability bond issued in April 2021
- Independent third-party attestation by Ernst & Young LLP

#### Allocation of Proceeds

- 83% allocated as at 31 March 20221
- S\$2,003 million of assets allocated in accordance to the Eligibility Criteria for Use of Proceeds as set out in the Framework
- S\$397 million in balance of unallocated proceeds •
- 6.6% in new financing and 93.4% in refinancing
- 5.1% Southeast Asia<sup>2</sup>(ex-Singapore) and 94.9% in Singapore



### Green Buildings



#### Impact

- Four BCA Green Mark Platinum buildings, five BCA<sup>3</sup> Green Mark Gold<sup>PLUS</sup> buildings, two EDGE-certified buildings and one LEED-certified building
- 8,824 tCO2e of avoided GHG emissions per year



Generation

GOALS

13 10045

- 149,456 megawatt-hours (MWh) of solar energy • generated per year
- 70,672 tCO2e of avoided GHG emissions per year



- S\$155 million in loans to SMEs
- 829 businesses supported

1. Based on 120% of the bond issuance amount to create a buffer for foreign exchange fluctuations, early repayments or redemptions, and other factors that may cause the eligible loan amount to 42 decrease unexpectedly. 2. Includes Malaysia, Thailand and Vietnam. 3. Singapore's Building and Construction Authority.

## Impact Reporting Methodology

	Renewable Energy		Green Buildings
•	Solar projects under construction are excluded from avoided emissions	•	Buildings that are undergoing certification are excluded from a
	calculations		emissions calculations

- Annual energy generation based on actual production figures (where available) or based on completed capacity financed by UOB as at 31 March 2022
- Annual energy output (MWh) estimated by: Completed capacity (approx. 150MWp) \* 3.5 sun hours per day \* 80% performance ratio \* 365 days
- Energy output multiplied by the latest country-specific grid emissions factors for (CO2, CH4, N2O) sourced from the International Energy Agency Emissions Factors 2021 data package to obtain avoided emissions

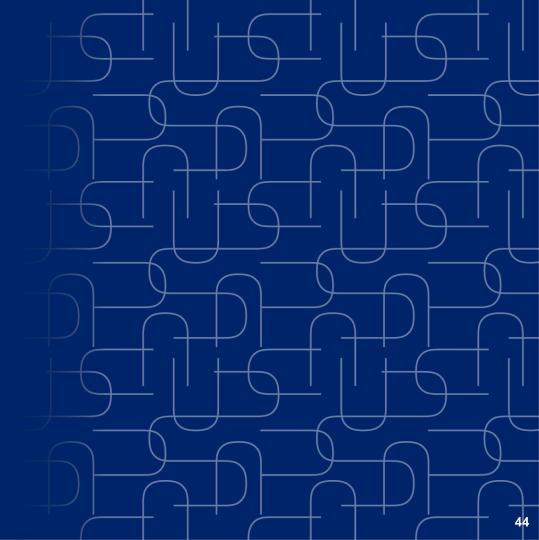
- n avoided emissions calculations
- Post-certification emissions estimated for each green building by multiplying its GFA with the estimated energy use intensity (sourced from BCA) and with Singapore's grid emission factors
- The absolute carbon emissions savings estimated based on difference between post and pre-certification emissions, apportioned by the percentage size financed by UOB
- Pre-green building certification emissions assumed to be 25% higher than • post-certification emissions<sup>1</sup>

Eligible Project Category	Number of Loans	Allocated Amount (S\$ million)	Geographical Distribution (SG /Rest of Southeast Asia)	Total Installed Renewable Energy Capacity (Megawatt- peak) (UOB's Share)	Greenhouse Gas (GHG) Emissions Avoided (tCO <sub>2</sub> e/year)
Green Buildings	12	1,735.6	97.4% / 2.6%		8,824
Renewable Energy	39	112.9	49.4% / 50.6%	150.54	70,672
Employment Generation	910	154.8	100.0% / 0%		
Total	961	2003.3	94.9% / 5.1%	150.54	79,496

1 BCA states that there should be at least 25% savings in annual energy consumption for Green Mark GoldPLUS buildings. Source: BCA, "Energy Modeling", https://bca.gov.sq/GreenMark/energymod.html 13



## Appendix A: Our Growth Drivers



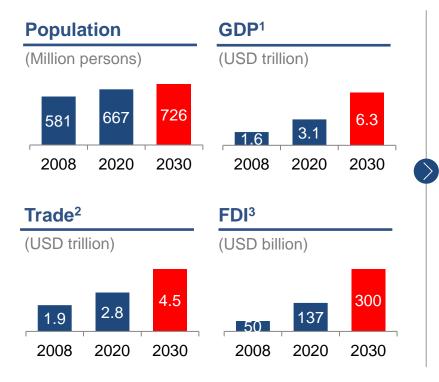
## **Our growth drivers**

**UOB** 

**Realise full potential** Sharpen regional **Reinforce fee income** Long-term growth of our integrated focus growth perspective platform Grow fee income to offset Provides us with ability to Global macro Disciplined approach in environment remains

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

## Southeast Asia's immense long-term potential



# Southeast Asia's immense growth prospects...

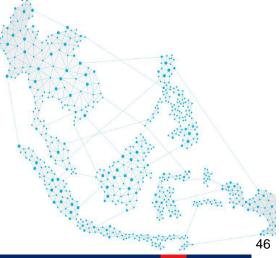
- Third largest population globally, after China and India
- Young demographics, with 382 million below 35 years old
- Fifth largest economic bloc globally by GDP<sup>1</sup>
- Fourth largest trading group globally
- Third largest recipient of inward FDI<sup>3</sup> globally

