Covered Bond

A logical development for issuers and investors in ASEAN

T&M Structured Debt Solutions ("T&M – SDS")

September 2016

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SECTION 1

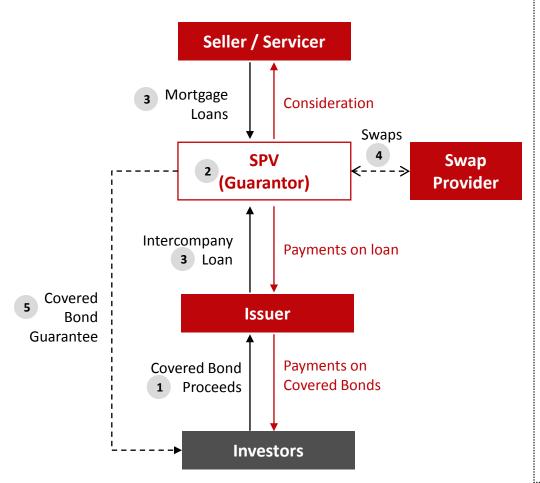
What is a Covered Bond?



1. What is a Covered Bond?

- **Dual Recourse:** Covered Bond is an instrument with recourse to the issuer (financial institution) as well as a pool of ring-fenced assets (typically residential mortgage loans) in the case of issuer default.
- Credit Enhancement: Asset pool over-collateralisation (i.e. cover pool exceeds issuance size) provides additional credit enhancement.
- Better Rating Than Senior Unsecured: Rating is higher than senior unsecured given additional recourse to the cover pool of assets (typically AAA-rated).
- Assets are Ring Fenced: In common law jurisdictions, ring-fencing is created by equitable assignment of
 assets to a SPV. Assignment only becomes legal assignment (and borrowers informed) in the event of an
 issuer default.
- On Balance Sheet: Assets remain on the issuer's consolidated balance sheet; i.e. no de-recognition even though the pool is ring-fenced.
- **Regulated:** Local regulators may place caps on size of covered bond issuance to mitigate asset encumbrance to detriment of depositors' interests (e.g. APRA capped issuance at 8% of local assets; MAS capped at 4% on bank's total assets¹).

1. What is a Covered Bond?



Structure Outline*:

- Issuer issues Covered Bonds to Investors to raise funding.
- 2. A Special Purpose Vehicle ("SPV") will be set up to purchase rights on a portfolio of residential mortgages from the Seller via equitable assignment.
 - Seller continues to capture economic benefits of the mortgages under normal circumstances.
- SPV will take an intercompany loan (subordinated to Covered Bond) from Issuer to fund the purchase of mortgages loans.
- 4. SPV will hedge any interest rate and/or FX exposures arising from its asset and liability mismatches.
- In consideration of the Issuer providing the intercompany loan, SPV will provide the Covered Bond investors a guarantee on the Issuer's principal and interest obligations relating to the Covered Bonds.
 - Guarantee is backed by a pledge on all of SPV's assets, including its equitable rights on the mortgage portfolio.



^{*} The diagram is an example of a covered bond programme structure established in some common law jurisdictions. It is to note that the programme structure varies, and will depend on the laws and regulations of each jurisdiction.

SECTION 2

Why Issuers should consider issuing Covered Bonds?



Stable funding avenue as seen in other markets even in times of market stress

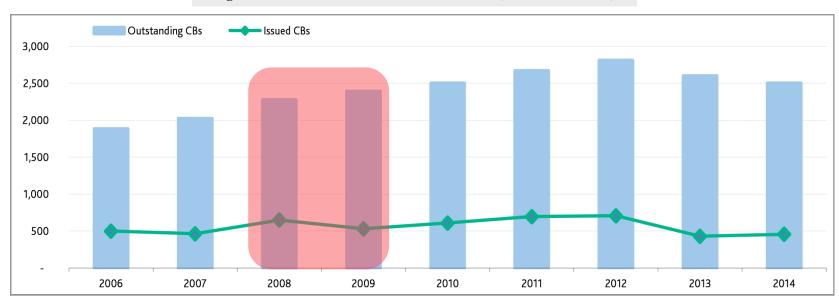
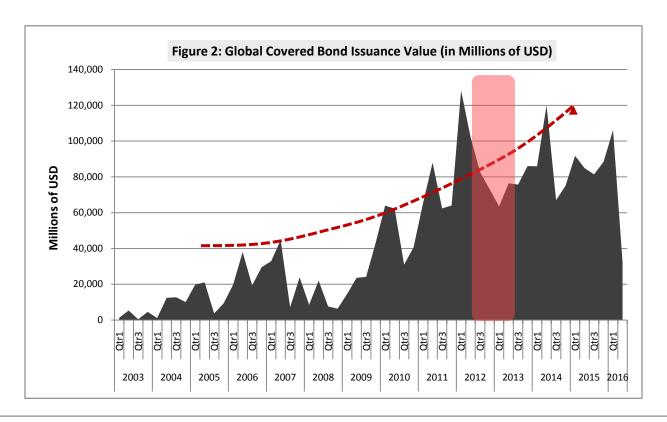


Figure 1: Global Covered Bond Issuance Value (in billions of EUR)

Covered Bond issuance remained relatively stable during the 2008-2009 global financial crisis.

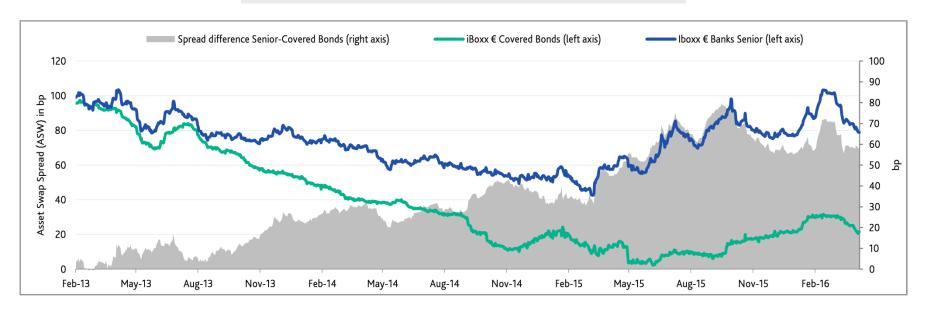
Stable funding avenue as seen in other markets even in times of market stress



During a period of liquidity squeeze (2H2012 to 1H2013) when bank lending tightened, covered bond issuance maintained close to the average of US\$77.0bn, indicating that issuers were still able to access the market for funding in times of market stress.

