

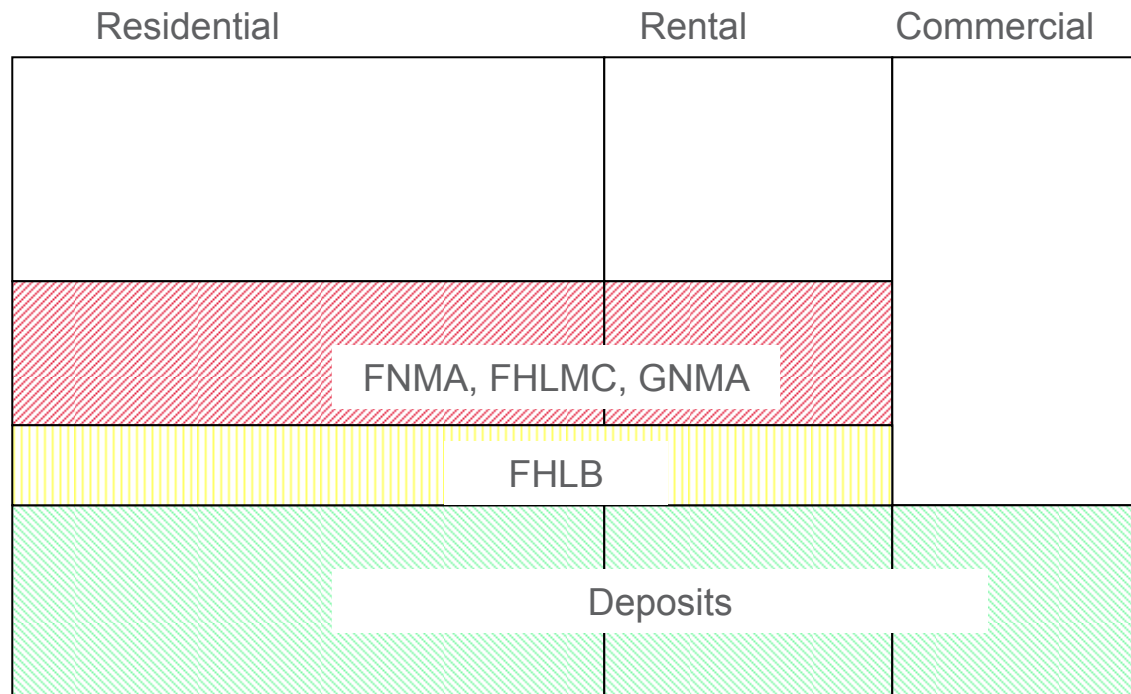
Covered Bonds in the United States

March 2011

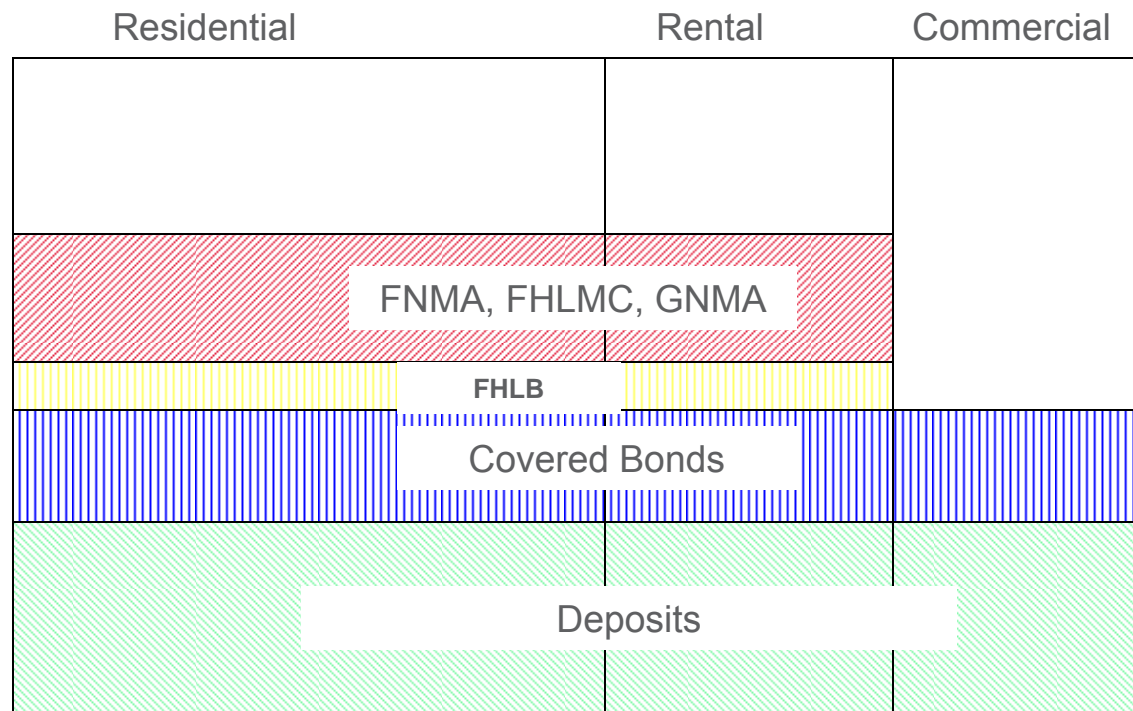
What are covered bonds?

