

# **UOB**

### UOB Group Fixed Income Investor Presentation

### September 2016

Disclaimer: This material that follows is a presentation of general background information about the Bank's activities current at the date of the presentation. It is information given in summary form and does not purport to be complete. It is not to be relied upon as advice to investors or potential investors and does not take into account the investment objectives, financial situation or needs of any particular investor. This material should be considered with professional advice when deciding if an investment is appropriate. UOB accepts no liability whatsoever with respect to the use of this document or its content.

Singapore Company Reg No. 193500026Z

### Agenda

3

- Overview of UOB Group
- **Disciplined Balance Sheet Management**
- Resilience of the Singapore Housing Market and Our Cover Pool
- Appendix A: Overview of our Covered Bond Program
- Appendix B: Regulatory Developments
- Appendix C: Extract from Latest Results



### **Overview of UOB Group**

### **UOB**

### **UOB** Overview

### 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 through organic means and a series of acquisitions. It is today a leading bank in Asia with an established presence in the ASEAN region. The Group has an international network of around 500 offices in 19 countries and territories.

Note: Financial statistics as at 30 June 2016.

- 1. FX rate used: USD 1 = SGD 1.34985 as at 30 June 2016.
- 2. Based on final rules effective 1 January 2018.
- 3. Leverage ratio is calculated based on the revised MAS Notice 637 which took effect from 1 January 2015.
- 4. Calculated based on profit attributable to equity holders of the Bank net of preference share dividend and capital securities distributions.
- 5. Computed on an annualised basis.
- 6. Average for 2Q16.

Key Statistics for 1H16

Total assets : SGD321.6b (USD238.3b<sup>1</sup>) Shareholder's equity : SGD31.3b (USD23.2b<sup>1</sup>) Gross loans : SGD212.3b (USD157.3b<sup>1</sup>) Customer deposits : SGD248.2b (USD183.9b<sup>1</sup>) Common Equity Tier 1 CAR : 13.1% Fully-loaded Common : 12.2% Equity Tier 1 CAR<sup>2</sup> Leverage ratio <sup>3</sup> : 7.4% ROA : 0.97% 5 ROE 4 : 10.5% 5 NIM : 1.73% 5 Non-interest/Total income : 37.8% NPI ratio : 1.4% Loans/Deposits ratio :84.0% Average all-currency : 167% 6 liquidity coverage ratio Cost / Income : 45.6% Credit Ratings

	Moody's	S&P	Fitch
Issuer Rating (Senior Unsecured)	Aa1	AA–	AA–
Outlook	Negative	Stable	Stable
Short Term Debt	P-1	A-1+	F1+

### A Leading Singapore Bank with Established Franchise in Core Market Segments HHUOB

#### **Group Retail**

- Best Retail Bank in Singapore<sup>1</sup>
- Strong player in credit cards and private residential home loan business

#### **Group Wholesale Banking**

- Best SME Banking<sup>1</sup>
- Seamless access to regional network for our corporate clients

#### Global Markets and Investment Management

- Strong player in Singapore dollar treasury instruments
- UOB Asset Management is one of Singapore's most awarded fund managers<sup>2</sup>

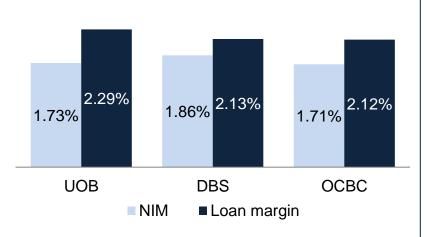
#### UOB Group's recognition in the industry



Source: Company reports.

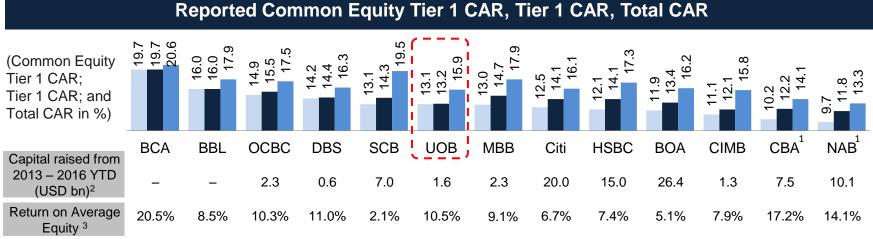
- 1. The Asian Banker Excellence in Retail Financial Services International Awards 2011 (Retail and SME Banking), 2012 & 2014 (Retail Banking).
- 2. The Edge Lipper Singapore Fund Awards, 2014.

#### Higher 1H16 loan margin than local peers



Loan margin is the difference between the rate of return from customer loans and costs of deposits. Source: Company reports.

### **Strong Capitalisation and Low Gearing Ratio**



#### **Reported Leverage Ratio**<sup>4</sup>

14.5%	8.2%	7.7%	7.5%	7.4%	6.9%	5.5%	5.3%	5.1%	5.0%
BCA	OCBC	DBS	Citi	UOB	BOA	SCB	NAB	HSBC	СВА

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, Dealogic.

The financials of banks were as of 30 June 2016, except for those of CIMB, Malayan Banking Berhad (MBB), National Australia Bank (NAB) which were as of 31 Mar 2016; and Commonwealth Bank of Australia which were as of 31 Dec 2015.

- NAB's and CBA's CET1 ratios are computed based on APRA's standards 1.
- 2. From 1 Jan 2013 till 1 Aug 2016 and includes Tier 1 capital.
- Computed on an annualised basis. 3.
- 4. Bangkok Bank PCL (BBL), Malayan Banking Berhad (MBB) and CIMB do not disclose their leverage ratio.

### **Competitive Against Peers**

				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	aa3	45.6%	0.97%	84.0%
Aa1	AA-	AA–	OCBC	aa3	45.2%	1.05%	82.2%
Aa1	AA–	AA–	DBS	aa3	44.1%	1.01%	91.8%
A1	А	AA–	HSBC	a3	63.2%	0.57%	68.8%
A1	BBB+	A+	SCB	a2	66.5%	0.12%	71.5%
Baa1	A–	n.r.	CIMB	baa2	57.4%	0.70%	90.6%
A3	A–	A–	MBB	a3	48.4%	0.83%	94.7%
Baa1	BBB+	BBB+	BBL	baa2	49.4%	1.07%	88.5%
Baa3	n.r.	BBB-	BCA	baa3	63.5%	3.86%	77.9%
Baa1	BBB+	А	BOA	baa2	70.9%	0.64%	74.3%
Baa1	BBB+	А	Citi	baa2	59.5%	0.84%	67.6%
Aa2	AA–	AA–	CBA	a1	42.2%	1.10%	124.1%
Aa2	AA–	AA-	NAB	a1	41.6%	0.75%	141.3%

Source: Company reports, Credit rating agencies (updated as of 1 August 2016).

The financials of banks were as of 30 June 2016, except for those of CIMB, Malayan Banking Berhad (MBB), National Australia Bank (NAB) which were as of 31 Mar 2016; and Commonwealth Bank of Australia which were as of 31 Dec 2015.

1. Computed on an annualized basis.

### One of The Few 'AA' Rated Banks Globally

#### Ratings

AA-/Stable/A-1+

STANDARD & POOR'S RATINGS SERVICES

McGRAW HILL FINANCIAL

### MOODY'S

#### Aa1/Neg/P-1

- "Good capital position against backdrop of weakening asset quality"
- <u>"Baseline credit assessment (BCA) of Aa3"</u>
- "Diversified Singaporean and Malaysian consumer banking and services to small-and medium-sized enterprises (SMEs)"
- "Prudent management team... expect the bank to continue its emphasis on funding and capitalisation to buffer against global volatility"
- "UOB will maintain its earnings, asset quality and capitalization while pursuing regional growth"
- <u>"Single 'A' rated stand alone credit profile (SACP)"</u>

#### **Fitch**Ratings

#### AA- /Stable/F1+

Lecue Detine

- "Ratings reflect its strong domestic franchise, prudent management, robust balance sheet..."
- <u>"AA- Viability Rating"</u>
- "Notable credit strengths ...core capitalisation, domestic funding franchises and close regulatory oversight"