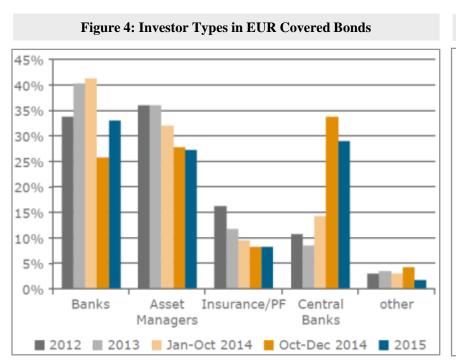
Lower issuance cost compared to Senior Unsecured debt

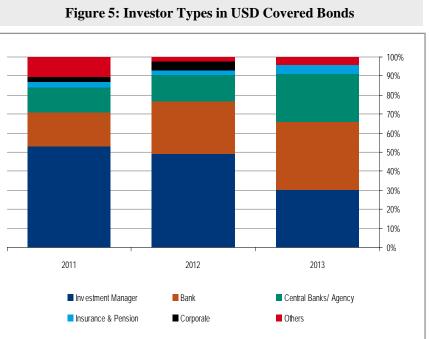
Figure 3: Spreads between Bank Senior Unsecured and Covered Bonds



- Covered Bonds have **lower spreads** when **compared with senior unsecured debt** in Europe (largest covered bond market). The widening is largely attributed to the European Central Bank's (ECB) large purchases of covered bonds via its Covered Bond Purchase Programme (CBPP).
- Lower cost will also help non-bank financial institutions which have more limited sources of funding as compared to banks which can tap into their cheaper deposit funding.

Diversify investor base





• The top three investor types for both EUR and USD Covered Bonds are **Asset Manager** / Investment Manger, **Banks** and **Central Banks/Agencies**.

Better duration matching between asset and liability

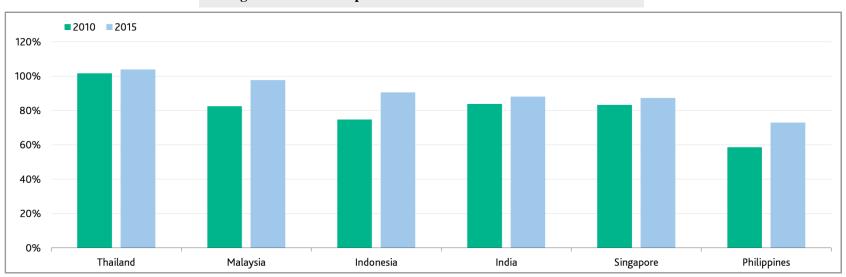


Figure 6: Loan-to-Deposit Ratios for Banks in ASEAN and India

- Many financial institutions have, in the past, relied heavily on deposit funding which is mostly short term.
- Loan growth has risen faster than deposit inflows in the last few years ASEAN and that has caused a strain in duration alignment between the asset (i.e. medium to long term loans) and liability (i.e. mainly deposits).
- Covered bonds, which can have longer duration as compared to deposits, can help financial institutions to better match their assets.

SECTION 3

Why Investors should consider investing in Covered Bonds?



Quality Investments

- Investors will be exposed to **high quality credit** as Covered Bonds are typically AAA rated and have **higher rating than the issuer's senior** unsecured debt.
- Based on a study by Moody's, on historical rating transition rates for covered **bonds between 1993 and 2013**, which includes the global financial crisis, no covered bonds defaulted, even though 20 covered bond issuers defaulted on their unsecured debt, deposits or subordinated debt.



Better Liquidity

- Covered Bonds are generally more liquid through larger issue size.
- Favourable treatment under various regulations such as Solvency II, ECB reportules and Basel III will also create a larger pool of investors, thereby increasing liquidity.
- In Europe, Covered Bonds are excluded from bail-in* if a bank gets into financial difficulty.
- Covered bonds will be eligible as liquid assets under High Quality Liquid Assets ("HQLA") to meet Liquidity Coverage Ratio ("LCR"). However, senior unsecured bank debt will not qualify as a liquid buffer asset. The introduction of LCR is likely to imply increased bank purchases of covered bonds, given the relative attractiveness of covered bonds compared to other securitised assets.
- Covered Bonds are also treated favorably by central banks for repo purchases.

^{*} The objective of the bail-in mechanisms is for bondholders to share the costs of crisis management prior to insolvency. The restructuring regimes will put unsecured bondholders in a worse position. However, covered bonds' seniority in capital structure helped during the crisis as they are exempted from this resolution regime.





Dual Recourse

- Covered bonds are debt instruments secured by a covered pool of financial assets to which **investors** have a preferential claim in the event of default.
- This safety feature of covered bonds make it a preferred asset class for investors because investors have dual recourse to the covered pool of financial assets and the issuer.



Lower Capital Cost

- Covered Bonds typically receive **preferential capital treatment** as compared to senior unsecured and securitised assets (e.g. RMBS). This provides an incentive for banks and other financial institutions to invest in Covered Bonds.
- Insurance companies in Europe also receive **favorable capital charge treatment under the Solvency II** requirements.

SECTION 4

Appendix

Regulatory Environment and Impact on the Covered Bonds Market

Major financial regulatory changes – such as Basel III and Solvency II – confer preferential treatment towards covered bonds from the risk and capital charges perspective versus other securitised assets.

LIQUIDITY COVERAGE RATIO ("LCR")

- Basel III introduced the Liquidity Coverage Ratio (LCR), where banks must construct a liquidity pool of High Quality Liquid Assets (HQLA) to cover cash outflows in a stress scenario.
- The LCR has been introduced in 2015 in most locations with an initial 60% liquidity requirement, rising annually by 10% to 100% on January 2019.
- Composition of Liquidity Pool:

Level	Assets	% of pool of HQLA			
Level 1	Cash and highly-rated government securities	No cap			
Level 2A, 15% haircut	AA- or better rated corporate and covered bonds	Up to 40%			
Level 2B, 25% to 50% haircut	RMBS rated AA or better Equities and corporate bonds rated A+ to BBB+	Up to 15%			

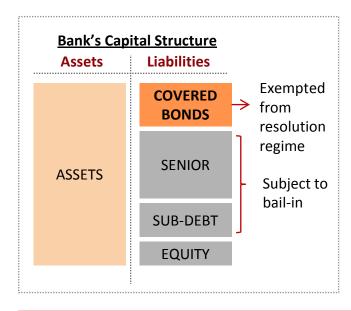
- Covered bonds and RMBS will be eligible as liquid assets under Level 2A and Level 2B assets respectively. However, senior unsecured bank debt will not qualify as a liquid buffer asset.
- The introduction of LCR is likely to imply increased bank purchases of covered bonds, given the relative attractiveness of covered bonds compared to other securitised assets.