- Senior debt of a regulated financial entity.
- Secured by a pool of financial assets.
 - Mortgage loans – residential and commercial
 - Public sector obligations
 - Ship loans
- Protected from acceleration in the event of issuer insolvency.
 - By statute or legal structure.
 - Collateral is isolated from insolvency estate of the issuer.
 - Collateral pays bonds as scheduled through maturity.
- A dynamic collateral pool – refreshed every month.
- Typically bullet maturity, fixed rate bonds.
- Assets remain on the balance sheet of the issuer.
- Most countries have statutes enabling covered bonds.
- Very strong implicit government support in many jurisdictions.

Why covered bonds?



Why covered bonds? (cont'd)



Why covered bonds? (cont'd)

- Add a significant new funding source
 - Covered bonds attract a new investor base
 - This investor base buys primarily sovereign and agency debt
- Diversify funding for housing finance
 - More funding sources reduce the effect of the disruption of any one source
 - Current failure of RMBS market increases funding burden on deposits and on FNMA, FHLMC and FHA/GNMA and FHLBs
 - Lessen dependence on FNMA, FHLMC, FHA/GNMA and FHLBs
- Extend the WAM of bank obligations
 - Historically, wholesale bank funding had a WAM of approximately 7 years
 - Average maturities of bank obligations are at historic lows
 - Covered bonds are typically issued in the three to fifteen year maturity range

Why covered bonds? (cont'd)

- Level the playing field for U.S. banks
 - European banks have access to this funding source, even the U.S. part of it (approximately \$30 billion in 2010 in the U.S.); U.S. banks do not
- More investor friendly than RMBS
 - Not an 'originate to sell' model
 - No complex tranching
 - No negative convexity (prepayment) risk
 - Real "skin" in the game
- Less dependent on rating agencies
 - Covered bonds are relatively easy to analyze
 - No need for complex models or analytics

Other considerations

Pressures on Securitization

- FAS 166/167, FDIC Sale Rule, SEC Reg AB II, Dodd-Frank Reform Act and Basel III all tend to reduce the benefits of securitization for banks
- Different capital treatment of covered bond as an investment as opposed to securitization investment
- Retention of assets on balance sheet may discipline the underwriting process
- More disciplined underwriting might support macro economic stability
- Should be viewed as one more funding alternative for issuers (in addition to deposits, CMBS, RMBS, FHLMC, FNMA and FHLB)
- Issuers should consider that covered bonds can be presented at Fed window
- Over time, this financing technology is likely to be used in connection with other assets

CB Investors

- Covered bond investors buy sovereign and agency debt
- Some of these same investors buy FNMA, FHLMC, GNMA debt
- Typically they will not buy straight bank debt
 - They do not buy ABS or RMBS
- To attract these investors you need statutory covered bonds
 - Predominantly banks, central banks, funds and insurance companies
- A €3 trillion market in Europe
- The U.S. investor base is opening up; foreign banks have issued almost \$30 billion in 2010 in covered bonds in the U.S. (in reliance on Rule 144A)

Who benefits?