#### **Debt Issuance History of UOB Group**

						Issue Rating
Issue Date	Туре	Structure	Call	Coupon	Amount	(M / S&P / F)
Tier 1						
May 2016	B3 AT1	Perpetual	2021	4.000%	SGD750m	A3 / BB+ / BBB
Nov 2013	B3 AT1	Perpetual	2019	4.750%	SGD500m	A3 / BB+ / BBB
Jul 2013	B3 AT1	Perpetual	2018	4.900%	SGD850m	A3 / BB+ / BBB
Tier 2						
Aug 2016	B2 T2	10½NC5½	2022	2.880%	USD600m	A2 / BBB+ / A+
Aug 2016	B2 T2	12NC7	2023	3.190%	HKD700m	A2 / Not rated / Not rated
/lar 2016	B3 T2	10½NC5½	2021	3.500%	USD700m	A2 / Not rated / A+
<i>I</i> lay 2014	B3 T2	12NC6	2020	3.500%	SGD500m	A2 / BBB+ / A+
Mar 2014	B3 T2	101/2NC51/2	2019	3.750%	USD800m	A2 / BBB+ / A+
Oct 2012	B2 LT2	10NC5	2017	2.875%	USD500m	Aa3 / A+ / A+
ul 2012	B2 LT2	10NC5	2017	3.150%	SGD1.2b	Aa3 / A+ / A+
Senior Unsecure	ed					
/lar 2016	-	3yr FXN	-	1.750%	HKD300m	Aa1 / AA- / AA-
Sep 2014	-	5½yr FXN	-	2.500%	USD500m	Aa1 / AA- / AA-
Sep 2014	-	4yr FRN	-	BBSW 3m +0.640%	AUD300m	Aa1 / AA- / AA-
/lar 2014	-	5yr FXN	-	US\$ 3m + 0.550%	USD200m	Aa1 / AA- / AA-
lov 2013	-	3yr FRN	-	BBSW 3m +0.650%	AUD300m	Aa1 / AA- / AA-
Sep 2013	-	3yr FRN	-	US\$ 3m + 0.380%	USD100m	Aa1 / AA- / AA-
lun 2013	-	3yr FXN	-	2.500%	CNY500m	Aa1 / AA- / AA-
/lar 2012	-	5yr FXN	-	2.20%	HKD1000m	Aa1 / AA- / AA-
/lar 2012	-	5yr FXN	-	2.250%	USD750m	Aa1 / AA- / AA-
Covered						
Mar 2016	Covered	5yr FXN	-	0.250%	EUR500m	Aaa / AAA / Not rated

B2: Basel II, B3: Basel III, AT1: Additional Tier 1, T2: Tier 2, LT2: Lower Tier 2, FXN: Fixed Rate Notes; FRN: Floating Rate Notes

Table includes rated public issues and private placements of UOB, but excludes zero callable structured notes and subsidiaries' issues, updated as of September 2016

### **UOB**

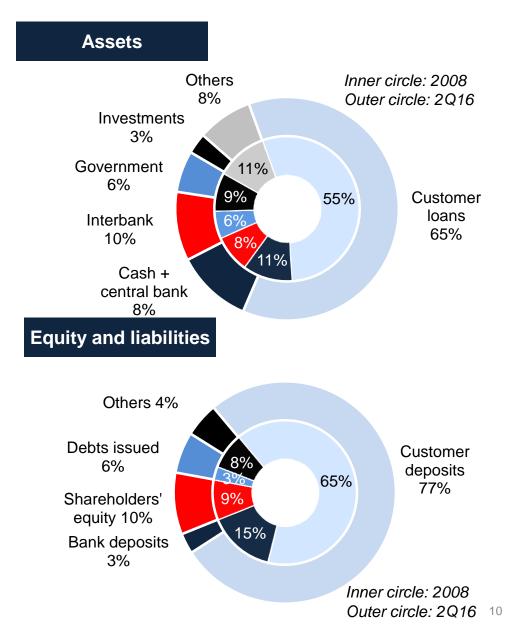


### **Disciplined Balance Sheet Management**

### **Disciplined Balance Sheet Management**

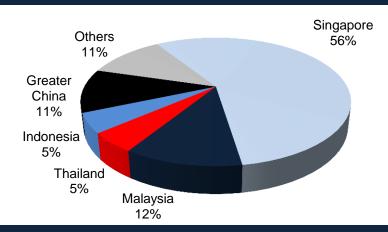
### Resilient balance sheet

- Stable NPL ratio: 1.4%
- High general allowances-to-loans ratio of 1.5%
- Strong NPL coverage: 125.6%
- Strong funding and capital base
  - Liquidity Coverage Ratios<sup>1</sup>: SGD (224%) and all-currency (167%)
  - Healthy fully-loaded CET1 ratio<sup>2</sup> of 12.2%
- Positive affirmation in the change of our balance sheet over the years
  - Issuance of Basel III perpetual capital securities (S\$750m) in May: 3 times subscribed
  - Upgrade of UOB's standalone rating by Standard & Poor's

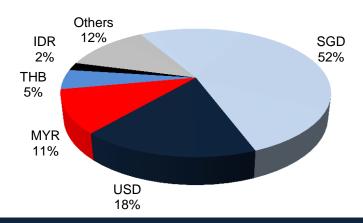


### **Diversified Loan Portfolio**

#### Gross Customer Loans by Geography<sup>1</sup>

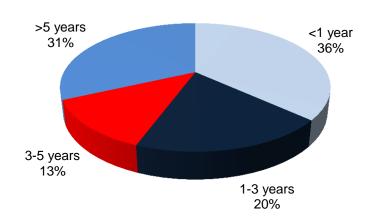


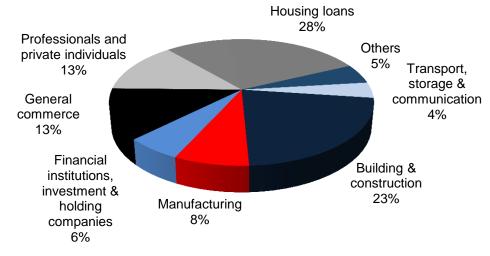
#### **Gross Customer Loans by Currency**



#### Gross Customer Loans by Maturity

#### **Gross Customer Loans by Industry**



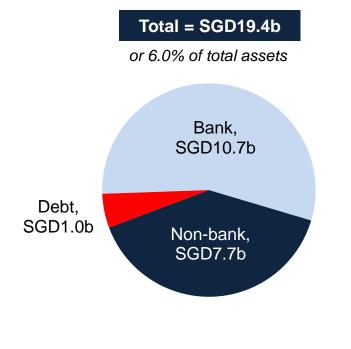


Note: Financial statistics as at 30 June 2016.

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).



### **Selective Exposure in China**



#### **Bank exposure in China**

- 99% with <1 year tenor</li>
- Around 75% accounted for by top 5 domestic banks and policy banks
- Trade exposures mostly with bank counterparties, representing around half of bank exposure

#### Non-bank exposure in China

- Target customers include top-tier state-owned enterprises, large local corporates and foreign investment enterprises
- NPL ratio around 1.0%
- Around half of loans denominated in RMB
- Around half has tenor within a year
- Minimal exposure to stockbroking companies linked to China's stock market
- No exposure to Qingdao fraud and local government financing vehicles

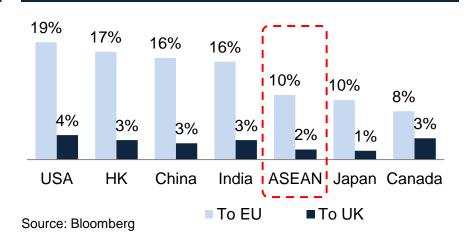
Note: Classification is according to where credit risks reside, largely represented by the borrower's country of incorporation/operation (for non-individuals) and residence (for individuals).

### **Minimal Immediate Impact from Brexit**

#### **Minimal Direct Impact on Asian Markets**

- It is a challenge to quantify Brexit effects with certainty at this stage
- The immediate impact on Asian economies is likely to be limited and shallow, considering the low export reliance
- If adverse impact of Brexit spreads to the broader European Union, however, this could have a more significant impact on Asia given the trade and investment links. As a bloc, EU represented 10.3% of ASEAN's total exports and 16% of FDIs in 2015

#### EU & UK Export Mix of Selected Partners (2015)

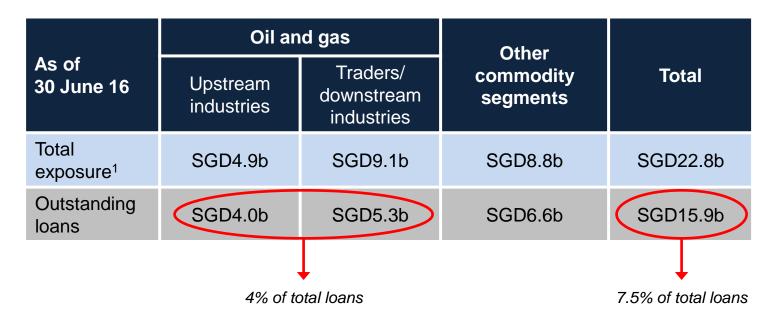


UOB's exposure to Europe (as of 30-Jun-16)	Non-bank	Non-bank Bank Debt securities		Total	As a % of total assets
Europe	SGD3.4b	SGD3.1b	SGD1.2b	SGD7.7b	2.4%
of which UK	SGD2.6b	SGD0.8b	SGD0.2b	SGD3.6b	1.1%

- Bulk of UK non-bank exposure is secured and denominated in GBP
- Consumer mortgage book small and healthy
- High rated bank counterparties in the UK

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**



- Total exposure, including off-balance sheet items, stood at SGD22.8b as of 30 June 2016
- Mainly to traders and downstream segments
- Proactive monitoring, limit management and collateral enhancement