Regulatory Environment and Impact on the Covered Bonds Market (cont'd)

NET STABLE FUNDING RATIO (NSFR)

- NSFR is intended to promote longer-term funding of on- and off- balance sheet exposures.
- Covered bonds are long term funding tools, and fit under the NSFR approach.

RESTRUCTURING PROCEDURES AND BAIL-IN MECHANISMS



- The objective of the bail-in mechanisms is for bondholders to share the costs of crisis management prior to insolvency.
- The restructuring regimes will put unsecured bondholders in a worse position. However, covered bonds' seniority in capital structure helped during the crisis as they are exempted from this resolution regime.
- As of today, covered bonds from Washington Mutual, Northern Rock or Bradford & Bingley, who were all nationalized as a result of the financial crisis, have neither defaulted nor accelerated.
- More recently, in Greece and Portugal, covered bonds outperformed their domestic sovereign counterparts as stress magnified in these countries.

Favourable regulatory provisions are likely to continue to contribute to high investor demand for covered bonds, indicating continued strong markets in covered bonds going forward.

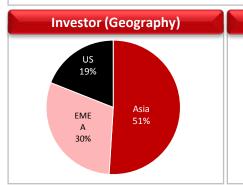
DBS Covered Bond Issuances

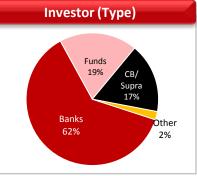
Singapore's Inaugural Covered Bonds

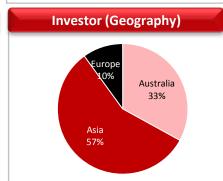
- DBS (T&M-SDS), together with Barclays, arranged and successfully established Singapore's (and South East Asia's) inaugural USD 10 billion Global Covered Bond Programme in June 2015 under MAS 648.
- The first series of 3-year AAA-rated USD 1 billion Covered Bonds was issued on 06 August 2015.
- Covered Bonds pay a fixed coupon of 1.625% p.a. payable semi-annually and they are guaranteed by Bayfront Covered Bonds Pte. Ltd. ("BCB").
- Guarantee is secured by (1) a portfolio of mortgage loans purchased by BCB from DBS and (2) other assets of BCB.
- European Covered Bond Council ("ECBC") has granted DBS' Covered Bonds the coveted covered bond label, making the programme the first non-EU programme to achieve this status.
- Investor receptivity was excellent for an inaugural issue of a new asset class, and key institutional investors included banks (62%); asset/fund managers (19%), central banks, supranationals and sovereign wealth funds (17%).
- Asia took 51% of the offering, while EMEA and US investors received 30% and 19% respectively.

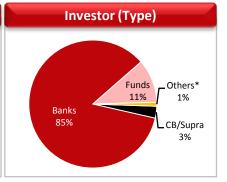
Second Series of Covered Bonds Issued in AUD

- DBS successfully priced its second series of 3-year AUD 750 million covered bonds on 25 May 2016, with the issue date expected to be on 3 June 2016.
 This is the first ever Kangaroo Covered Bond from an Asian issuer.
- The covered bonds pay a floating coupon of BBSW + 0.77% p.a. payable quarterly and are guaranteed by Bayfront Covered Bonds Pte. Ltd. ("BCB").
- Guarantee is secured by (1) a portfolio of mortgage loans purchased by BCB from DBS and (2) other assets of BCB.
- Investor receptivity was excellent for the first AUD denominated covered bonds by DBS (more than 1.3 times oversubscribed from 35 accounts) despite the volatile market conditions. The issuance was upsized from AUD 500 million to AUD 750 million due to high demand in the order book.
- Key institutional investors included banks (85%); asset/fund managers (11%); central banks, supranationals and sovereign wealth funds (3%).
- Asia took 57% of the offering, while Australia and Europe investors received 33% and 10% respectively.











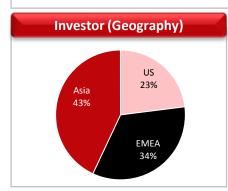
Asia Covered Bond Issuances

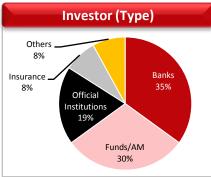
Kookmin Bank Issues Asia's First Covered Bond of 2016

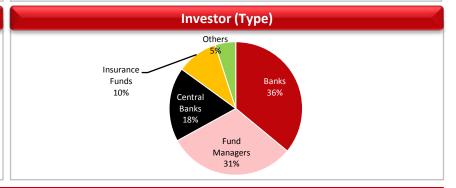
- DBS, together with ANZ, BNPP and Commerz, successfully closed and executed for KB Kookmin Bank ("KB"), a AAA-rated, 5 year, USD 500 million Statutory Covered Bond Issue. This is KB's second issuance under its USD 8 billion Global Covered Bond Programme.
- The Statutory Covered Bonds pay a fixed coupon of 2.25% p.a. payable semiannually and under the Korean Covered Bond Laws, they will have the benefit of a statutory preference and priority of claims over the Cover Pool that comprises residential mortgage loans secured by a first-ranking priority mortgage, and secured over a residential property located in Korea.
- The KB Statutory Covered Bonds was 1.6 times oversubscribed; especially from Asian investors with allocation increasing from 11% in the first issue to 43% in the current issue.
- Investors from US (23%) and EMEA (34%) also came in strongly to complete the diversified investor pool in terms of geography.
- As for investor types, Banks, are the main anchor with 35% allocation. Funds and Asset Managers came in second at 30% allocation while Official Institutions and Insurance were allocated 19% and 8% respectively.

UOB Issues Asia's first Euro-denominated Covered Bonds

- UOB became the first bank in Asia to distribute euro-denominated fixed-rate, Aaa/AAA-rated covered bonds, raising EUR500 million.
- This is UOB's first series under its USD 8 billion Global Covered Bond Programme, and was issued on 3 March 2016.
- The Covered Bonds will bear a fixed coupon of 0.25% per annum payable annually in arrears.
- The Covered Bonds are secured by a guarantee from Glacier Eighty Pte. Ltd., backed by a portfolio of quality mortgage loans linked to residential properties in Singapore.
- Investor receptivity was excellent despite volatility and uncertainty in the financial markets, with the transaction's order book building up to more than EUR1.3 billion (2.6 times oversubscribed).
- The Covered Bonds attracted more than 75 institutional investors who were predominantly from Europe.
- Key institutional investors included banks (36%), fund managers (31%), central banks (18%) and insurance funds (10%).