## ... that UOB is uniquely placed to capture

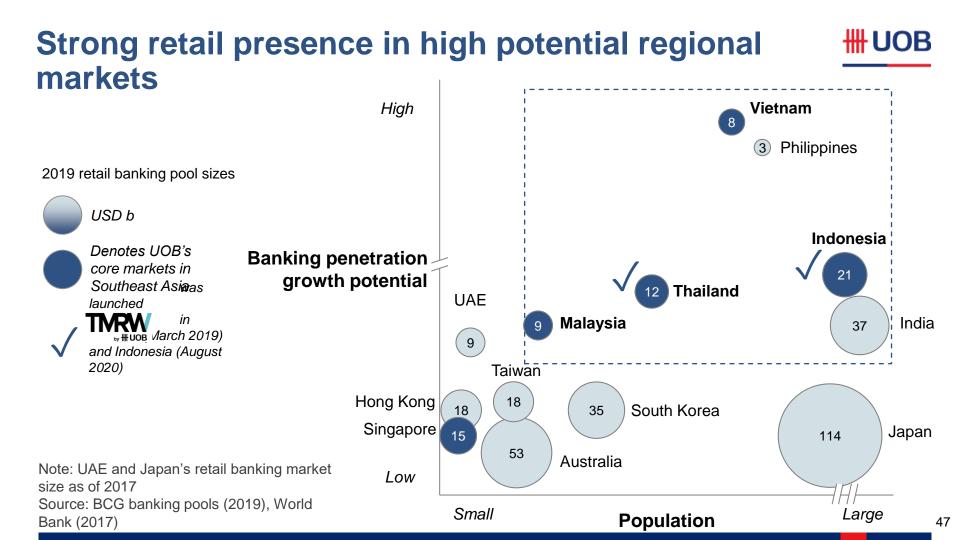
 Most diverse regional franchise among Singapore banks

III UOB

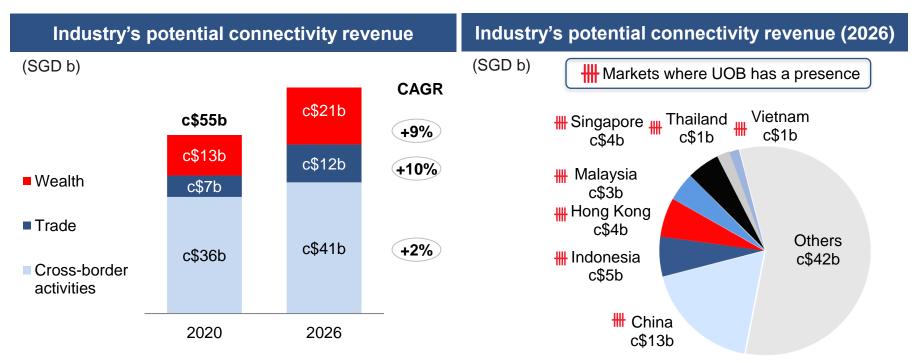
 Full effective control of regional subsidiaries and integrated platform



1. Gross domestic product 2. Comprises exports and imports 3. Foreign direct investments Source: Macrobond, UOB Global Economics and Markets Research



# Revenue potential from 'connecting the 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

III UOB

# Wholesale: Growing regional franchise, capturing #UOB cross-border opportunities



+69%<sup>2</sup> Suppliers and distributors within Financial Supply Chain Management (FSCM) solution

• +25%<sup>3</sup> Global Financial Institutions Group income

+10%3,5
Digital banking transactions by businesses across the Group

1. Year on year growth for YTD May '22. 2. As of YTD May '22. 3. Year on year growth in 1H22. 4. Refers to payments made on Corporate PayNow, DuitNow and PromptPay in Singapore, Malaysia and Thailand. 5. Refers to digital banking transactions via UOB Infinity/BIBPlus.

# **Consumers:** Tapping on rising affluence and growing digitalisation in Southeast Asia





ASEAN, reduce cost to serve and deepen engagement to drive customer lifetime value

### Ecosystem Partnerships



~500k New customers to be digitally acquired across the region by UOB TMRW by end of 2022

# S

# ~S\$3b<sup>1</sup>

Deposits from digitallyacquired customers in the region



>80

Ecosystem partnerships in ASEAN to drive customer acquisition and loyalty 27%<sup>2</sup> Digitally acquired customers from partnership referrals

Embed partnerships and alternative data to digitally acquire at low cost, retain and reward customers

### Omni-channel Offerings

Digitalise customer experience and processes; repurpose branches for more advisory needs