- From the issuer perspective:
 - Money center banks
 - Less reliance on FNMA and FHLMC and the FHLB system
 - Regional banks
 - Access to commercial mortgage loan funding
 - Homeowners
 - Having more alternative sources of funding should improve rates
 - Loan adjustments are simple
 - No competing interests on loan modifications
 - Rental housing
 - Additional support for apartment financing
 - Municipalities
 - Public sector covered bonds will broaden their investor base
 - Credit unions

Who benefits? (cont'd)

- From the investor perspective:
 - High credit quality – most bonds are triple-A rated.
 - In Europe, favorable capital treatment.
 - Higher yield than sovereign debt.
 - Diversification – sovereign or agency debt is viewed as similar risk.
 - Good liquidity.
 - Issuance regulated by statute in Europe.
 - More investor friendly than RMBS or CMBS
 - Not an 'originate-to-sell' model
 - No complex tranching – good transparency
 - No negative convexity (prepayment) risk
 - 100% 'skin in the game'

What are the benefits?

- Brings more mortgage financing out of the “shadow banking” world and into a fully regulated banking environment
- While on-balance sheet funding tends to grow the institution, it is bigger in a simpler way

What are the benefits? (cont'd)

- Lower funding cost than senior unsecured debt
- Extension of WAM for bank funding
- Diversification of funding base
- Mortgage modifications to accommodate borrowers are easy to accomplish; no competing interests
- Levels the playing field
 - Foreign banks currently have access to this investor base, including in the U.S., while U.S. banks do not.