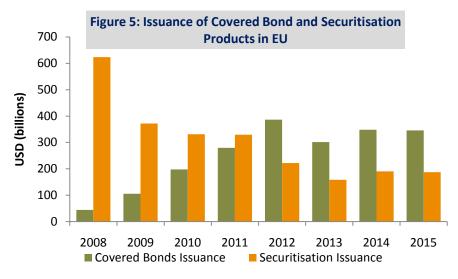


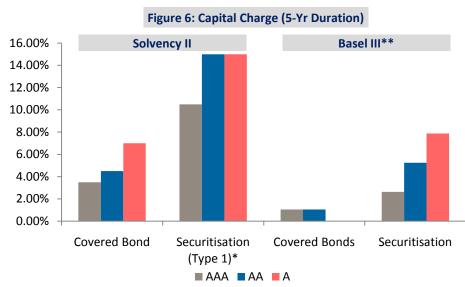




Covered Bonds vs. Securitisation

- While the issuance of covered bonds has remained relatively stable over the years (with the notable exception in 2012 when banks reduced borrowing), the issuance of securitisation products has decreased post-financial crisis (Figure 5).
- Alongside the resilience demonstrated, significantly lower capital charge on covered bonds (Figure 6) than
 those for similarly-rated securitisation, has encouraged insurers and banks to opt to invest in covered
 bonds rather than securitisation products.







Source: Bloomberg, AFME Securitisation Report, ECBC Factbook 2015, Ageas

^{*}Solvency II distinguishes between "Type 1" and "Type 2" securitisation,s where Type 1 securitisations are considered to be "high quality", and meets certain criteria set by the European Commission.

^{**}Covered bond capital charge is based on Basel III/CRD IV standard capital charge; Securitisation capital charge is based on Basel III external ratings-based capital charge.

Covered Bonds vs. Securitisation

Comparison Parameters	Senior Unsecured Bonds	Securitisation (RMBS)	Covered Bonds
Recourse	Only to Issuer	Only to assets	Dual recourse
Debt rating	Based on the payment schedule of the bonds	Based on the principal payment of the underlying assets	Bullet repayment and can be extended if the Issuer is in default
Principal payment	Equivalent to Issuer's rating	Higher than Issuer's unsecured bond rating	Higher than Issuer's unsecured bond rating

Existing Legal Frameworks

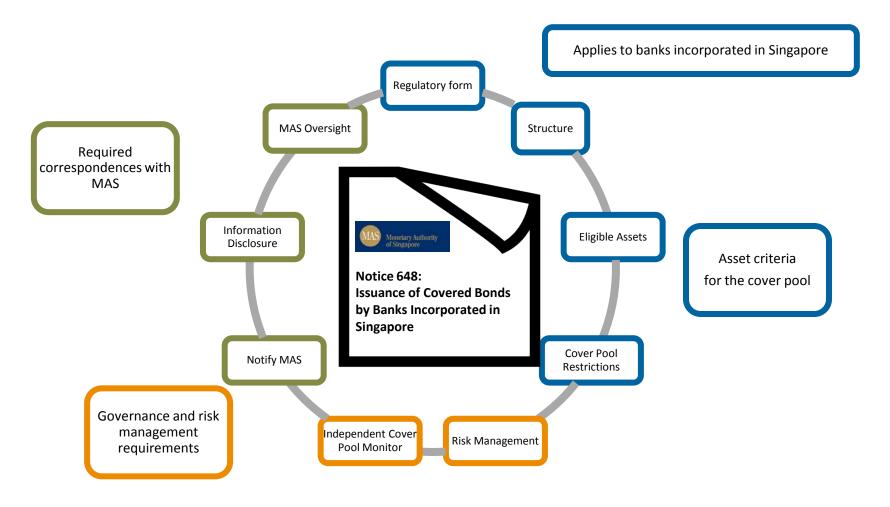
- Most jurisdictions adopt a legislative approach in governing their covered bond markets (e.g. Australia, Germany and South Korea), while others (such as Singapore and the U.K.) have opted instead for the common law approach.
- In Singapore, existing contract and insolvency laws are deemed to provide a sufficiently robust legal framework through which covered bonds can be structured and issued, with no further requirements for a covered bond legislative framework.

	Australia	Germany	South Korea	UK	Singapore
Specific Covered Bond Legislation	Banking Amendment (Covered Bonds) Bill Act 2011	PfandbriefAct	Covered Bonds Act of Korea	UK Regulated Covered Bond Regulations	MAS Notice 648 pursuant to Singapore Banking Act
	Schedule 1 of the Bill amends the Banking Act 1959 to allow ADIs to issue covered bonds and establishes a regulatory framework for covered bonds issued by Australian banks and other regulated deposit-taking institutions (ADIs).	► The PfandbriefAct (Pfandbriefgesetz – PfandBG) came into force on 17 July 2005; and was amended in 2009, 2010, 2013, 2014, and 2015	 ▶ The Covered Bond Act was passed by the National Assembly of Korea on December 19, 2013, and came into effect 3 months after it was promulgated ▶ First legislative covered bond in Asia 	 RCB issuers are subject to an extensive initial application process, and regular stress testing and supervisory monitoring by the Financial Conduct Authority FCA has a wide range of enforcement powers to ensure issuers comply with the Regulations, including the power to issue directions that are enforceable by the courts 	 Requirements set out in Notice 648 by MAS are mandatory for banks as it is part of the banking Act However, there is no special covered bond law in place in Singapore
Legal Framework for Issuer Bankruptcy	➤ Specific legal framework supersedes the general insolvency law	Specific legal framework supersedes the general insolvency law (30-36a of the Pfandbrief Act)	 Specific legal framework supersedes the general insolvency law The Covered Bond Act stipulates that the cover pools of the issuers, which are registered with the Financial Supervisory Service, will not be subject to insolvency proceedings of the issuers 	 General insolvency law However, the RCB legislation amends certain provisions of the general insolvency law 	 General insolvency law According to MAS Notice 648, the issuer shall obtain a legal opinion to confirm that assets included in the cover pool are beyond its and its creditors' reach, even in an insolvency situation

Source: European Covered Bond Council

Singapore – Key Sections of MAS Notice 648

MAS released Notice 648 Issuance of Covered Bonds by Banks Incorporated in Singapore on **31 December 2013** and it was last revised on **4 June 2015**.