S\$138b<sup>2,3</sup>

Assets under management (AUM)<sup>4</sup> ▲ 1% YoY



>S\$9b<sup>2</sup> New mortgage sales in Singapore and across the region

50



### Appendix B: Additional Information on UOB's Covered Bond Program

## **Covered Bond Legal Frameworks**



	Singapore	Australia	Canada	Germany	United Kingdom	Korea
Legal Framework / Regulation	Notice 648 under the Banking Act	Banking Amendment (Covered Bonds) Act 2011	Canadian Covered Bond Law (June 2012)	German Pfandbrief Act	UK Regulated Covered Bond Regulations	Covered Bonds Act of Korea
Regulator	Monetary Authority of Singapore	Australian Prudential Regulation Authority (APRA)	Canada Mortgage and Housing Corporation (CMHC)	Bundesanstalt für Finanzdienstleistungs-aufsicht (BaFin)	Financial Conduct Authority (FCA)	Financial Services Commission of Korea (FSC
Issuers and P	rogram Requirements					
Structure	<ul> <li>Direct Issue Structure (with cover pool security ring-fenced via true sale to Covered Bond Guarantor)</li> </ul>	<ul> <li>Direct Issue Structure (with cover pool security ring-fenced via true sale to Covered Bond Guarantor)</li> </ul>	<ul> <li>Direct Issue Structure (with cover pool security ring-fenced via true sale to Covered Bond Guarantor)</li> </ul>	<ul> <li>Direct Issue Structure (with cover pool security registered recorded in the cover register)</li> </ul>	<ul> <li>Direct Issue Structure (with cover pool security ring-fenced via true sale to Covered Bond Guarantor)</li> </ul>	<ul> <li>Direct Issue Structure (with cover pool security registered under the Covered Bond ACT)</li> </ul>
Eligible Issuers	<ul> <li>All banks incorporated in Singapore (including Singapore-incorporated subsidiaries of foreign banks)</li> </ul>	<ul> <li>Authorized Deposit- taking Institutions (ADI)</li> </ul>	<ul> <li>Federal Regulated</li> <li>Financial Institutions,</li> <li>Cooperative Credit</li> <li>Society (subject to</li> <li>successful registration)</li> </ul>	<ul> <li>Regulated Financial Institutions, including Universal Banks and Specialist Mortgage Banks</li> </ul>	<ul> <li>Authorised Credit Institutions</li> </ul>	<ul> <li>Licensed Banks (min. KRW 100bn equity capital and BIS ratio ≥10%)</li> </ul>
Issuance limit	<ul> <li>Encumbered residential mortgage loans must not exceed 10% of bank's total assets*</li> </ul>	<ul> <li>Assets in cover pool must not exceed 8% of issuing ADI's Australian assets</li> </ul>	<ul> <li>Limited to 5.5% of the bank's total assets</li> </ul>	<ul> <li>No specific limit</li> </ul>	<ul> <li>No specific limit, but the FCA can set one on a case-by-case basis</li> </ul>	<ul> <li>Principal amount of all covered bonds must not exceed 4% of such issuer's total asset value</li> </ul>
Eligible Cover Pool Assets	<ul> <li>Residential mortgages</li> <li>Other loans secured by the same residential property</li> <li>Assets that form part of the security for residential mortgage loans (e.g. guarantees and indemnities)</li> </ul>	<ul> <li>Residential mortgages</li> <li>Commercial mortgages</li> </ul>	<ul> <li>Canadian residential mortgage loans</li> </ul>	<ul> <li>Mortgage covered bonds (any combination of residential and commercial mortgages)</li> <li>Public sector covered bonds (public sector loans)</li> <li>Ship and aircraft finance- backed bonds also permitted</li> </ul>	<ul> <li>Public sector credits / guarantees</li> <li>Bank debt</li> <li>Secured first-ranking mortgage / real estate loans</li> <li>Shipping, social housing, secured public-private partnership loans</li> </ul>	<ul> <li>First priority residential mortgages</li> <li>Government / public sector loans and bonds</li> <li>Loans secured by ships or aircraft which are insured by insurance contracts</li> <li>ABS under the ABS Act and MBS under the KHFC Act</li> </ul>

\*Total assets exclude: (i) the assets of subsidiaries, whether in Singapore or overseas and (ii) the assets to meet specified regulatory requirements.

## **Covered Bond Legal Frameworks (Continued)**

### **HUOB**

	Singapore	Australia	Canada	Germany	United Kingdom	Korea
Minimum Standards of Asset Quality	Residential mortgages ≤80% LTV	<ul> <li>Residential mortgages ≤80% LTV</li> <li>Commercial mortgages ≤60% LTV</li> </ul>	<ul> <li>Residential mortgages ≤80% LTV</li> <li>The mortgaged property cannot exceed four residential units</li> </ul>	<ul> <li>60% LTV for both residential and commercial mortgage loans</li> <li>60% LTV for both ship &amp; aircraft loans</li> </ul>	<ul> <li>80% LTV for residential mortgage loans</li> <li>60% LTV for commercial mortgage loans</li> <li>60% LTV for shipping loans</li> </ul>	<ul> <li>70% LTV for residential mortgage loans</li> <li>70% LTV for loans secured by ships and aircraft</li> <li>Not a loan extended to any person in which an application for bankruptcy or rehabilitation proceedings has been filed or commenced</li> </ul>
Substitution Assets	<ul> <li>Cash/ cash equivalents (Singapore Government Bonds, Treasury Bills, MAS Bills), may not exceed 15% of cover pool, except under certain circumstances</li> </ul>	Cash/ deposit held with ADI and convertible into cash, Bank accepted bills or CDs (1) Repo eligible and mature within 100 days; (2) not issued by issuer of covered bonds; (3) must not exceed 15% of cover pool Government debt instrument issued by Commonwealth/ State/ Territory	cover pool	<ul> <li>Up to 10% could be money claims against the European Central Bank, central banks in European Union or suitable credit institutions</li> <li>Derivatives are eligible under certain conditions but may not exceed 12%</li> </ul>	May not exceed 10% of cover pool	<ul> <li>Liquid assets (Cash, CD issued by other FIs &lt;100 days)May not exceed 10% of cover pool</li> <li>Derivatives</li> </ul>
Collateralization	Minimum of at least 103%	Minimum of 103%	<ul> <li>No legislative minimum</li> <li>Cover pool assets have to be at least equal to liabilities (nominal basis), Market practice to covenant to maintain overcollateralisation of at least 3.0% and 7.5%</li> </ul>	nominal basis	Minimum of 108% (FSA to evaluate each program)	Minimum of 105% on a nominal basis