Legislative Covered Bonds

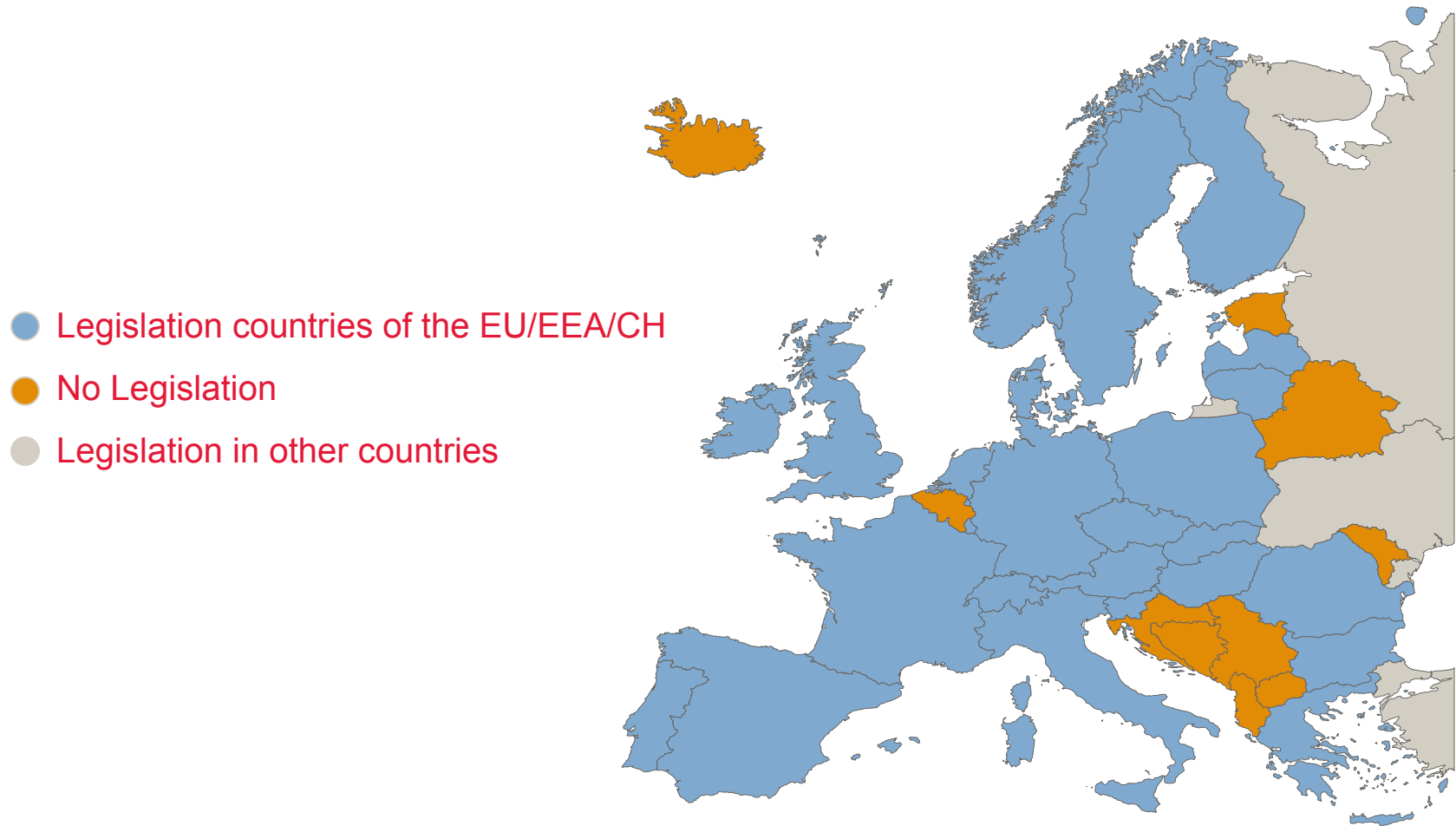
Legislative covered bonds

- Legislative covered bonds have been in existence for over 200 years, and over that time no defaults have been documented.
 - Pfandbriefe, the most well-known form of covered bonds, were originally developed as a mortgage funding mechanism in 18th century Prussia.
 - The modern Pfandbriefe market was codified in 1900 with the enactment of the “German Mortgage Bank Act.”
 - This enabling legislation created a legal framework that allowed issuers to ring-fence assets on their balance sheets such that investors in the covered bonds had explicit protection by law regarding both recourse to the issuer and a priority claim on the asset pool in the event of a default.
- Enabling legislation provides the predominant framework for covered bond issuance, however, there are ways to achieve the same end result – a full recourse obligation that is also fully collateralized by a pool of assets over which investors have a legal priority claim in the event of insolvency – without having covered bond legislation in place.
 - Canadian covered bond issuance to date has relied on Canadian contract law, in the absence of specific enabling legislation.

Legislative covered bonds (cont'd)

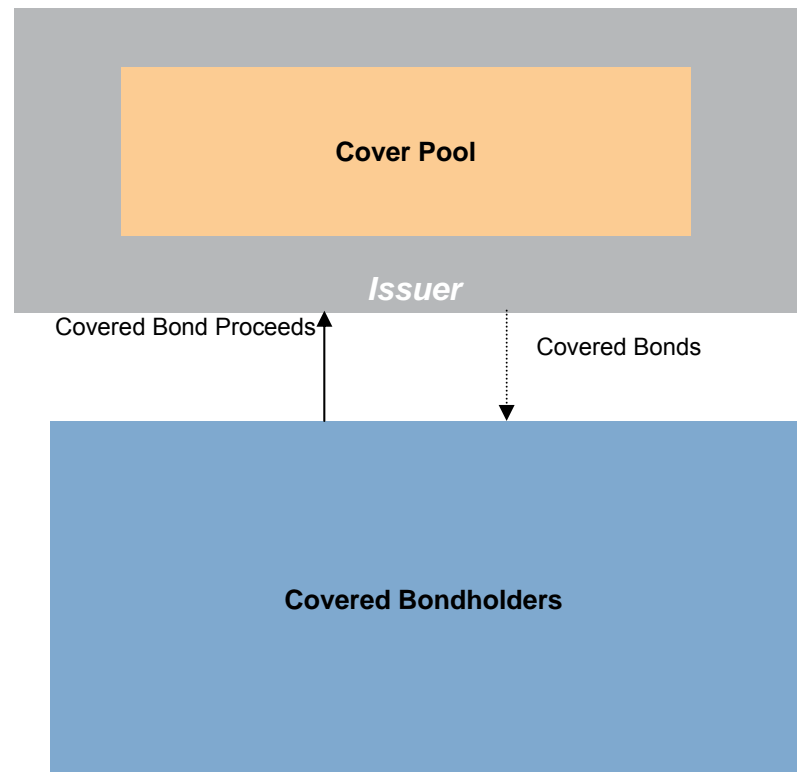
- In jurisdictions with covered bond legislation, statutes provide that in the event of an issuer insolvency, special privileges are granted to covered bond investors regarding the underlying assets. For example:
 - In Germany, Sweden, and Finland, the regulation is most favorable for the investor because the cover assets are legally separated.
 - In all other countries, the cover assets form part of the insolvency estate, but the holders of covered bonds have insolvency privileges which permit collections on the mortgages to continue to pay interest and ultimately principal to investors in accordance with the original bond schedules.
- As of 2010, some 40 countries have special Covered Bond legislation or arranged structured Covered Bonds on a contractual basis in a general-law based framework.