Singapore – Key Sections of MAS Notice 648 (cont'd)

The Monetary Authority of Singapore ("MAS") issued a revised MAS Notice 648 on 4 Jun 2015, amending the original notice issued on 31 Dec 2013 to further facilitate the issuance of covered bonds in Singapore :

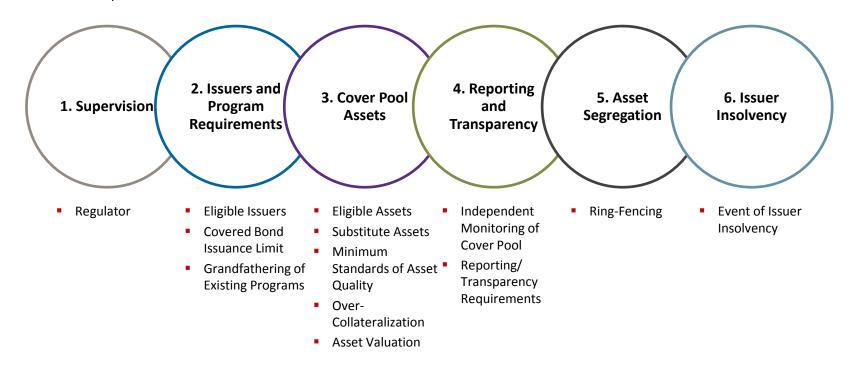
Regulatory Framework	Notice issued pursuant to MAS' powers under the Singapore Banking Act; applies to banks incorporated in Singapore.
Dual Recourse	Covered bonds means any bonds, notes or other debentures issued by a bank or an SPV where payment of liabilities are (i) secured by a cover pool; and (ii) recoverable from the bank regardless of whether the cover pool is sufficient to pay off such liabilities.
Segregation Structure	Allows for transfer of assets to Special Purpose Vehicle ("SPV") by either (i) equitable assignment, or (ii) for the bank or replacement trustee to hold assets in trust for the beneficial interest of the SPV.
Cap on Size of Cover Pool	▶ 4% of bank's total assets, excluding assets held for regulatory reserves and liquidity requirements and assets of subsidiaries.
Eligible Cover Pool Assets	 Residential mortgage loans (and other loans secured by the same residential property as well as other related security such as guarantees and indemnities).
Loan-to-Value ("LTV") Limits	▶ LTV limit of 80% applies at the point of inclusion into the cover pool. Subsequently, residential mortgage loans with LTV in excess of 80% may be retained in the cover pool, provided (i) loans with LTV limits of 80% are counted towards the minimum over-collateralisation requirement; and (ii) entire amount of loans will be subject to 4% encumbrance limit.
Substitution Assets	► Cash (including foreign currency); Singapore Government Securities; and MAS Bills
Cap on Substitution Assets	▶ 15% of total value of cover pool, except for (i) covered bond payment obligations (due in the next 12 months) and (ii) one-month timing differences in the receipt and use of the assets.
Mandatory Over- Collateralisation	At least 103% at all times of the nominal amount of covered bonds outstanding, and value of loans capped at 80% of current property valuation.
Independent Cover Pool Monitor	▶ To be appointed to verify annually the accuracy of asset register & compliance with regulations, assess the adequacy of issuer's risk management and internal controls, and report to MAS.
Notification to MAS	Issuers to furnish MAS with information on its covered bond programme one month prior to issuance, to inform MAS of issuance three days beforehand and to submit memorandum of compliance.

Comparison of Covered Bond Frameworks

Across 5 key countries:



• Areas of comparison include:



Comparison of Covered Bond Frameworks

	Australia	Canada	UK	Korea	Singapore
Legislation/ Regulations*	Banking Amendment (Covered Bonds) Act 2011	Jobs, Growth and Long Term Prosperity Act	UK Regulated Covered Bond Regulations	Covered Bonds Act of Korea	MAS Notice 648 pursuant to Singapore Banking Act
Regulator	Australian Prudential Regulation Authority	 Canada Mortgage and Housing Corporation 	► The Financial Conduct Authority	Financial Services Commission of Korea	► Monetary Authority of Singapore
Eligible Issuers	Authorized Deposit-taking Institutions (ADI) Banks Credit unions Building societies A group of ADIs can enter into an arrangement to facilitate the issuance of covered bonds	 A federal financial institution as defined in Section 2 of the Bank Act A cooperative credit society that is incorporated and regulated by or under an Act of the legislature of a province 	 Any credit institution authorized to issue regulated covered bonds The issuer must satisfactorily prove to the regulator that its programme complies with the regulations before being admitted to the Regulated Covered Bond Register 	 Banks licensed under the Bank Act, Industrial Bank of Korea, Korea Development Bank, NH Bank, EXIM Bank of Korea and the credit business division of the National Federation of Fisheries Cooperative. The financial institution must have equity capital of at least KRW 100bn and a BIS ratio of 10% or greater Korea Housing Finance Corporation and Korea Finance Corporation 	▶ All banks incorporated in Singapore
Cover Pool Encumbrance Limit	▶ 8% of Australian assets	▶ 4% of total assets	► Limit decided on a case-by-case basis for each issuer and not publicly disclosed	▶ 4% of total assets	▶ 4% of the total assets (excluding assets earmarked for regulatory reserves and liquidity requirements and assets of subsidiaries)
Eligible Cover Pool Assets	Residential mortgages (80% LTV) Commercial mortgages (60% LTV)	 Public sector debt Uninsured Canadian residential mortgage loans (80% LTV) 	 Public sector debt Bank debt Secured first-ranking mortgage / real estate loans Shipping loans Social housing loans Public-private partnership loans secured by a public body with step-in rights 	 Residential mortgages <70% Senior RMBS from the Issuer Public sector debts less Shipping and aircraft mortgages less than 70% LTV 	 Residential mortgages Any other loans secured by the same residential property Related security, such as guarantees and indemnities Interest held by bank as trustee for the SPV in relation to the above 80% LTV for Mandatory OC
Substitution Assets	 Cash, bank bills, Government debt instrument issued by Commonwealth, a State or a Territory May not exceed 15% of cover pool 	 Securities that are issued by the government of Canada May not exceed 10% of the cover pool 	 Sterling-denominated short-term investments including, bank deposits, debt securities with a minimum AA- rating or P-1 / A-1+ / F1+, AAA-rated RMBS, government debt May not exceed 10% of the cover pool 	 Liquid assets such as cash and certificates of deposit issued by other financial institutions with maturities of less than 100 days May not exceed 10% of the cover pool 	 Cash, Singapore Government Bonds and MAS Bills May not exceed 15% of the cover pool, except for (i) covered bond payment obligations due in the next 12 months and (ii) one-month timing differences in receipt and uses of the assets
Mandatory OC	▶ 103%	No legislative minimum	▶ 108%	▶ 105%	▶ 103%
Ring-fencing	► Covered assets assigned to SPV	► Covered assets assigned to SPV	► Covered assets assigned to SPV	On balance sheet by legislation	 Covered assets assigned to SPV or held on trust by the bank for the SPV
Asset Monitor	▶ Yes	▶ Yes	▶ Yes	▶ Yes	▶ Yes