## Appendix C: UOB's Sustainability Approach

## Four pillars of sustainability strategy

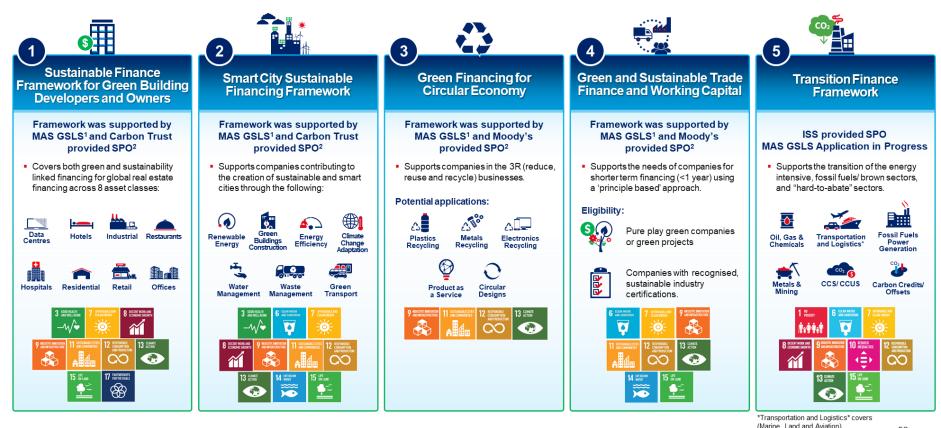
#### UOB supports all 17 UN SDGs and actively promotes them with our stakeholders



Rooted in Our Values of Honour, Enterprise, Unity and Commitment

## **Sustainable Finance Umbrella Frameworks**





## **UOB's responsible financing journey:** pragmatic and progressive

#### **Overview of UOB Group's Responsible Financing Journey**



## TCFD Implementation - Climate Scenario Analysis #UOB

	Qualitative Transition Risk Assessment	Transition Risk Scenario Analysis Pilot	Physical Risk Pilot Analysis	Improved Methodology
	2019 •	2020	2021	2022
Key Milestone	<ul> <li>Completed qualitative assessment in 2019, referencing SASB's Materiality Map® and Moody's Environmental Risks Global Heatmap.</li> <li>Identified carbon-intensive segments most likely to be impacted by climate change:</li> <li>Metals and mining</li> <li>Transportation</li> <li>Building Materials</li> <li>Forestry</li> <li>Energy</li> <li>Chemicals</li> <li>Agriculture</li> </ul>	<ul> <li>Partnered an internationally recognised environmental consultancy in climate scenario analysis in 2020</li> <li>Three pathways of climate scenarios based on research by IEA and OECD:         <ul> <li>An orderly transition where early actions are taken to reduce emissions to meet climate targets (high carbon price scenario)</li> <li>A disorderly transition where delayed and drastic actions are taken to meet climate targets (moderate carbon price scenario)</li> <li>Business-as-usual where no actions are taken (low carbon price scenario)</li> </ul> </li> </ul>	<ul> <li>Conducted a pilot physical risk analysis involving approximately 2,000 wholesale banking customers (~80% of the total wholesale banking exposure) and retail banking property mortgages focusing on our major markets that are most vulnerable to physical risks, i.e. Malaysia, Thailand and Indonesia.</li> <li>The analysis utilised a bottom-up approach with customers' operating and asset locations overlaid on various climate hazard maps to determine their vulnerability to seven physical hazards in short-, mid-, and long- term horizons up to 2050 over three IPCC climate scenarios.</li> <li>In addition, we also refreshed our transition risk analysis.</li> </ul>	<ul> <li>Partnered with a leading global consultancy and developed an improved climate risk assessment methodology and uplift the internal capacity of the Bank.</li> <li>The improved methodology integrates multiple climate risk drivers, considers both transition risk and physical risk, and includes sector specific approach for high-risk sectors, as well as a general approach for other sectors.</li> <li>The detailed methodology and assessment results will be disclosed in the UOB Sustainability Report 2022.</li> </ul>

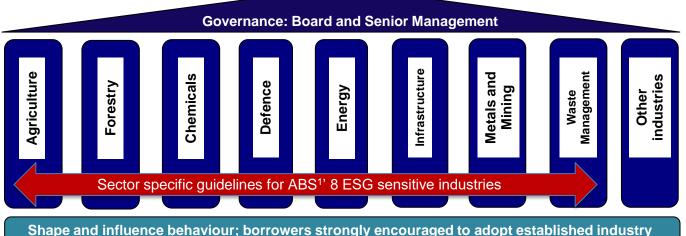
#### Future Plan



## **UOB's responsible financing**



UOB's ESG framework is underpinned by policies and guidelines, including UOB's responsible financing policy to manage ESG-related risks in our financing activities, which is regularly reviewed by Group Credit Committee.