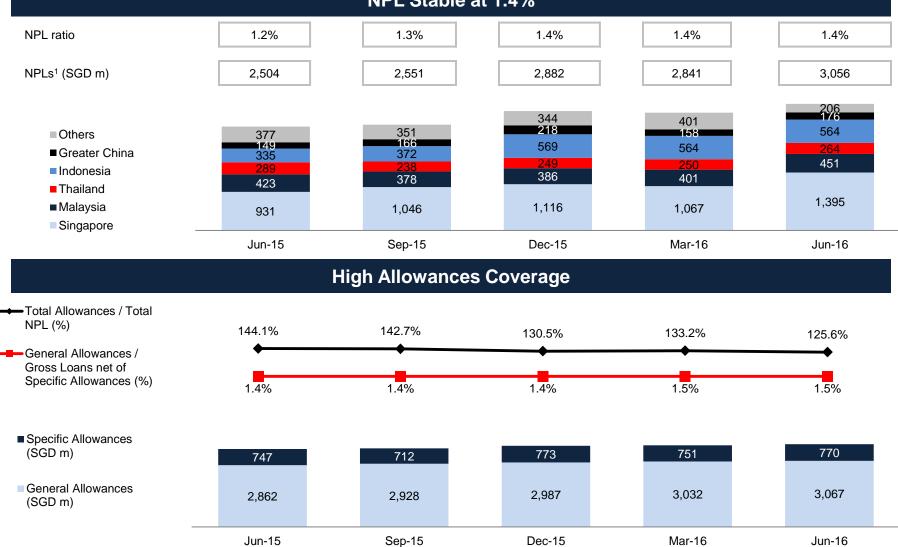
1. Total exposure comprises outstanding loans and contingent liabilities

## **HH UOB**

### **Resilient Asset Quality,**

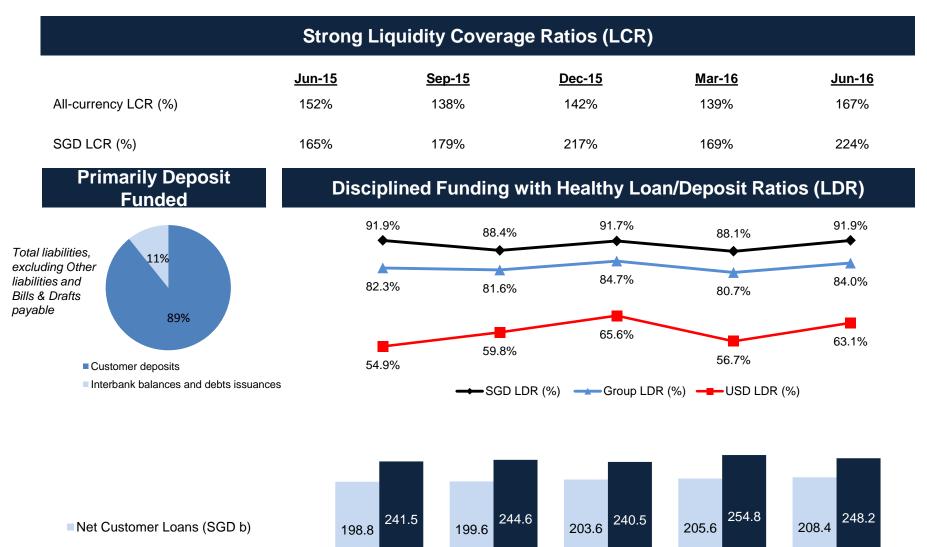
### **High Allowances Coverage**

NPL Stable at 1.4%



1. 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).

### **Strong Funding & Liquidity Profile**



Sep-15

Jun-15

Customer Deposits (SGD b)

Mar-16

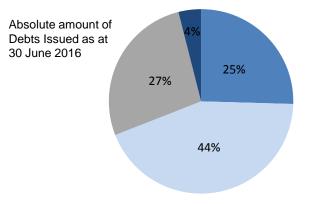
Dec-15

### **Disciplined Wholesale Funding Strategy**

#### Wholesale Funding Strategy

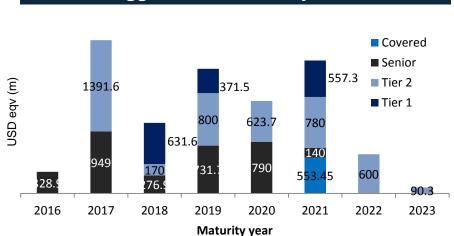
- Diversification among global markets
  - Multiple funding instruments ranging from subordinated capital to senior to secured debt
  - Commitment to refreshing strategic benchmark curves
- Strategic cultivation of high quality and longstanding investors

#### **Diversification in Debt Instruments Issued**

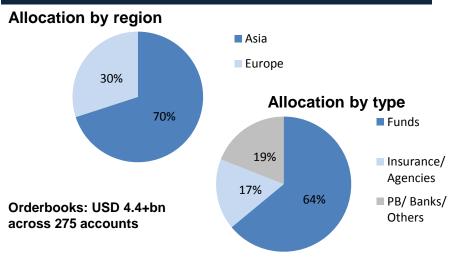


Subordinated debt Commercial paper

■ Senior notes/ others ■ Covered bonds



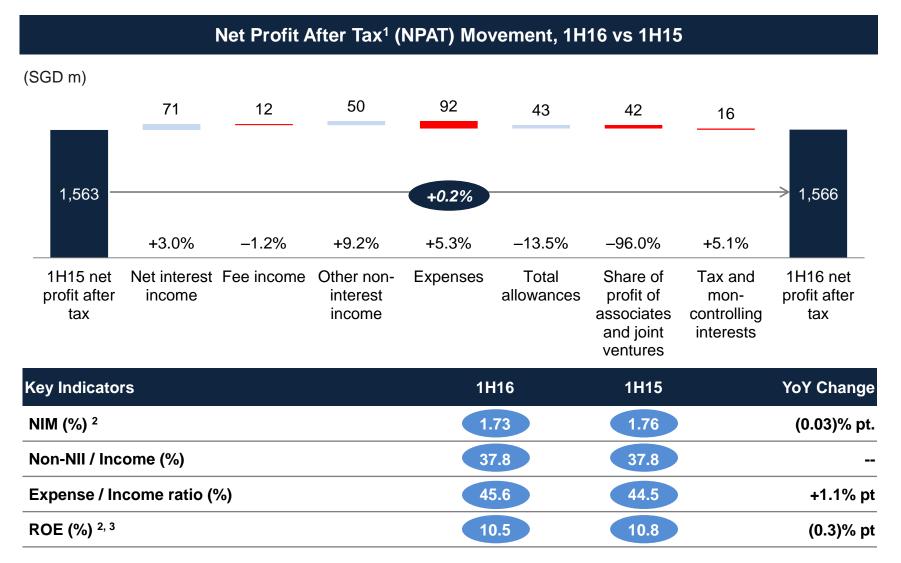
#### Staggered Debt Maturity Profile Investor Diversification In Recent USD 600m T2



Note: Maturities shown at first call date for Capital Securities FX rates used are as at 30 June 2016

III UOB

### **1H 16 Financial Overview**



1. Relate to amount attributable to equity holders of the Bank.

2. Computed on an annualised basis.

3. Calculated based on profit attributable to equity holders of the Bank net of preference share dividends and capital securities distributions.

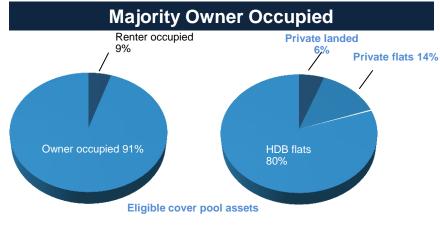
🛲 UOB

### **UOB**



Resilience of the Singapore Housing Market and Our Cover Pool

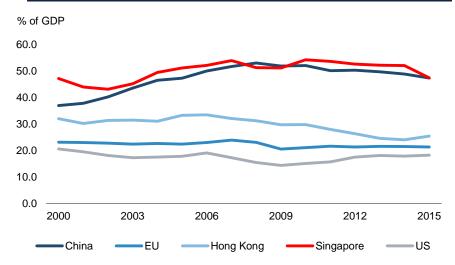
# Dynamics Behind the Singapore Housing Market



<sup>1</sup> HDB Website, "Our History" <sup>2</sup> Singstat – "Singapore in Figures 2015"

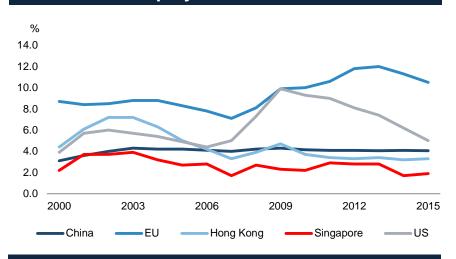
Source: CEIC, Singapore Department of Statistics

#### High Domestic Savings Rate (excl CPF)

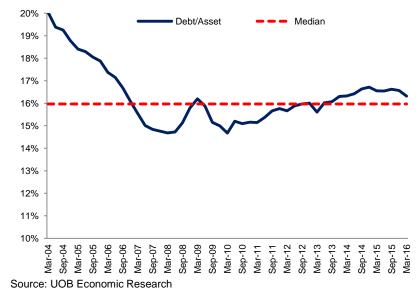


(1) Source: Singapore Department of Statistics (2) Source: World Bank, Bloomberg, BIS

#### Low Unemployment vs. Global Peers

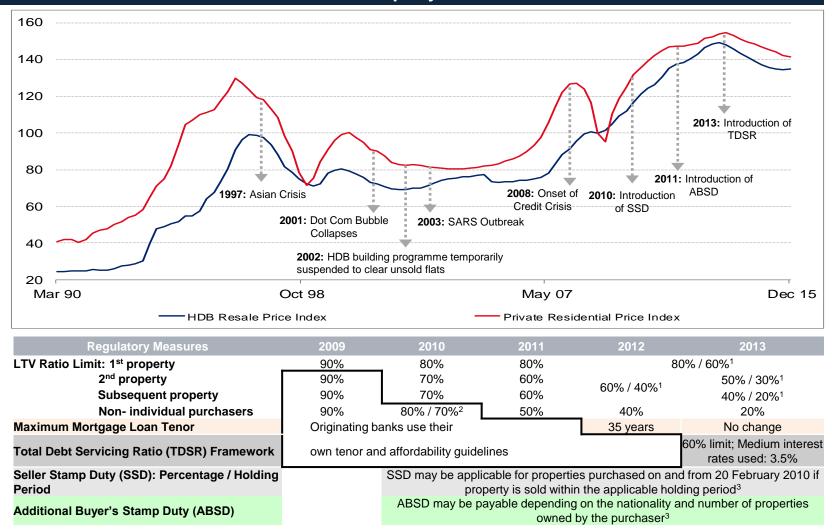


#### Low Household Debt/Asset



### **Prudent Policies for Sustainable Prices**

**Residential Property Price Indices** 



1. From 6<sup>th</sup> October 2012, higher LTV ratio limit will apply if the mortgage tenor ≤30 years and sum of tenor of mortgage plus age of borrower at time of applying for credit facility is ≤65 years old, otherwise lower LTV ratio limit will apply.