	Australia	Canada	UK	Korea	Singapore
	Banking Amendment (Covered Bonds) Act 2011	Jobs, Growth and Long Term Prosperity Act	UK Regulated Covered Bond Regulations	Covered Bonds Act of Korea	Notice 648 Issuance of Covered Bonds by Banks Incorporated in Singapore
Supervision					
Regulator	 Australian Prudential Regulation Authority (APRA) 	 Canada Mortgage and Housing Corporation (CMHC) 	► The Financial Conduct Authority (FCA) is responsible for the initial registration and ongoing supervision of regulated covered bond programs	► Financial Services Commission of Korea (FSC)	 Monetary Authority of Singapore (MAS)
Issuers and Progr	amme Requirements				
Eligible Issuers	 Authorized Deposit-taking Institutions (ADI) ▶ Banks ▶ Credit unions ▶ Building societies ▶ A group of ADIs can enter into an arrangement to facilitate the issuance of covered bonds 	 A federal financial institution as defined in Section 2 of the Bank Act A cooperative credit society that is incorporated and regulated by or under an Act of the legislature of a province 	 Any credit institution authorized to issue regulated covered bonds The issuer must satisfactorily prove to the regulator that its programme complies with the regulations before being admitted to the Regulated Covered Bond Register 	Korea, Korea Development Bank, NH Bank, EXIM Bank of Korea and the credit	► All banks incorporated in Singapore
Cover Pool Encumbrance Limit	Covered bonds cannot be issued if assets in the cover pool (including overcollateralization) exceeds 8% of the issuing ADI's Australian assets (at the time of issuance) or such other percentage as prescribed by APRA	Per the Office of the Superintendant of Financial Institutions Canada (OSFI), covered bond issuance is limited to 4% of total adjusted assets	► The issuance limit is evaluated on a case-by-case basis (although previously it was a soft limit of 20% of total assets)	The Covered Bond Act prescribes covered bonds issuance shall not exceed 8% of its total assets; the Presidential Decree further limits this to 4% of its total assets as the end of the fiscal year immediately preceding the scheduled date of issuance.	Covered bond issuance is subjected to the aggregate value of assets in the cover pool being capped at 4% of the total assets of the bank, excluding assets earmarked for regulatory reserves and liquidity purposes and subsidiaries assets

	Australia	Canada	UK	Korea	Singapore
	Banking Amendment (Covered Bonds) Act 2011	Jobs, Growth and Long Term Prosperity Act	UK Regulated Covered Bond Regulations	Covered Bonds Act of Korea	Notice 648 Issuance of Covered Bonds by Banks Incorporated in Singapore
Issuers and Program	nme Requirements				
Grandfathering of Existing Programs	► Not applicable	Implied that grandfathering will be allowed; however, programs that utilize CMHC- insured collateral (all except RBC's) will need to be wound down	Yes, subject to the approval of the regulator	Not applicable	▶ Not applicable
Cover Pool Assets					
Eligible Assets	 Residential mortgages Commercial mortgages APRA has the regulatory power to add asset classes 	 Uninsured Canadian residential mortgage loans 	 Public sector credits / guarantees Bank debt Secured first-ranking mortgage / real estate loans Shipping loans Social housing loans Public-private partnership loans secured by a public body with step-in rights 	 Residential mortgages Senior RMBS from the Issuer Public sector debts Shipping and aircraft mortgages 	 Residential mortgages Any other loans secured by the same residential property Assets including intangible properties that form part of all the security provided for the residential mortgage loans, such as guarantees and indemnities Interest held by bank as trustee for the SPV in relation to the above
Substitute Assets	 Cash Deposit held with an ADI and convertible into cash within 2 business days Bank accepted bills or CDs not issued by ADI issuing the covered bonds that are repo eligible and mature within 100 days (≤15% of cover pool) Government debt instrument issued by Commonwealth, a State or a Territory 	 Securities that are issued by the government of Canada May not exceed 10% of the cover pool 	 Sterling-denominated short-term investments including: ▶ Bank deposits ▶ Debt securities with a minimum AA- rating or P-1/A-1+/F1+ ▶ AAA-rated RMBS notes ▶ Government debt 	 Liquid assets such as cash and certificates of deposit issued by other financial institutions with maturities of less than 100 days May not exceed 10% or the cover pool 	Treasury Bills and MAS Bills May not exceed 15% of the cover pool, except for (i) next 12 months covered bond

		Australia		Canada		UK		Korea		Singapore
		Banking Amendment (Covered Bonds) Act 2011		Jobs, Growth and Long Term Prosperity Act		UK Regulated Covered Bond Regulations		Covered Bonds Act of Korea		lotice 648 Issuance of Covered onds by Banks Incorporated in Singapore
Cover Pool Assets										
Minimum Standards of Asset Quality	>	Residential mortgages <80% LVR Commercial mortgages <60% LVR	>	Residential mortgages <80% LTV May not exceed four residential units	•	Residential mortgages <80% LTV Commercial mortgages <60% LTV Shipping loans <60% LTV	•	Residential mortgages <70% LTV Ships and aircraft loan receivables <70% LTV	•	The portion of residential mortgage loans in excess of 80% of current market valuation not eligible for calculation of mandatory overcollateralization
Over Collateralization ("OC")	•	The Bill specifies a minimum overcollateralization of 103%	•	No legislative minimum	•	Minimum overcollateralization is evaluated by the FSA on a program-by-program basis, but will be 8% as of 1/1/2013	•	Minimum overcollateralization of at least 105%	•	Minimum overcollateralization of at least 103%

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Cover Pool Assets									
Asset Valuation	ADIs must ensure the value of assets in a cover pool is at all times at least equal to 103% of the face value of the covered bonds	•	The ACT requires that the market value of the covered bond collateral is greater than the outstanding covered bonds The Valuation Calculation is the present value of the covered bond collateral relative to the market value of the outstanding covered bonds (excluding hedges) Following issuer default, the Amortization Test requires that the cover pool assets exceed the aggregate principal amount of outstanding covered bonds	>	The ACT requires that the balance of the mortgages in the cover pool, adjusted in accordance with UK house price indices, exceeds the balance of the outstanding covered bonds by the minimum overcollateralization amount Following issuer default, the Amortization Test requires that the cover pool assets exceed the aggregate principal amount of outstanding covered bonds If the issuer's ratings fall below A-1+/P-1/F1+, the issuer must establish a reserve fund equal to one month's interest payments on the covered bonds	•	The value of assets in the cover pool must be at least equal to 105% of the face value of the covered bonds	•	Banks must ensure the value of assets in a cover pool is at all times at least equal to 103% of the face value of the covered bonds. The portion of the residential mortgage loans of up to 80% current market valuation of the residential property is used Valuation of residential properties used to secure the loans shall be conducted at least annually or more frequent in periods of significant changes in the market conditions