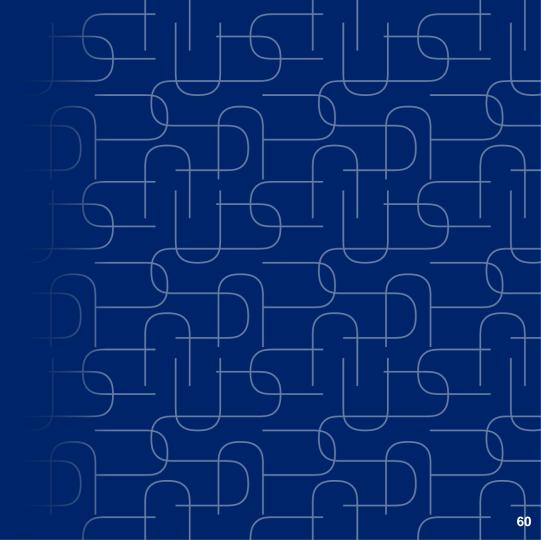
Shape and influence behaviour; borrowers strongly encouraged to adopt established industry standards and relevant certification

Compliance with exclusion list (e.g. nuclear, defence and cross-cutting issues including child labour and forced labour as well as UNESCO<sup>2</sup> World Heritage sites)

Compliance with applicable ESG regulations in respective countries in which borrowers operate



## Appendix D: UOB's Sustainable Bond Framework



## **Highlights of UOB Sustainable Bond Framework**





#### Sustainable Bond Framework, furthering sustainability efforts globally and regionally

- UOB has established a multi-label Sustainable Bond Framework with a view to:
  - ✓ Finance both green and social eligible assets across multiple geographies and sectors
  - ✓ Allow issuance from UOB and its banking subsidiaries under different formats (covered, senior unsecured, subordinated)
  - ✓ Align with the ICMA Green Bond Principles, ICMA Social Bond Principles, ICMA Sustainability Bond Guidelines, the ASEAN Green Bond Standards, the ASEAN Social Bonds Standards, and the ASEAN Sustainability Bonds Standards



#### Acting as Catalyst and Enabler Throughout ASEAN

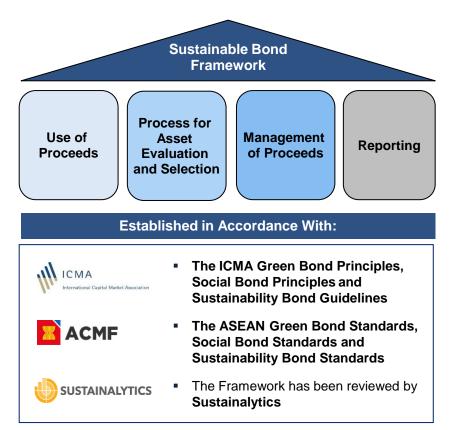
 As an ASEAN-based bank with an established regional franchise, UOB is well-positioned to help businesses advance responsibly



#### Leveraging UOB's SME franchise

- Anchored on our extensive regional footprint, UOB continues to help small and medium-sized enterprises (SMEs) scale their businesses through customised and innovative solutions
- Our SME clients play a vital role in employment generation in ASEAN

## **Rationale and key features of the framework**



#### Rationale

- The UOB Sustainable Bond Framework was developed with the objective of reinforcing UOB's capabilities in financing green and social projects, which contribute to the UN SDGs
- Through this Framework, UOB aims to mobilise investors to contribute capital towards the realisation of the UN SDGs

#### **Types of Instruments**

- The Framework governs the issuance of any debt instruments by UOB and its banking subsidiaries, and includes the following:
  - Green bonds to finance and/or to refinance eligible green assets;
  - Social bonds to finance and/or to refinance eligible social assets; or
  - **Sustainability bonds** to finance and/or to refinance a mix of eligible green assets and eligible social assets

₩UOB

### **WOB**

## **Use of proceeds**

- The proceeds of bonds issued under the Framework will be used to finance or refinance Eligible Assets that fall under one of the Eligible Categories
- The selection of Eligible Assets is subject to compliance with UOB's Responsible Financing Policy and an assessment of environmental and social risks

#### Eligible Assets include:

- ✓ Loans to businesses and projects for which the use of proceeds meet the Eligibility Criteria
- ✓ Loans to businesses that derive 90% or more of their revenues from activities which meet the Eligibility Criteria
- ✓ UOB's own operating or capital expenditures which meet the Eligibility Criteria

#### Exclusionary Criteria

x Proceeds will not knowingly be allocated to finance projects or activities listed in the Framework's Exclusionary Criteria

#### **Overview of the Eligible Categories**

#### **Eligible Green Categories**

- Renewable Energy
- Energy Efficiency
- Clean Transportation
- Green Buildings
- Sustainable Water and Wastewater Management
- Pollution Prevention and Control
- Circular Economy Adapted Products, Processes and Production Technologies
- Climate Change Adaptation and Resilience
- Sustainable Management of Living Natural Resources and Land Use

#### **Eligible Social Categories**

- Access to Essential Services
- Affordable Housing
- Employment Generation

#### **Contribution to UN SDGs**





- **HHUOB**
- UOB intends to make and to keep readily available Green, Social and/or Sustainability Bond reporting within a year of issuance and update investors upon any material changes affecting the Portfolio annually and until the maturity of the relevant Green, Social or Sustainability Bonds
- The reporting will be made publicly available on UOB's website and will cover allocation and impact metrics