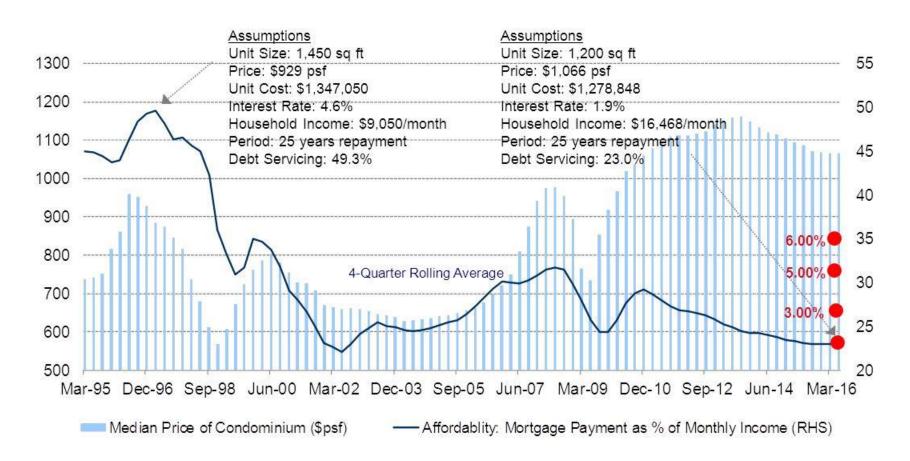
2. 80% LTV ratio limit for 1<sup>st</sup> property and 70% LTV ratio limit for 2<sup>nd</sup> and subsequent properties.

3. Refer to IRAS website for more details.

Source: CEIC

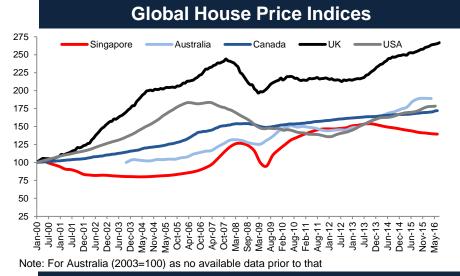
### Mortgage Debt Serving Ratio Remains Low

Low Mortgage Debt Service Ratio due to Low Interest Rates, High Income Growth and Smaller Units

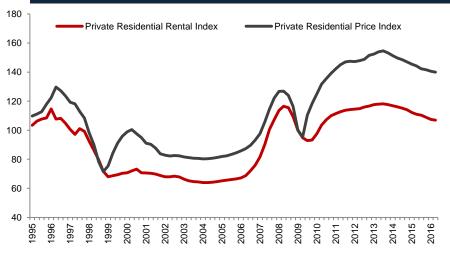


**UOB** 

### **Singapore Home Prices Remain Competitive**

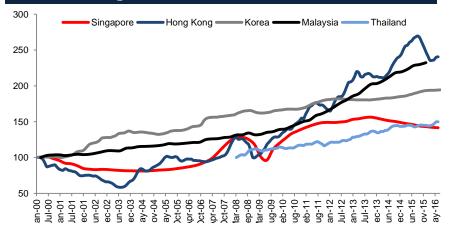


#### **SG Private Residential Rent Indices**



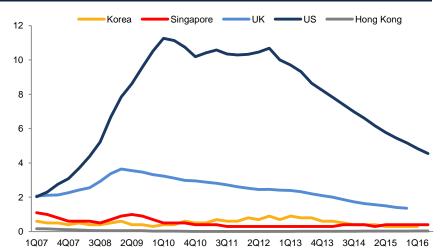
Source: CEIC, URA, UOB Economic-Treasury Research, Singapore Department of Statistics, Bloomberg

**Regional House Price Indices** 



Note: For Thailand (2008=100) as no available data prior to that

#### Mortgage Delinquency Rate Comparison



\* The delinquency ratio of Korea captures loans in arrears for more than 1 day (no 3Q15 data), the ratios of USA include loans in arrears for more than 1 month, while the ratios of the Singapore, UK and Hong Kong count loans in arrears for more than 3 months

**HHUOB** 

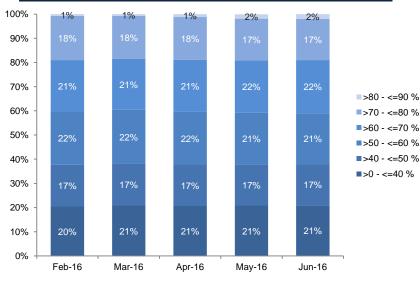
### **Our Cover Pool Profile**

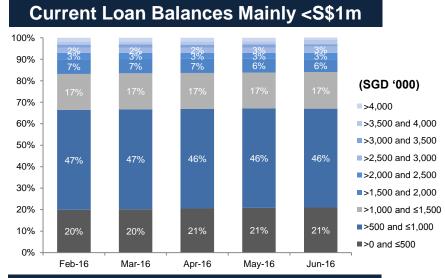
Overview of Cover Pool (as of June-16)									
Number of Mortgage Loans	7,075								
Total Current Balance (SGD)	4,477,508,898								
Average Current Loan Balance (SGD)	632,863								
Maximum Current Loan Balance (SGD)	8,830,689								
W.A. Current Interest Rate	2.14%								
W.A. Seasoning	57 months								
W.A. Remaining Tenor	266 months								
W.A. Indexed Current LTV	54%								
W.A. Unindexed Current LTV*	60%								

W.A. represents weighted averages

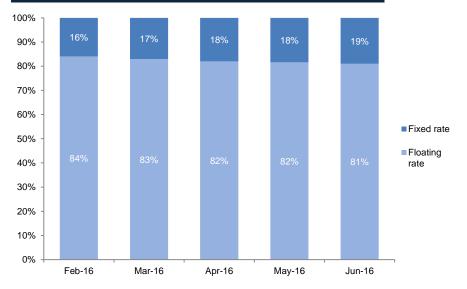
\*Current loan balance divided by the original property value

#### **Granular LTV Breakdown**

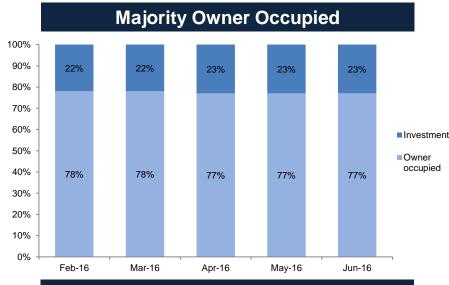




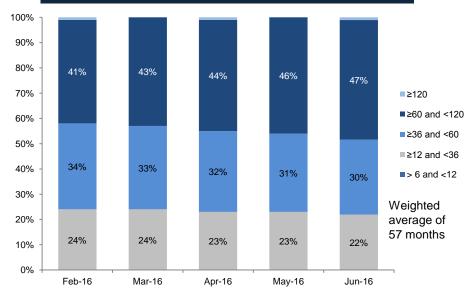
#### Largely Floating Rate Mortgages



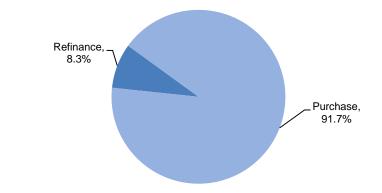
### **Cover Pool has Remained Stable**



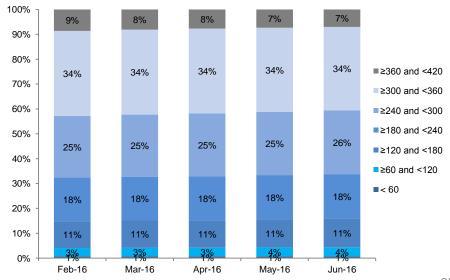
Well Seasoned Portfolio (in months)