	Australia	Canada	UK	Korea	Singapore
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Reporting and Tra	nsparency				
Independent Monitoring of Cover Pool	 The ADI issuing the covered bonds is required to appoint an independent cover pool monitor Functions of the cover pool monitor include: Assessing the keeping of an accurate register of the assets in the cover pool Assessing compliance requirement with respect to quality and value of assets in the pool 	 ▶ The issuer must appoint a cover pool monitor, a qualified auditor or any other external party approved by CMHC, to: ▶ Confirm mathematical accuracy of tests and calculations ▶ Confirm mathematical accuracy of tests and calculations ▶ Perform other tests regarding assets and liabilities of the registered covered bond programme ▶ Prepare and delivers to the registered issuer, CMHC and the Bond Trustee an annual report, detailing the scope of the work, confirming the sampling methodology used to assess the accuracy of covered bond collateral records and detailing findings 	 The Regulated Covered Bond Regulations supersede general insolvency law An independent cover pool monitor (usually the issuer's auditor) is required to perform audits of the cover pool and verify coverage tests The assets in the cover pool are those which are: Transferred to the Covered Bond Limited Liability Partnership Recorded on the cover register maintained by the issuer and the regulator 	The issuer must appoint a separate asset monitor to monitor whether the eligibility requirements of the cover pool assets are met and perform any act on behalf of the covered bondholders that is needed to manage, maintain and dispose of the cover pool assets in the event of default on the covered bonds	 ▶ The bank shall appoint an external third party, qualified to be an auditor under the Companies Act, as the cover pool monitor to: ▶ Verify annually that the bank keeps an accurate register of the assets in the cover pool ▶ Verify annually that the bank complies with the regulatory requirements relating to the cover pool ▶ Assess the adequacy of bank's risk management process and internal controls relating to covered bond programme annually ▶ Report to the Authority immediately if it becomes aware that the bank or SPV has breached any of the conditions imposed

	Australia	Canada	UK	Korea	Singapore
	Banking Amendment (Covered Bonds) Act 2011	Jobs, Growth and Long Term Prosperity Act	UK Regulated Covered Bond Regulations	Covered Bonds Act of Korea	Notice 648 Issuance of Covered Bonds by Banks Incorporated in Singapore
Reporting and Trans	sparency				
Reporting / Transparency Requirements	 The cover pool monitor is required to provide a report on the quality and value of the cover pool to the issuing ADI, who in turn is required to make the reports available to covered bondholders This report is to be provided at least every six months APRA can request such reports at any time 	 ▶ The issuer must provide a monthly report, which includes: ▶ Calculations of the Asset Coverage Test, Valuation Calculation, Prematurity Test (if applicable), Amortization Test (if applicable)) ▶ Credit enhancements ▶ Rating triggers ▶ Static summary statistics relating to Eligible Loans in the covered bond collateral ▶ Material issues and deficiencies ▶ A programme website must be established by all registered issuers for registered covered bond programs, providing continuous investor and CMHC access and availability to the general public 	 ► The issuer must provide the regulator with cover pool data on a quarterly basis ► The FSA must be notified: ► Prior to each new issue ► Immediately upon the occurrence of any breach in the asset coverage test 	The issuer must manage the cover pool separately from its other assets, preparing and maintaining separate books for the administration of the cover pool, and may appoint a covered bond administrator to manage and administrate the cover pool assets as aforesaid for the benefit of the covered bondholders	 The cover pool monitor is required to provide a report on the bank's compliance with the regulatory requirements relating to the cover pool, and the bank's risk management process to MAS annually The bank shall notify MAS in writing 3 business days prior to the issuance of new covered bonds, provided that the bank has submitted information on the covered bond programme to MAS one month in advance The bank shall submit a Memorandum of Compliance, any additional information, as requested by the Authority, relating to its application and issuance of the covered bonds

		Australia		Canada		UK		Korea		Singapore
		Banking Amendment (Covered Bonds) Act 2011		Jobs, Growth and Long Term Prosperity Act		UK Regulated Covered Bond Regulations		Covered Bonds Act of Korea		Notice 648 Issuance of Covered Bonds by Banks Incorporated in Singapore
Asset Segregation	1									
Asset Segregation Ring-Fencing	>	The cover pool has to be owned by an entity other than the ADI issuing the covered bonds – a special purpose vehicle (SPV), which can either be a trust or a company The purpose of the covered bond special purpose vehicle must relate only to the bond APRA has no direction making powers over assets held by the SPV for the benefit of covered bondholders and service providers APRA does have access to the portion of the cover pool that is excess overcollateralization	•	The Canadian covered bond legislation provides a framework for issuance of covered bonds and protection of the cover pool assets from the bankruptcy estate of the issuer	•	Cover assets are ring-fenced by means of a true sale to a special purpose entity (the Covered Bond Limited Liability Partnership)	•	The Covered Bond Act stipulates that the cover pools of the issuers which are registered with the Financial Supervisory Service will not be subject to insolvency proceedings of the issuers, i.e. this specific legal framework supersedes the general insolvency law	•	The cover pool assets may be legally or beneficially owned by the bank or an SPV or held by the bank as trustee or a replacement trustee on behalf of a SPV for the purpose of securing the liabilities to the holders of the covered bonds and any liabilities arising from the enforcement of the rights of the holders of the covered bonds The bank shall obtain a legal opinion to confirm that assets included in the cover pool are beyond its and its creditors' reach, even in an insolvency situation
		overcollateralization (voluntary overcollateralization above what is required by the rating agencies)								

	Australia	Canada	UK	Korea	Singapore
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Issuer Insolvency					
Event of Issuer Insolvency	 ▶ The resolution process relating to a failing ADI and the resolution process relating to covered bondholders need to be separated from each other in the event of issuer default ▶ In the event a statutory manager or an administrator is appointed to an ADI that has issued covered bonds, the powers of the statutory manager or administrator relating to the ADI or its assets do not extend to assets in the cover pool other than contractual powers and obligations of the ADI issuing the covered bonds ▶ The appointment of a statutory manager or an administrator to an ADI does not necessarily trigger acceleration in interest and principal payments relating to the covered bonds 	 Under a registered covered bond program, the terms of any series or tranche of covered bonds issued and outstanding will expressly provide that the bondholders will retain a claim against the registered issuer for any deficiency in the repayment of all principal, interest and other amounts The covered bondholders rank pari passu with the ordinary depositors of the registered issuer and at least pari passu with the unsecured unsubordinated creditors of the registered issuer 	 Following issuer insolvency, the Covered Bond Limited Liability Partnership (LLP) becomes the legal owner of the cover pool assets The covered bondholders have an unsecured claim against the issuer The LLP must arrange the maintenance and administration of the cover pool and make timely payments to the covered bondholders The LLP has full powers, including the power to raise funds 	 In the case of issuer insolvency, covered bondholders shall have a priority right of payment on the registered cover pool over third parties In the case of bankruptcy of the issuer, the cover pool shall not be subject to bankruptcy proceeding, including compulsory execution, preservative measure and stay order with respect to the issuer 	 In the event of the issuer's insolvency, the duties of an administrator would be to represent the interest of investors and enforce the investors' rights in the collateral A bank undertaking to issue covered bonds is expected to provide for the appointment of such an administrator and set out its duties contractually