Allocation Metrics	Impact Metrics*
<ul> <li>Confirmation that Eligible Assets included in the Portfolio comply with the Framework</li> </ul>	<ul> <li>Green</li> <li>GHG emissions reduced/avoided per year (tCO<sub>2</sub>e)</li> <li>Energy generated/saved per year (MWh)</li> </ul>
Total amount of Eligible Assets	<ul> <li>New clean transportation infrastructure built (km)</li> </ul>
<ul> <li>List of Green, Social or Sustainability Bonds issued with their outstanding amount</li> </ul>	<ul><li>Water reduced, reused or purified per year (m3)</li><li>Waste diverted from landfill per year (tonnes)</li></ul>
<ul> <li>Breakdown of Eligible Assets by Eligible Category</li> </ul>	<ul> <li>Material reused, recycled, refurbished, manufactured per year (tonnes)</li> </ul>
<ul><li>Breakdown of Eligible Assets by geographic location</li><li>Share of new financing and refinancing</li></ul>	<ul> <li>Area covered by sustainable agricultural land management practices (hectares)</li> </ul>
<ul> <li>Balance of unallocated proceeds at the reporting end-period</li> <li>Where feasible, case studies of projects financed</li> </ul>	<ul> <li>Number of buildings/infrastructure built or upgraded</li> <li>Amount of housing loans disbursed to qualifying borrowers</li> <li>Amount of loans to SMEs and / or microenterprises</li> <li>Number of employees, businesses and communities supported</li> </ul>

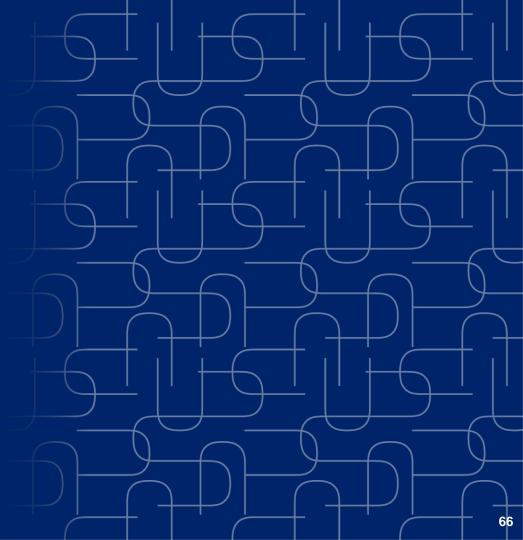
## **External review and assurance**

- UOB has obtained a Second-Party Opinion from Sustainalytics to confirm the alignment of the Framework with the applicable market standards. The Second-Party Opinion is published on UOB's website
- UOB may engage an external auditor to provide independent verification and assurance on its reporting and management of proceeds

**SUSTAINALYTICS** Second-Party Opinion SUSTAINALYTICS UOB Sustainable Bond Framework SECOND-Sustainalytics has published a positive Second-Party Opinion on UOB's Sustainable PARTY OPINION Bond Framework on 17 March 2021 Evaluation Summary Sustainalytics is of the opinion that the United Overseas Bank, Limited ('UOB" or "the Bank') Sustainable Bond Framework is credible and impactful and aligns with the four core components of the Green Bond Principles (GBP) 2018, Social Bond Principles March 17, 2020 "Sustainalytics is of the opinion that UOB is well-positioned to issue Green, Singapore CREP Symposium of the Great Guide Transfer (2007) ASEAN Social Bond Standards (SSP) 2020, Sustainability Reard Guidelines (SS0) 2018, ASEAN Social Bond Standards (ASEAN SBS) 2018, ASEAN Green Bond Standard (ASEAN GBS) 2018, and ASEAN Sustainability Bond Standards 2018 (ASEAN SUS). This assessment is based on the Social or Sustainability Bonds and that the UOB Sustainable Bond Framework is Report Section USE OF PROCEEDS The eligible categories for the use of proceeds are aligned with those recognized by the GPP, SPP, SBQ, ASEAN SBS, ASEAN GBS, and ASEAN SUS. Sustainalytics considers that the robust, transparent and in alignment with the four core components of the Green Sustainabilities' Opinion eligible categories will lead to positive environmental and social impacts and advance the UN Sustainable Development Goals, specifically SDG 1, 3, 4, 6, 7, 8, 9, 11, 12, 13, 14 and 15. Bond Principles 2018, Social Bond Principles 2020, Sustainability Bond For inquiries contact the Sustainabl PROJECT EVALUATION / SELECTION UOB's project evaluation and Finance Solutions project team: selection will be conducted by its business units and a working group (the 'Working Group') within UOB's Environmental Sustainable Governance Committee. The eligible assets will be initially selected Guidelines 2018, ASEAN Social Bond Standards 2018, ASEAN Green Bond Wakako Mizuta (Tokyo Project Manager wakako.mizuta@sustainalytics.com by the business units, and approved by the Working Group. This is in line with market practice. (+81) 3 4571 2380 Standards 2018. and ASEAN Sustainability Bond Standards 2018." Marike Stocker (Singe MANAGEMENT OF PROCEEDS The processes for management of proceeds is handled by the Working Group using a portfolio approach. Project Support marika atocker@auatainal Use of proceeds will be tracked by a register using internal accounting and information systems. If the assets are repaid or divested, they will be removed from the portfolio and replaced as (+852) 3008 2391 Mina Jang (Amsterdan soon as practically feasible. Pending full allocation, unallocated proceeds will be invested in line with UOB's liquidity management policy. This is in line with market practice. In addition, Sustainalytics is of the opinion that the Framework: Project Support mina.jang@sustain (+31) 20 205 0209 licholas Gandolfo (Singapo REPORTING Until maturity of the Green, Social or Sustainability bond **Client Relations** UOB intends to report on allocation and impact of financing on its website on an annual basis. Allocation reporting will include (amongst others) total amount of eligible assets, share of new susfinance anac@sustainabitics.com ✓ Is credible and impactful (+852) 3008 239 Additionally, UOB is committed to reporting on relevant quantitative and qualitative impact where feasible. This is in line with marks  $\checkmark$  Is aligned with the overall sustainability strategy of the Bank and that the use of Alignment with the ASEAN Sustainability Bond Standards proceeds categories will contribute to the advancement of the UN Sustainable The ASEAN Sustainability Bond Standards provide guidance to issuers and communicate more specifically about what an issuer should do to issue credible green, social, and sustainability bonds within Southeast Asia. Sustainabities is of the opinion that the eligible green and social project categories under the UOB Sustainable Bond Framework align with the ASEAN Sustainability Bond Standards. **Development Goals** 