Loans Mainly for Purchases

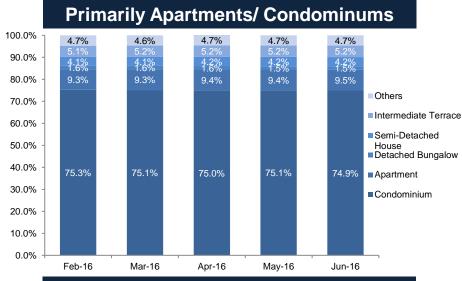


Stable Profile for Remaining Loan Tenors

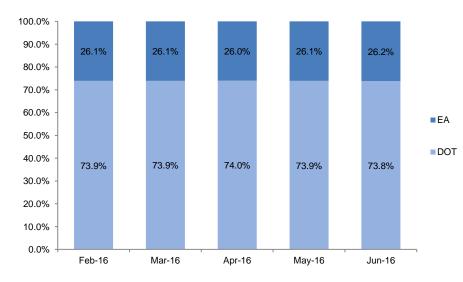


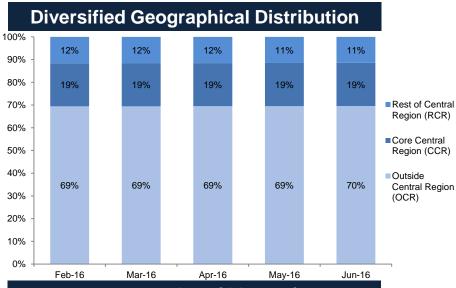
### **HH UOB**

### **Cover Pool has Remained Stable**

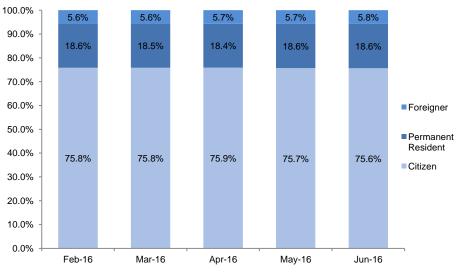


#### Strong Legal Protection by EA/ DOT





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





### Appendix A: Overview of our Covered Bond Program

### **HH UOB**

### **Covered Bond Program Summary**

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

Issuer	United Overseas Bank Limited
Issuer Long Term Rating	Aa1 (neg) / 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)^ / Not Eligible
Programme Rating	Aaa / AAA (Moody's / S&P)
Issuance Structure (Dual Recourse)	Direct issuance covered bond regulated under MAS Notice 648, Senior unsecured claim against the Issuer and 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-collateralization (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 and United Overseas Bank Limited

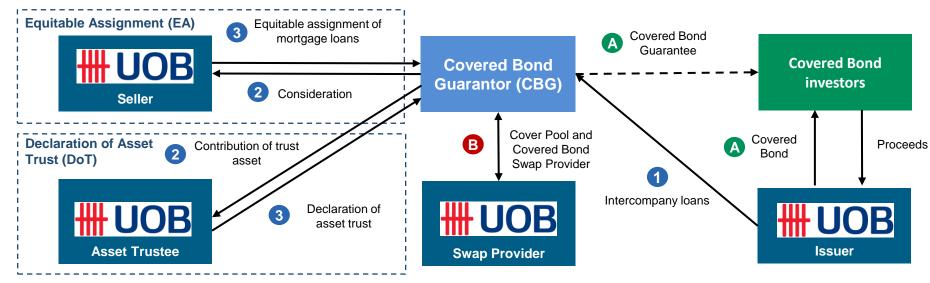
<sup>^</sup>Please refer to http://ec.europa.eu/finance/bank/docs/regcapital/acts/delegated/141010\_delegated-act-liquidity-coverage\_en.pdf and check for details. At the time of this presentation and subject to any relevant matters which are within the control of a relevant EU investor (including its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

### **UOB**

### **Structure Diagram**

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
- 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

<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



### **Structural Features/Enhancements**

Credit Structure	The Covered Bonds will be direct, unsecured and unsubordinated obligations of the Issuer
(Dual Recourse)	The CBG guarantees the payment of principal and interest under the Covered Bonds pursuant to the Covered Bond Guarantee and secured by the Cover Pool
Over-collateralisation from the Cover Pool	The adjusted aggregate principal amount of the Cover Pool must be equal to or in excess of the outstanding nominal amount of all Covered Bonds, as required by MAS Notice 648 and the rating agencies to maintain the ratings of the Covered Bonds
LTV Cap	Where a mortgage loan has a loan-to-value ratio in excess of 80%, the portion of the loan exceeding the 80% threshold will not be counted in the Asset Coverage Test
Asset Coverage Test (ACT)	The Asset Coverage Test (ACT) is performed monthly by the Cash Manager to test whether the required over-collateralisation level of Cover Pool is maintained
Amortisation Test	The Amortisation Test (AT) is performed monthly by the Cash Manager following the service of a Notice to Pay to test that the Amortisation Test Aggregate Loan Amount is at least equal to the nominal amount of all the outstanding covered bonds
Pre-Maturity Test (for Hard Bullet only)	An Issuer Event of Default will occur where the rating of UOB falls below the rating trigger(s) and the transaction account has not been pre-funded up to the outstanding nominal amount of Covered Bond maturing within the next six months
Reserve Fund	If UOB is downgraded below the rating trigger(s), UOB is required to establish a Reserve Fund equal to the next three months of interest due on the Covered Bonds or Covered Bond Swap payments plus one quarter of senior fees due and payable to Trustee, Cash Manager, Account Bank, Servicer, Asset Monitor
Commingling Reserve Fund	If UOB is downgraded below the rating trigger, UOB is required to establish a Commingling Reserve Fund equal to the previous three months <sup>1</sup> or two months <sup>2</sup> of principal and interest collections from the mortgage loans multiplied by the committed collateralisation percentage
Deposit Set-off	Additional collateralisation will be provided by the issuer to cover the potential set-off risk
Covered Bond Swap(s)	The Covered Bond Swap will, where necessary, convert SGD receipts by the CBG into the required currency and interest rate cash flows to match payment on the covered bonds. UOB is the Covered Bond Swap provider and will be required to post collateral and/or be replaced subject to ratings triggers
Servicer	UOB will be the servicer of Loans in the Cover Pool. The servicer role will be transferred to a suitably rated institution if UOB's rating falls below the rating trigger(s)
Indexation	Value of property included in the ACT is adjusted on a quarterly basis
Investor Report	UOB will produce and furnish covered bond investor reports on its website on a monthly basis
Cashflow Waterfall	Following the service of an Asset Coverage Test Breach Notice (not revoked), a Notice to Pay or CBG Acceleration Notice, cash collections from Cover Pool are "trapped" to ensure the asset coverage level is maintained and Covered Bondholders are protected

# **UOB**

### **Key Programme Rating Triggers**

Moody's		Trigger	Sa	λ.Ρ	Trigger	Trigger Event		Descriptions
Long- term	Short- term	Events	Long- term	Short- term	Events			The Pre-Maturity Test is performed daily for 12 months prior to the Maturity Date in relation to a hard bullet Covered Bond
Aaa			AAA			Pre-Maturity		If UOB's unsecured and unsubordinated debt obligations fall below the rating trigger, UOB shall fund the Pre-Maturity
Aa1			AA+	A-1+		Test		Liquidity Ledger in the amount equal to the Required Redemption Amount of the relevant Series of Hard Bullet
Aa2	P-1	No impact	AA	A-1+	No impact			Covered Bonds
Aa3	F-1	No impact	AA-		No impact			The Cash Manager shall, within 5 calendar days, request UOB
A1			A+	A-1		Reserve Fund		to fund the Reserve Ledger with an amount equal to the
A2			А	7-1				Reserve Fund Required Amount
A3		<ul> <li>Pre-maturity Test</li> <li>Reserve Fund</li> </ul>	A-	A-2	<ul> <li>Pre-maturity Test</li> <li>Reserve Fund</li> </ul>	Collateral Posting (Swap)		The Swap Provider will be required to provide collateral pursuant to a one-way credit support annex
		<ul> <li>Deposit Set-off</li> <li>Collateral Posting for Swap(s)</li> </ul>	BBB+		<ul> <li>Transfer of Account Bank</li> <li>Collateral Posting for Swap(s)<sup>†</sup></li> <li>Procure a Guarantee/Repla</li> </ul>	Account Bank		If the Account Bank falls below the rating trigger, then its rights and obligations are required to be transferred to another bank
Baa1	P-2					Deposit Set-off		Additional collateralisation will be provided by the issuer to cover the potential set-off amount against borrowers' deposit
					cement for Swap(s) Provider <sup>†</sup>	Guarantee/Repla cement for Swap(s)		The Swap Provider uses commercially reasonable efforts to procure either a guarantee in respect of all present and future obligations or transfer the Cover Pool Swap (if applicable) or
Baa2		Procure a Guarantee/Replac	BBB	A-3		Provider		Covered Bond Swap
Baa3	P-3	ement for Swap(s) Provider	BBB-		<ul> <li>Deposit Set-off</li> <li>Commingling Reserve</li> </ul>	Replacement of Servicer		The Servicer role will be transferred to a suitably rated institution
	low	<ul> <li>Replacement of Servicer</li> <li>Perfection of</li> </ul>	Inves	low tment ade	<ul> <li>Replacement of Servicer</li> <li>Perfection of</li> </ul>	Perfection of Title/Transfer of Asset Trustee		EA structure: Notification to borrowers for legal perfection DoT structure: Appointment of a replacement Assets Trustee
Inves Gra	tment ade	Title/Transfer of Asset Trustee ► Transfer of Account Bank			Title/Transfer of Asset Trustee	Commingling Reserve		The Cash Manager shall, within 5 calendar days, request UOB to fund the Reserve Ledger with an amount equal to the Commingling Reserve Fund Required Amount