European Jurisdictions with Legislation



Issuing form

- Traditional statutory form



Benefits associated with legislative covered bonds

- Banks, which comprise a significant portion of the covered bond investor base, tend to hold covered bonds as collateral for their repo activities
- The ECB has historically given more favorable capital treatment to covered bonds meeting the criteria specified in EU's Undertakings for Collective Investment and Transferable Securities (UCITS) directive for collective investment vehicles
- Article 22(4) of the UCITS directive requires:
 - the bonds must be issued by a credit institution with its registered office in an EEA member state
 - the bonds must be secured on a priority basis by a ring-fenced asset pool for the benefit of the bondholders throughout the life of the bonds
 - the cover assets must be capable of covering all amounts due under the covered bonds
 - the issuer of the covered bonds must be subject by law to specific public supervision

Benefits associated with legislative covered bonds (cont'd)

- Article 22(4) of the existing directive will be replaced (in the same form) by Article 52(4) of the new EU UCITS Directive which must be implemented by EEA member states by 31 July 2011
- From 1 January 2011, jumbo covered bonds that meet the Article 22(4) criteria will fall within liquidity category II of the ECB eligible collateral rules and have a valuation haircut of between 1% and 29% depending upon credit rating, maturity and interest terms
- Other covered bonds will fall within liquidity category III and have a valuation haircut of between 1.5% and 38%

Basel II/III – Risk weighting

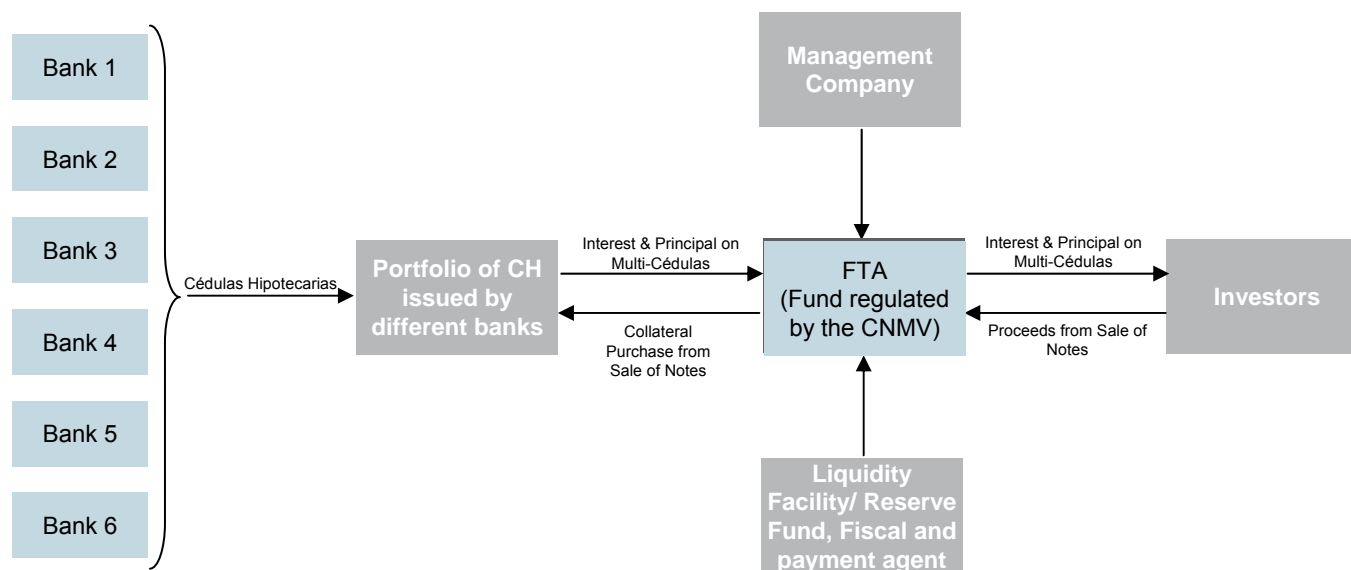
- For bank regulatory risk weighting purposes, statutory covered bonds will generally be capable of achieving a lower risk weighting
- The Capital Requirements Directive (CRD), which effects the Basel II framework in Europe, requires European credit institutions to hold a certain minimum amount of eligible capital depending on the risk weighting of their assets
- Covered bonds meeting the UCITS Article 22(4) criteria can benefit from risk weighting of as little as 10%, under the standardised approach under Basel II, depending on the risk weighting of the issuer's unsecured bonds. This would often be around half of the risk weighting allocated to unsecured debt from the same issuing financial entity or group
- Covered bonds that do not meet the Article 22(4) criteria will be subject to higher risk weightings