### Appendix E: Macroeconomic Outlook and Banking Regulations



## **Property cooling measures in Singapore**

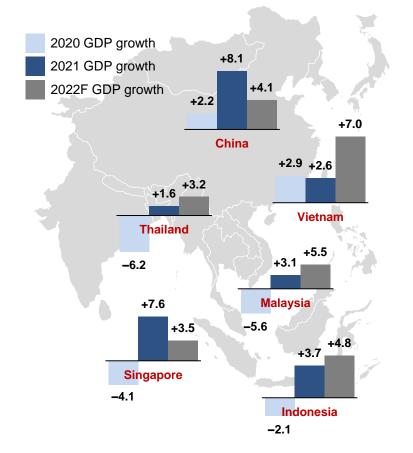


	1 <sup>st</sup> property	2 <sup>nd</sup> property	Thereafter	Corporates						
Loan-to-value (LTV) limit	75%/55%*	75%/55%* 45%/25%*		15%						
Max mortgage tenor	30	30 years (HDB)/35 years (non-HDB)								
Total debt servicing ratio	55% limit, 3.5% inte	erest rate applied	on mortgages							
	Sold in 1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	Thereafter						
Seller stamp duty	12%	8%	4%	0%						
	First \$180k	Next \$180k	Next \$640k	Thereafter						
Buyer's stamp duty	1% 2% 3% 4%									
Additional buyer's stamp duty	0 to 35%, depending on nationality and number of properties owned by purchaser									

\* Higher LTV limits applies if mortgage tenor is ≤ 30 years or sum of mortgage tenor and age of borrower ≤ 65 years old

## Asian growth to sustain into 2022





	despite	risks fron	n Russia-U pandemi		flict & C	hina
70			55.0			
60	5	2	55.6	51.7	53.1	52.5
50	THE HILL		t mater	hí 101-01	HÉ III.	
40						
30						
	ASEAN Mfg PMI	EM Services PMI	EM Mfg PMI	DM Service PMI	es DM M	lfg PMI
	■1Q19 ■2	Q19 <b>3</b> Q′	l9 ∎4Q19	■1Q20	2Q20	■3Q20
	■4Q20 ■1	Q21 ■2Q2	21 ■3Q21	4Q21	■1Q22	2Q22

Note: DM: Developed marketing; EM: Emerging market; Mfg: Manufacturing Source: Macrobond, UOB Global Economics & Markets Research

#### ...as SE Asia reopens for travel and business

Singapo	re
01-Apr	Borders reopened to all fully vaccinated travellers
26-Apr	Group size limits and safe distancing requirements to be relaxed
Indonesi	a
22-Mar	Quarantine requirements for overseas visitors lifted
Thailand	
01-Apr	Requirement for international visitors to provide a negative pre-departure PCR test removed
Malaysia	
01-Apr	Borders reopened to allow quarantine-free travel. No more restrictions on business operating hours
01-May	Cross-border bus and taxi services between Singapore and Malaysia to resume

Source: UOB Global Economics & Markets Research forecasts

## Monetary policy to tighten as inflation spikes

	1Q21	2Q21	3Q21	4Q21	1Q22	2Q22	3Q22f	4Q22f	1Q23f	2Q23f
US 10-Year Treasury	1.74	1.47	1.49	1.51	2.34	3.01	3.60	3.80	3.80	3.60
US Fed Funds	0.25	0.25	0.25	0.25	0.50	1.75	3.00	3.75	4.00	4.00
SG 3M SIBOR	0.44	0.43	0.43	0.44	0.79	1.91	2.65	2.80	3.10	3.10
SG 3M SOR	0.36	0.24	0.21	0.36	0.95	2.06	2.85	3.00	3.20	3.20
SG 3M SORA	0.23	0.13	0.13	0.19	0.27	0.76	1.80	2.72	3.05	3.08
MY Overnight Policy Rate	1.75	1.75	1.75	1.75	1.75	2.00	2.50	2.50	2.75	3.00
TH 1-Day Repo	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.75	1.00	1.00
ID 7-Day Reverse Repo	3.50	3.50	3.50	3.50	3.50	3.50	4.00	4.50	4.75	5.00
CH 1-Year Loan Prime Rate	3.85	3.85	3.85	3.80	3.70	3.70	3.55	3.55	3.55	3.65

Expectations remain firm for the Fed to continue with its rate hikes in 2022 but the path has become more uncertain, given the shift to "meeting by meeting" basis. We now expect another two more 50bps rate hikes at the Sep and Nov FOMC before ending the year with another 25bps hike in Dec.