UOB's current rating

### **Covered Bond Legal Frameworks**

				<b>*</b>		
	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)	The Federal Financial Supervisory Authority	Financial Services Authority (FSA)	Financial Services Commission of Korea (FSC)
Issuers and Pro	ogram Requirements					
Structure	<ul> <li>Direct Issue Structure (with cover pool security ring-fenced via true sale to Covered Bond Guarantor)</li> </ul>	(with cover pool security	<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 Financial Institutions, Cooperative Credit Society</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>All the assets of the SPV must not exceed 4% of the 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 4% of total adjusted assets</li> </ul>	<ul> <li>No specific limit</li> </ul>	<ul> <li>Case-by-case basis, but ranging from 10 to 20% of total assets (soft limit: 20% of total assets)</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>Commercial mortgages</li> </ul>	<ul> <li>Canadian residential mortgage loans</li> </ul>	<ul> <li>Mortgage covered bonds:         <ul> <li>Any combination of residential and commercial mortgages</li> </ul> </li> <li>Public sector covered bonds:         <ul> <li>Public sector loans</li> </ul> </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>

### **Covered Bond Legal Frameworks**

					<b>*</b>							
		Singapore		Australia		Canada		Germany		United Kingdom		Korea
Minimum Standards of Asset Quality		Residential mortgages ≤80% LTV		Residential mortgages ≤80% LTV Commercial mortgages ≤60% LTV Excl. non-performing assets >90 days	• •	Residential mortgages ≤80% LTV The mortgaged property cannot exceed four residential units	•	60% LTV for both residential and commercial mortgage loans		80% LTV for residential mortgage loans 60% LTV for commercial mortgage loans 60% LTV for shipping loans		70% LTV for residential mortgage loans 70% LTV for loans secured by ships and aircraft Not a loan extended to any person in which an application for bankruptcy or rehabilitation proceedings has been filed or commenced
Substitution Assets		Cash/ cash equivalents (Singapore Government Bonds, Treasury Bills, MAS Bills), may not exceed 15% of cover pool, except under certain circumstances		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	• •	Securities issued by Government of Canada May not exceed 10% of cover pool"	•	Up to 10% could be money claims against the European Central Bank, central banks in European Union or suitable credit institutions Derivatives are eligible under certain conditions but may not exceed 12%		Sterling ST investments, Bank deposits, Debt securities with min. AA- rating or P-1/A-1+/F1+, AAA-rated RMBS notes, Government debt May not exceed 10% of cover pool	•	Liquid assets (Cash, CD issued by other FIs <100 days)May not exceed 10% of cover pool
Collateralizatior		Minimum of at least 103%	•	Minimum of 103%		No legislative minimum Cover pool assets have to be at least equal to liabilities on a nominal basis, Market practice is to covenant to maintain overcollateralisation of between 3.0% and 7.5%	•	Min. of 102% on a stressed net present value (NPV) basis Min. of 100% on an nominal basis	•	Minimum of 108% (FSA to evaluate each program)	•	Minimum of 105% on a nominal basis

**UOB** 

# **HH UOB**

### Key Features – Use of CPF funds in Residential Property Financing

### What is CPF (Central Provident Fund)?

- CPF, established in 1955, is a comprehensive savings plan that requires working Singapore citizens and permanent residents to set aside funds for their retirement, healthcare and housing needs.
- Both employees and employers make monthly CPF contributions
- These contributions go into three accounts



Ordinary Account (OA)

For housing, insurance, investment and education

# Retirement

Medica

### Special Account (SA)

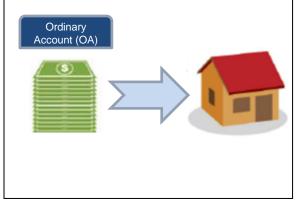
For old age and investment in retirementrelated financial products

### Medisave Account (MA)

For hospitalisation expenses and approved medical insurance

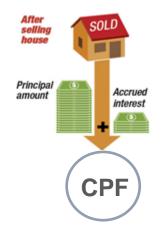
#### Use of CPF for housing loan

- CPF Members can use their savings (and future monthly contributions) in the Ordinary Account to finance residential property purchase and/or repay the housing loan in part or whole and/or to service the monthly housing loan instalments
- When CPF money is used for housing, a charge (CPF charge) is created on the residential properties in order to secure the refund of CPF money withdrawn, including interest, when the property is sold
- The CPF charge is to be registered after the bank's mortgage over the property



#### CPF Board and Priority of Payments

 Under the present regime, if the property is sold (after deducting all costs and expenses incurred directly in connection with the sale), the proceeds will be applied to repay the outstanding housing loan ahead of the CPF money withdrawn



- This order of priority does not apply if the mortgage loans are transferred or assigned by the mortgagee without the CPF Board's consent
- Such consent from the CPF Board has not been obtained at the programme set-up date. To mitigate the risk that the CBG may lose its priority against enforcement proceeds, a declaration of asset trust structure is used for the sale of CPF Loan

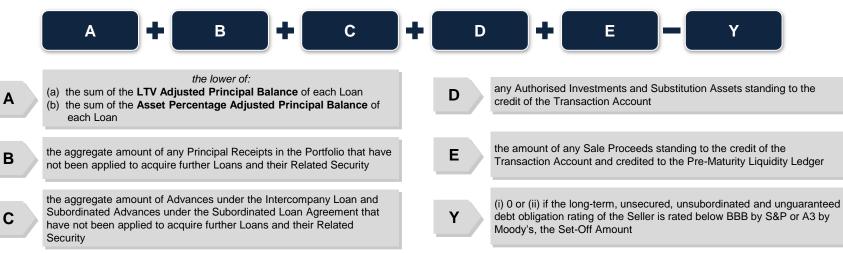
### **Asset Coverage Test (ACT)**

#### Adjusted Aggregate Loan Amount



#### SGD Equivalent of the Aggregate Outstanding Nominal Amount of all Covered Bonds

- Tested monthly on every Test Date prior to the service of a Notice to Pay and for so long as any Covered Bonds remain outstanding
- □ Failure of meeting the ACT on the Test Date after the service of an ACT Breach Notice will constitute an Issuer Event of Default
- □ The formula for calculating the Adjusted Aggregate Loan Amount is as follows:



#### LTV Adjusted Principal Balance of each Loan means

#### the lower of:

- i. the actual Principal Balance of the relevant Loan in the Portfolio^
- ii. the aggregate of the Valuation<sup>†</sup> of each Property multiplied by M<sup>1</sup>

#### minus

#### the deemed reductions

1. where, for all Loans that are not Defaulted Loans, 0.80 or such other amount as may be specified under MAS Notice 648; and where, for all Loans that are Defaulted Loans, zero

<sup>†</sup>Adjusted quarterly via indexation

#### Asset Percentage Adjusted Principal Balance of each Loan means

the actual Principal Balance of the relevant Loan\*\*

minus

the deemed reductions

then multiplied by

the Asset Percentage

^Excluding Top-up Loans and Converted Loans

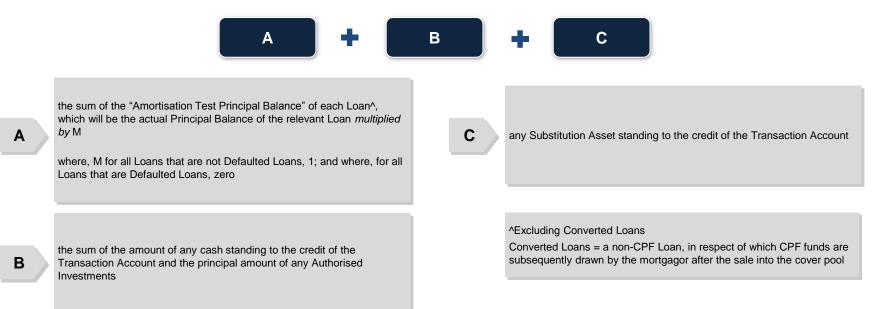
Converted Loans = a non-CPF Loan, in respect of which CPF funds are subsequently drawn by the mortgagor after the sale into the cover pool

### **Amortisation Test**

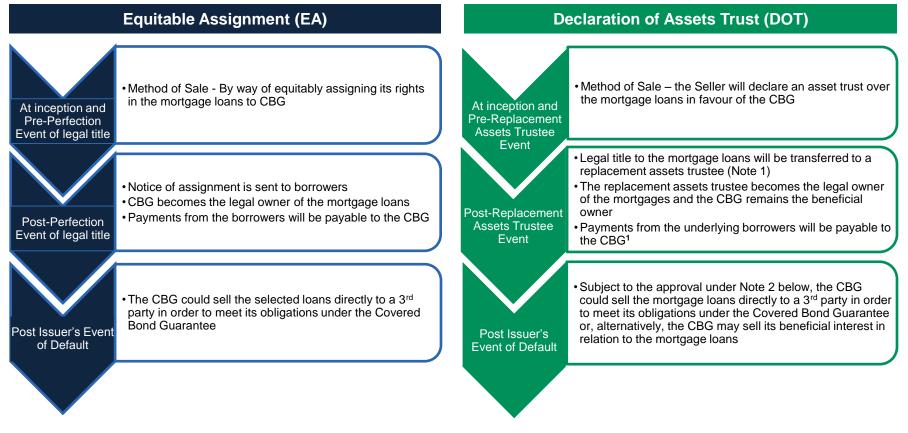
#### **Amortisation Test Aggregate Loan Amount**