Basel II/III – Risk weighting (cont'd)

- Under Basel III proposals, covered bonds will have an increased advantage over certain securitisations:
 - greater risk weighting (or full deduction) for lower rated and unrated securitisations
 - more conservative haircuts in calculating counterparty exposure and market risk calculations for securitisations
- In the EU, changes recently introduced under CRD3 impose additional risk weightings for “resecuritisations”
- Certain covered bonds will be permitted in calculating cover assets for the new liquidity cover ratios:
 - will be in “level 2” – can comprise up to 40% of cover assets
 - will be subject to haircut of at least 15%

Spanish Basic Multi-cédulas Architecture

- In the Spanish legislation, there are two types of covered bonds: Cédulas Hipotecarias (CH) and Cédulas Territoriales (CT), which are backed by mortgages and public sector assets, respectively. Below we highlight the CH issuance architecture.
- Legislation enables mortgage loans of small regional banks to be pooled together to issue large liquid issuances of multi-cédulas by means of a Spanish special purpose vehicle, (Fondo de Titulización de Activos – FTA) and the appointment of a trustee which is supervised by the Comisión Nacional del Mercado de Valores (CNMV), the Spanish Commission of Securities.
- Again, through this architecture smaller issuers achieve access to the global covered bond market by a single issuer of multi-cédulas.



Structured Covered Bonds

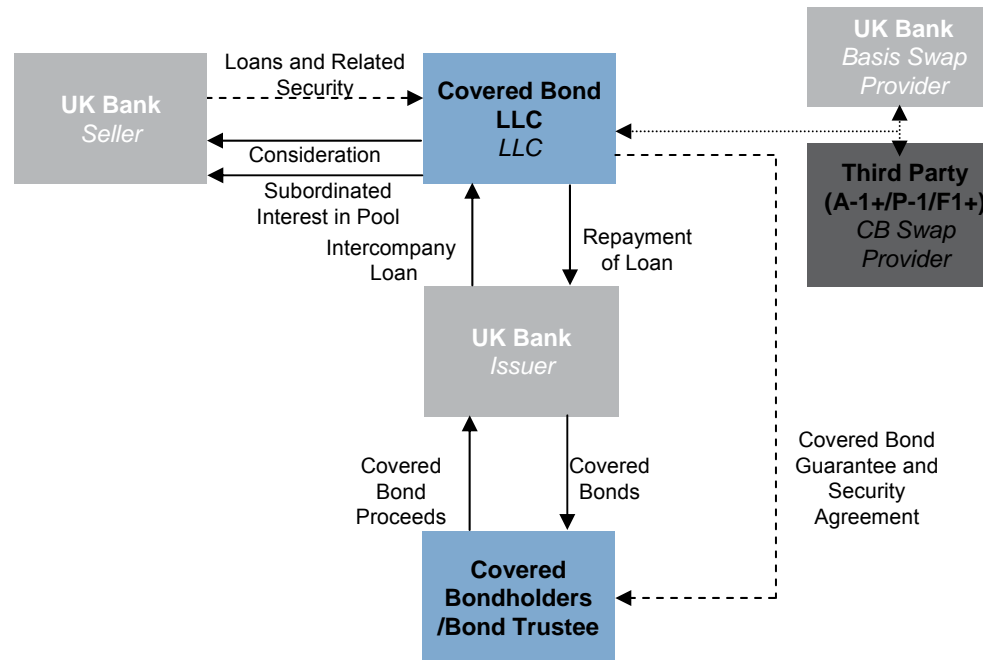
Covered Bond Issuance in the Absence of Enabling Legislation