The MAS surprised with a second off-cycle policy announcement on 14 Jul as it took a "*further calibrated step to tighten monetary policy so as to lean against price pressures becoming more persistent*" via a re-centring the mid-point of the S\$NEER policy band to its prevailing level. MAS policy is likely in restrictive setting after four rounds of tightening since Oct 21. We think Oct MPS tightening is still on the cards but off-cycles are done for 2022 unless core inflation surprises.

Asian central banks have raised interest rates or are on the verge of doing so as inflation rise but the pace of hikes is unlikely to match the Fed's. Key economic risks include more contagious COVID-19 variants, higher commodity prices due to the sanctions on Russia, China's economic slowdown and more aggressive tightening by the Federal Reserve that could increase market volatility and slow global demand.

Source: UOB Global Economics & Markets Research forecasts

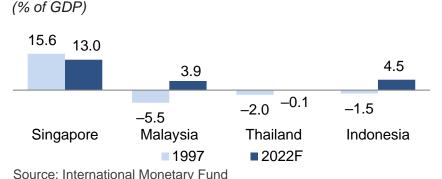
#UOR

## Sound fundamentals in Southeast Asia

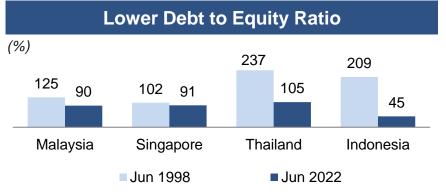




### Improved Current Account Balances

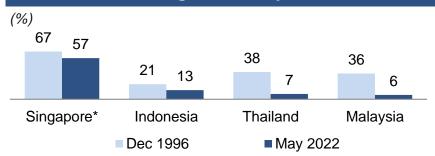


Sources: World Bank, International Monetary Fund



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





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

## Global regulators delayed capital rules by a year

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

Retained earnings are one of the major sources of ... highest quality capital that banks hold. 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)
- 4. Total Loss Absorbing Capacity (not applicable to Singapore banks)

While the reforms are necessary to strengthen the banking system over the long term, they will require banks to make considerable operational adjustments which they would be hard pressed to make under current challenging conditions.

- Media Release, Monetary Authority of Singapore, 7 April 2020

- 5. Basel IV: Revised standards for credit risk, market risk, operational risk, leverage ratio, output floor and related disclosure requirements
- Minimum Capital Requirements for Market Risk replaced Fundamental Review of the Trading Book
- 7. Revised definition on exposure measure

## **Basel III across the region**



	BCBS	Singapore	Malaysia	Thailand	Indonesia
Minimum CET1 CAR	4.5%	6.5% <sup>1</sup>	4.5%	4.5%	4.5%
Minimum Tier 1 CAR	6.0%	8.0% <sup>1</sup>	6.0%	6.0%	6.0%
Minimum Total CAR	8.0%	10.0% <sup>1</sup>	8.0%	8.5%	8.0%
Capital Conservation Buffer	2.5%	2.5%	2.5%	2.5%	2.5%
Countercyclical Buffer in 2020 <sup>2</sup>	n/a	0%	0%	0%	0%
D-SIB Buffer	n/a	2.0%	1.0%	1.0%	1.0%–3.5% <sup>3</sup>
Minimum Leverage Ratio	3.0%	3.0%	3.0%	3.0% <sup>4</sup>	3.0%
Minimum LCR	100%	100%	100%	100%	100%
Minimum NSFR	100%	<b>≡</b> <sup></sup> 100%	100%	100%	100%

Temporary forbearance to enable banks to provide support to the economies amid COVID-19
 The required stable funding factor under NSFR is cut from 50% to 25% for customer loans maturing within 6 months until 30 September 2021. This has been progressively raised back to 50% as at 1 April 2022.

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. Compliance by 2022

## Impact of Basel IV<sup>1</sup> likely to be manageable

	LGD <sup>2</sup> floor of Retail Mortgage cut	LGD <sup>2</sup> and PD <sup>3</sup> floors introduced for
Retail credit	to 5% from 10%	QRRE <sup>4</sup> and Other Retail
Wholesale credit		
Others	Unsecured corporate FIRB <sup>5</sup> LGD <sup>2</sup> cu to 40% from 45%	t CCF <sup>6</sup> for unconditional cancellable commitments raised to 10% from 0%
	CCF <sup>6</sup> for general commitments cut to 40% from 75%	PD <sup>3</sup> floor of bank asset class raised to 5bp from 3bp
	Higher haircuts and lower FIRB <sup>5</sup> secur LGD	ed RWA <sup>7</sup> output floor set at 72.5% of that of standardised approach
	Removal of 1.06 multiplier for IRB <sup>8</sup> RWA <sup>7</sup>	Fundamental review of the trading book
	Lower RWA	Higher RWA
Source: BCBS		
1. Basel IV: Reducing variation in risk-weighted assets		oundation internal rating-based approach
2. Loss given default		redit conversion factor
3. Probability of default		isk weighted assets
4. Qualifying revolving retail exposures		ternal rating-based approach

**UOB** 

# **Thank You**