#### SGD Equivalent of the Aggregated Outstanding Nominal Amount of the Covered Bonds

- Tested monthly on every Test Date following the service of a Notice to Pay but prior to the service of a CBG Acceleration Notice and for so long as Covered Bonds remain outstanding
- Breach of the Amortisation Test will immediately constitute a CBG Event of Default and will result the service of a CBG Acceleration Notice
- □ The formula for calculating the Amortisation Test Aggregate Loan Amount is as follows:



#### Equitable Assignment -v- Declaration of Assets Trust Structure



**Note 1:** The Assets Trustee or the CBG will obtain one of the below three approvals in order for the mortgages relating to the loans under the DOT structure to be transferred to a new trustee unless the consent of the CPF Board is not required:

- 1. prior consent of the CPF Board;
- a Section 55B/C Court Order approving the transfer if the proposed transferee is licensed to carry on banking business;
- 3. a Sections 210/212 Court Order approving the transfer if the proposed transferee is not licensed to carry on banking business and the prior consent of the CPF Board

**Note 2:** The Assets Trustee or the CBG will obtain any one of the approvals in Note 1 for the transfer to the  $3^{rd}$  party purchaser

**Additional Note**: Pending transfer to a replacement asset trustee, UOB shall continue to be the Assets Trustee and a sale of the beneficial interest in the assets trust to a 3rd party purchaser could still occur

The purchaser would be able to deal with the borrowers and/or enforce the loans (in the name of the assets trustee) via a power of attorney granted by the Assets Trustee

### **WOB**



#### Appendix B: Regulatory Developments

## **WOB**

#### **Basel III Implementation**

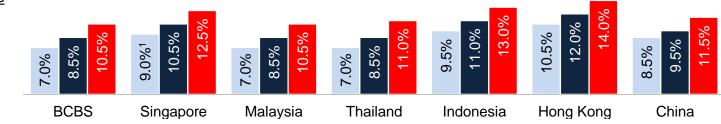
	BCBS	Singapore	Malaysia	Thailand	Indonesia	Hong Kong	China
	BANK FOR INTERNATIONAL SETTLEMENTS			-			
Minimum CET1 CAR	4.5%	6.5% <sup>1</sup>	4.5%	4.5%	4.5%	4.5%	5.0%
Minimum Tier 1 CAR	6.0%	8.0% <sup>1</sup>	6.0%	6.0%	6.0%	6.0%	6.0%
Minimum Total CAR	8.0%	10.0% <sup>1</sup>	8.0%	8.5%	8.0%	8.0%	8.0%
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 Capital 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% <sup>3</sup>	Up to 2.5%
Full Compliance	Jan-19	Jan-19	Pending	Jan-19	Jan-19	Jan-19	Jan-19
D-SIB	_	2.0%	Pending	Pending	1.0% – 2.5%	1.0% – 3.5%	1.0% <sup>4</sup>
G-SIB	1.0% – 3.5%	n/a	n/a	n/a	n/a	n/a	1.0% <sup>4</sup>
Minimum Leverage Ratio	3.0%	Pending	3.0%	3.0%	3.0%	3.0%	4.0%
Full Compliance	2018	Pending	2018	2018	2018	2018	2013

% of risk weighted assets 5

Minimum CET1

Minimum Tier 1 CAR

Minimum Total CAR



Source: Regulatory notifications and rating reports.

1. Includes 2% for D-SIB buffer for the three Singapore banks.

2. Each local regulator determines its own level of countercyclical capital buffer to accumulate capital in periods of economic expansion.

3. HKMA has set a CCyB of 2.5% to be phased in over a period of 3 years. In 2016, the CCyB requirement is 0.625% of RWA.

4. In China, G-SIBs are only subject to the higher of G-SIB and D-SIB buffer

5. Minimum ratios on a fully-loaded basis, including capital conservation buffer and D-SIB capital surcharge, but excluding countercyclical capital buffer and G-SIB

## **WOB**

#### **Resolution Regime Overview**

Resolution Regime in Asia							
Country Public discussion		Existing resolution powers	Factors influencing views on bail-in <sup>1</sup>	How past resolution been handled			
Singapore 🦲	Yes	Statutory bail-in proposed to apply to only subordinated debt	<b>Role as an global financial hub</b> ; strength of system; good coordination between regulator and local banks	Crisis prevention tools; no record of bank failures in the past			
Indonesia 🐣	No	Transfer powers; no statutory bail-in	History of public sector bailouts	Liquidation; public funds			
Hong Kong 🚱	Yes, ended	Transfer powers; statutory bail-in proposed	Role as an international financial centre and presence of G-SIBs	Liquidation; public funds; M&A			
China 🍦	No	Transfer powers; no statutory bail-in	Risk of contagion in debt market; role of government in banking sector	Capital injections; NPL disposals; forbearance			

1. Bold text indicates factors in favor of implementing a bail-in regime; *italic text* indicates factors against

#### **Resolution Regime: Priorities for 2015**<sup>2</sup>

As per Financial Stability Board (FSB), any systemically significant financial institution that fails should be subject to a resolution regime as set out in *The Key Attributes of Effective Resolution Regimes for Financial Institutions*. In Nov 2015, the FSB released two finalised guidance papers on the Principles for Cross-border Effectiveness of Resolution Actions, and Guidance on Cooperation and Information Sharing with Host Authorities of Jurisdictions.

- Jurisdictions should have in place a transparent and efficient process for resolution measures by a foreign resolution authority to have cross-border effect, provided that domestic creditors are treated equitably.
- Authorities must have the confidence that resolution powers are legally enforceable, especially where instruments are governed by a foreign law.
- Jurisdictions should continue to develop statutory frameworks but in the interim use contractual approaches to aid the enforceability of resolution actions. Even after implementation of statutory frameworks, contractual approach can continue to complement such regimes.

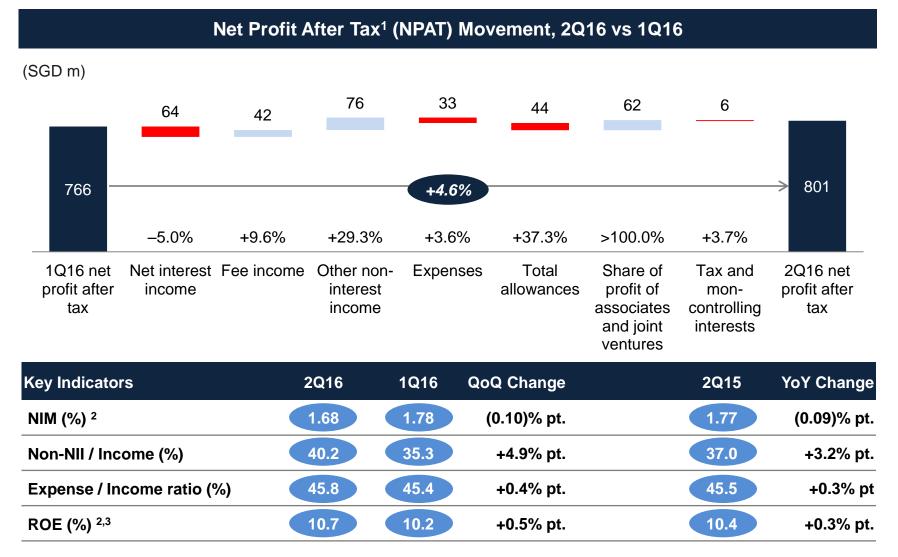
2. Source: Financial Stability Board's *The Key Attributes of Effective Resolution Regimes for Financial Institutions* Note: Malaysia and Thailand have yet to implement a framework for resolution regime.

## **UOB**



# Appendix C: Extract from Latest Results

#### 2Q 16 Financial Overview



1. Relate to amount attributable to equity holders of the Bank.

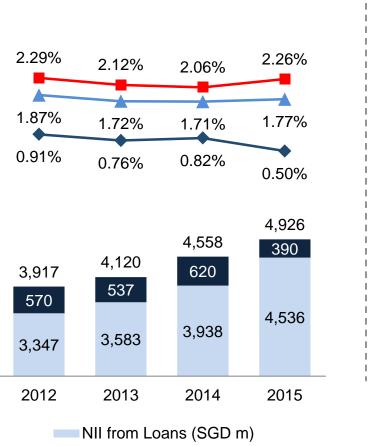
2. Computed on an annualised basis.

3. Calculated based on profit attributable to equity holders of the Bank net of preference share dividends and capital securities distributions.

III UOB

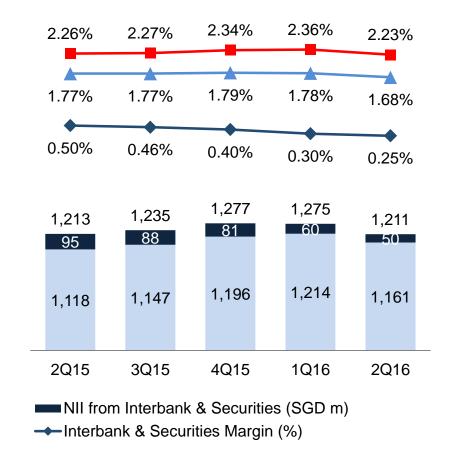
#### Lower Net Interest Income on Tighter Margins but Partly Offset by Loan Growth

Net Interest Income (NII) and Margin



Loan Margin (%)

----Net Interest Margin (%)



Note: The definition of 'Customer Deposits' was expanded to include deposits from financial institutions relating to fund management and operating accounts from 1Q14 onwards. The interest expenses relating to these deposits and the corresponding impact to loan margin and interbank/securities margin for FY2013 were restated accordingly.