T&M SDS – Key Credentials

Experiences in the successful completion of asset backed securitisation and covered bond transactions



Landesbank Baden-Württemberg

US\$ 650,000,000

Covered Bond

Co-Lead Manager

DBS

May 2016



Bank of Nova Scotia
US\$ 2,500,000,000

Covered Bond

Co-Manager

DBS
April 2016



Canadian Imperial Bank of Commerce

US\$ 400.000.000

Covered Bond

Co-Manager

DBS
April 2016



Royal Bank of Canada US\$ 1,750,000,000

Covered Bond

Book Running Manager

DBS

March 2016



Toronto-Dominion Bank

US\$ 1,750,000,000

Covered Bond

Co-Manager

DBS

March 2016



National Australia Bank

US\$ 1,400,000,000

Covered Bond

Joint Lead Manager

⊠DBS

March 2016



Westpac Banking Corporation

US\$ 1,350,000,000

Covered Bond

Co-Manager

⊠DBS

March 2016



KB Kookmin Bank
US\$ 500.000.000

Covered Bond

Joint Lead Manager

⋈DBS

February 2016

SAIC GMAC

SAIC-GMAC Automotive Finance

RMB 3,000,000,000

Asset Backed Securitisation

Co-Financial Advisor

⋈DBS

February 2016

Auto Finance Co.

US\$ 300,000,000

Asset Backed Securitisation

Joint Lead Manager

DBS

December 2015

Credit Card Co.

US\$ 400,000,000

Asset Backed Securitisation

Joint Lead Arranger

DBS

November 2015

SAIC GMAC

SAIC-GMAC Automotive Finance

RMB 3,000,000,000

Asset Backed Securitisation

Co-Financial Advisor

DBS

September 2015



US\$ 1,000,000,000

Covered Bond

Joint Programme Arranger

⊠DBS

August 2015

Credit Card Co.

US\$ 300,000,000

Asset Backed Securitisation

Joint Lead Arranger

⊠DBS

November 2014

Credit Card Co.

US\$ 500,000,000

Asset Backed Securitisation

Joint Lead Arranger

DBS

October 2014

Credit Card Co.

S\$ 223,000,000

Whole Business Securitisation

Joint Lead Manager

⋈DBS

April 2016

TAL

TAL International S\$ 291,020,000

Asset Backed Securitisation

Co-Manager

◯ DBS February 2014

3DBS



Tal International S\$ 268,700,000

Asset Backed Securitisation

Co-Manager

⋈DBS

November 2013



T&M SDS – Key Credentials (Cont'd)

Experiences in the successful completion of asset backed securitisation and covered bond transactions



US\$ 250,000,000
Asset Back Securitization

Joint Lead Arranger



November 2013

Credit Card Co.

S\$ 223,000,000

Whole Business Securitisation Joint Lead Manager

DBS

September 2011









Credit Card Co.

\$\$ 50,000,000

Secured Financing

Sole Lead Arranger

DBS

May 2013







5d. T&M SDS - Global Awards

Awards for DBS Covered Bond, issued in 2015

IFR Asia Awards (Regional) Singapore Capital Markets Deal of the Year



- DBS was the issuer of the S\$1 billion inaugural Covered Bond in Singapore.
- The deal received Singapore Capital Markets Deal of the Year.

The Asset Country Awards Best Deal of the Year Singapore



- DBS was the issuer of the S\$1 billion inaugural Covered Bond in Singapore.
- The deal received Best Deal of the Year, Singapore.

FinanceAsia End of the Year Achievement Awards Best Singapore Deal



 The deal received Best Deal, Singapore for 2015.

IFR Awards (Global) Covered Bond Deal of the Year



The deal received Covered Bond Deal of the Year.

Alpha Southeast Asia Awards Most Innovative Deal of the Year Southeast Asia



The deal was awarded Most Innovative Deal of the Year, Southeast Asia.

The Asset Awards (Regional) Best New Bond



 The deal received Best New Bond for 2015 for Asia.

5d. T&M SDS - Global Awards (cont'd)

Awards for Securitisation and Asset-backed Products

Structured Finance: Asia-Pacific Structured Finance Issue (2013)





- DBS was the Sole Lead Arranger in the securitisation of residential progress payment receivables of Orchis Capital.
- The deal received Asia Pacific Structured Finance Issue of the Year Award.

Asia Pacific Structured Finance Issue of the Year 2013





- DBS was the Sole Lead Arranger in the securitisation of residential progress payment receivables of Orchis Capital.
- The deal received Asia Pacific Structured Finance Issue of the Year Award.

Best Cross Border Securitisation Deal for 2013





- DBS was the Joint Lead Manager in the securitisation of auto loan receivables by Bavarian Sky.
- The deal received Best Cross Border Securitisation Deal for 2013 Award.

Deals of the Year 2012 – Structured Finance





- DBS was a Joint Lead Arranger in the refinancing of SGD645 million existing CMBS by Silver Oak.
- The deal received Deals of the Year 2012 Structured Finance.

Financing Deal of the Year for 2012 (DCM)





- DBS was a Joint Lead Arranger in the refinancing of SGD645 million existing CMBS by Silver Oak.
- The deal was awarded the Financing Deal of the Year for 2012 (DCM).

Structured Finance: Asia Pacific Securitisation Deal (2011)





- DBS was a Joint Lead Arranger in the refinancing of SGD 645 million existing CMBS by Silver Oak.
- The deal received Asia Pacific Securitisation Deal for 2011.

Asia Pacific Securitisation Deal for Year 2011





- DBS was a Joint Lead Arranger in the refinancing of SGD645 million existing CMBS by Silver Oak.
- The deal was awarded Global Award for Asia Pacific Securitisation Deal for the Year 2011.

Best Cross Border Securitisation Deal for the Year 2011





- DBS was a Joint Lead Arranger in the refinancing of SGD 645 million existing CMBS by Silver Oak.
- The deal received Best Cross Border Securitisation Deal for the Year 2011.

Financial Deal for 2011 (DCM)





- DBS was a Joint Lead Arranger in the refinancing of SGD 645 million existing CMBS by Silver Oak.
- The deal received Financial Deal for 2011 (DCM).



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