#### Steady Non-Interest Income Mix Underpins Diversity

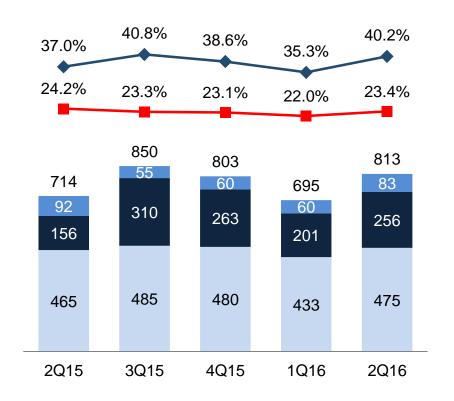
Non-Interest Income (Non-NII) and Non-NII Ratio



Fee Income (SGD m)

Other Non-Interest Income (SGD m)

Core Fee Income / Total Income (%)

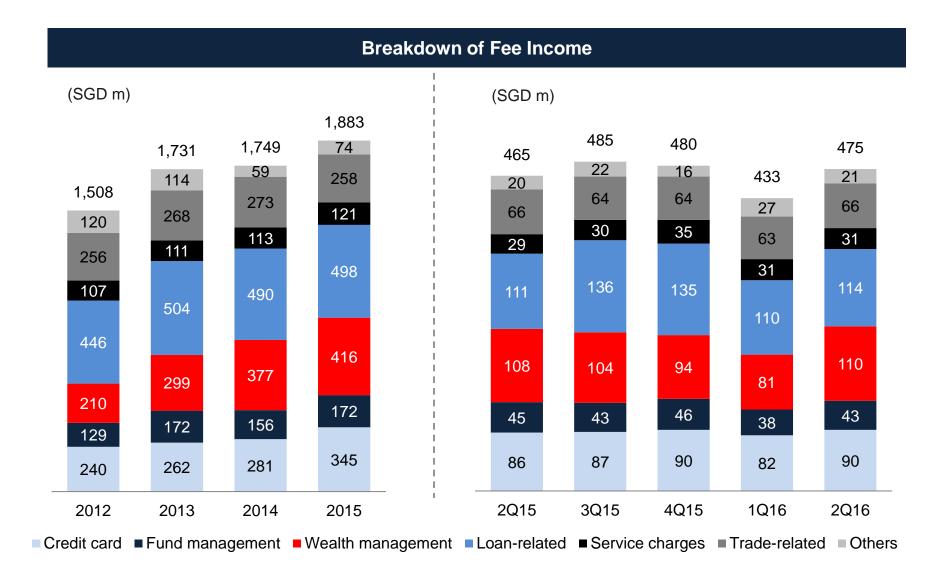


Trading and Investment Income (SGD m)

← Core Non-NII / Total Income (%)

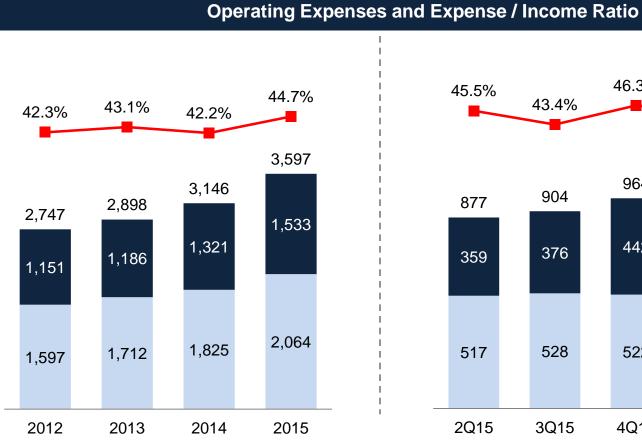
HUOB

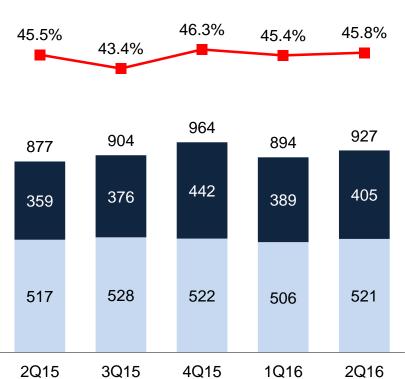
#### **Broad-based Focus in Fee Income**



**HHUOB** 

#### **Maintain Costs Discipline while Investing** in Long-term Capabilities





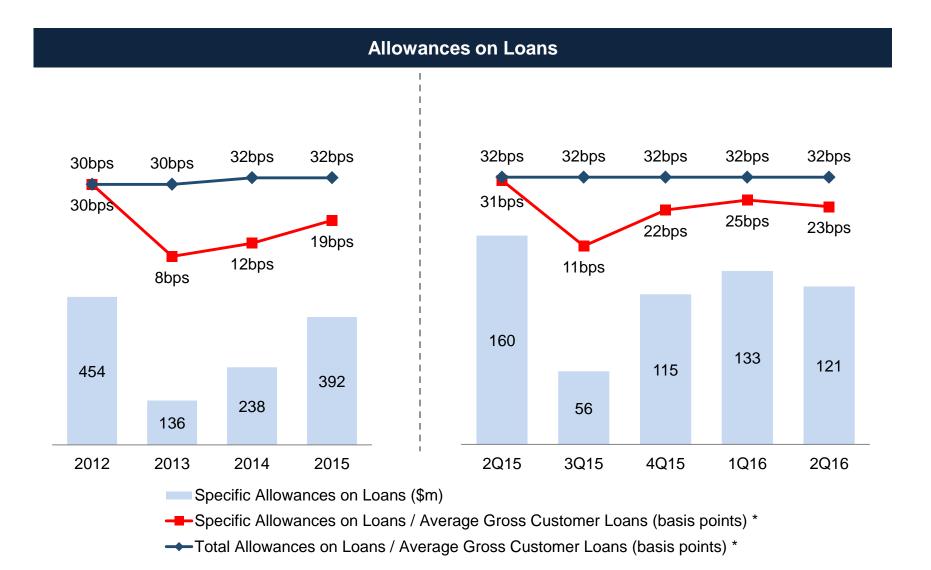
Staff Costs (SGD m)

Other Operating Expenses (SGD m)

Expense / Income Ratio (%)

**UOB** 

#### **Stable Total Credit Costs**



\* Computed on an annualised basis.

**HHUOB** 

#### Loan Growth was 1.2% QoQ in Constant Currency Terms

**HHUOB** 

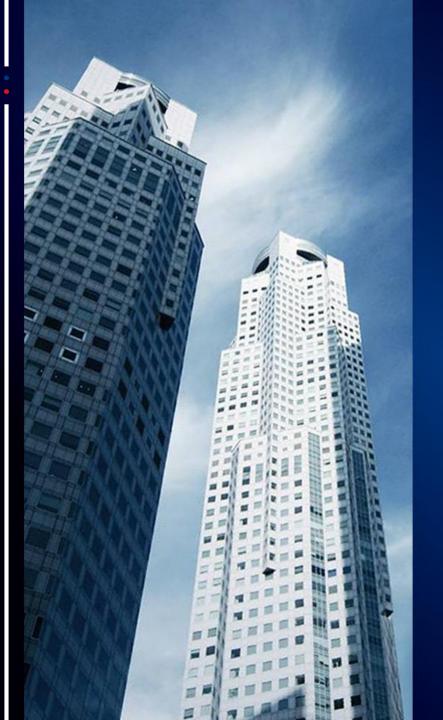
Gross Loans <sup>1</sup>	Jun-16 SGD b	Mar-16 SGD b	QoQ +/(–) %	Jun-15 SGD b	YoY +/(–) %	<b>Gross loans breakdown:</b> Inner circle: Mar-16 Outer circle: Jun-16
Singapore	119.9	117.8	+1.8	115.0	+4.2	Othere
Regional:	72.8	72.4	+0.6	71.1	+2.4	- Others 9% Singapore
Malaysia	25.4	25.5	-0.4	25.3	+0.3	56%
Thailand	11.6	11.4	+2.3	11.0	+5.8	Greater China
Indonesia	11.4	10.9	+4.4	10.8	+5.2	12% 10%
Greater China	24.4	24.6	-0.7	23.9	+1.9	12% 56%
Others	19.6	19.2	+1.9	16.3	+20.1	Indonesia 5%
Total	212.3	209.4	+1.4	202.4	+4.9	5% 5%
						Thailand 12% 6%
USD Loans	37.6	35.2	+6.8	33.6	+12.0	Malaysia
						12%

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).

#### **Movements in Non-Performing Assets**

	2Q16 \$m	1Q16 \$m	2Q15 \$m
NPA at start of period	3,016	3,066	2,692
New NPA	802	344	372
Upgrades, recoveries and translations	(548)	(235)	(263)
Write-offs	(106)	(159)	(96)
NPA at end of period	3,164	3,016	2,705

**UOB** 



## **UOB**

## Thank you