Structured Covered Bonds

- In countries without enabling legislation, it has been possible to utilize technology developed for asset securitization as a means to create a structured covered bond under existing contractual law.
 - The key to such structures is the establishment of both primary recourse to the issuer and secondary recourse to a collateral pool in the event the issuing institution becomes unable to service the covered bonds.
- The first structured covered bond was issued in the United Kingdom by HBOS in October 2003:
 - Currently, there are 20 established UK covered bond programs.
 - In April 2008, legislation was passed in the UK creating the legal framework for covered bonds. In September, 2009 Barclays became the first UK bank to issue UK legislative covered bonds to the public market.
- In September 2006, WaMu's inaugural covered bond transaction came to market, representing the first structured covered bond from a North American financial institution.
 - In March 2007, Bank of America launched the second US covered bond utilizing the same architecture developed for WaMu.
- In October 2007, RBC launched the inaugural Canadian covered bond program, structured by Barclays Capital and RBC Capital Markets.
 - Bank of Montreal, Bank of Nova Scotia, CIBC, Toronto Dominion and National Bank of Canada followed suit and accessed the market using the same architecture.

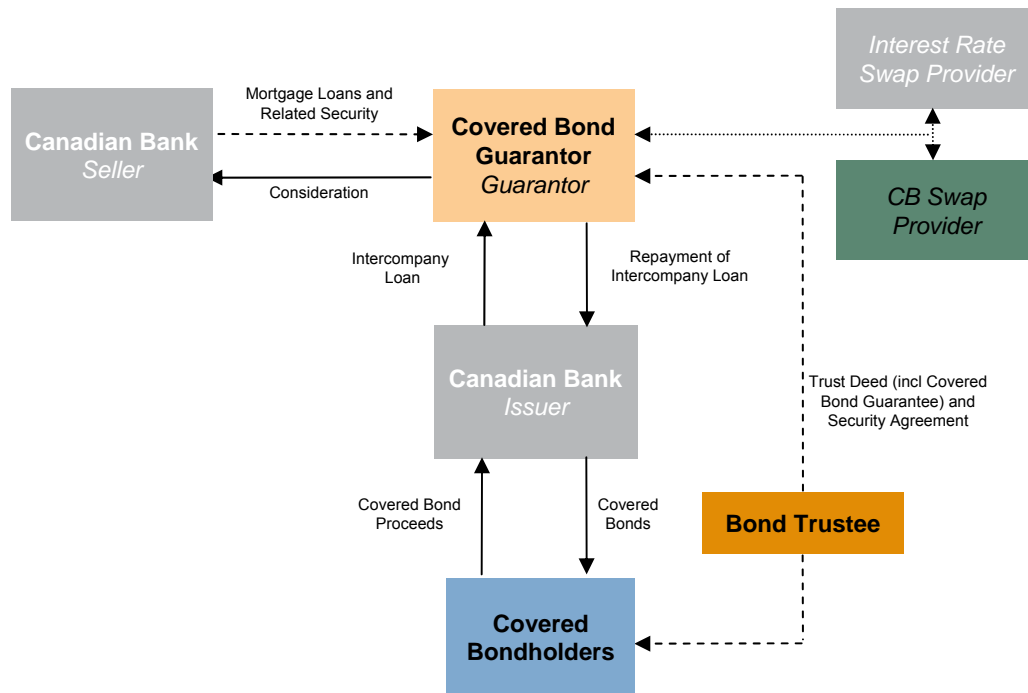
UK Covered Bond Architecture

- In the absence of legislation, structures can be put in place to achieve the same benefits to investors and issuers of legislatively enabled covered bonds.
 - The first UK structured covered bond was issued in 2003 and since then issuers have raised over €61 billion through UK structured covered bonds.
 - In 2008, legislation was passed in the UK creating a legislative framework which codified the structure that had been previously developed in the absence of legislation.
- In the UK architecture, the UK bank issues Covered Bonds directly to investors.
- A bankruptcy remote, single member, limited liability company (LLC) will hold loan assets purchased from the UK bank as Seller via the Depositor and provides a guarantee to the Covered Bond investors:
 - The Covered Bonds also benefit from a direct guarantee from the UK bank.
 - The single member owner of the LLC (which need not represent an economic interest) should not be part of the UK bank's corporate group so as to minimize affiliate issues with the bank.
- Principal and interest payments on the Covered Bonds are not directly linked to the cash flow of the underlying Cover Pool.



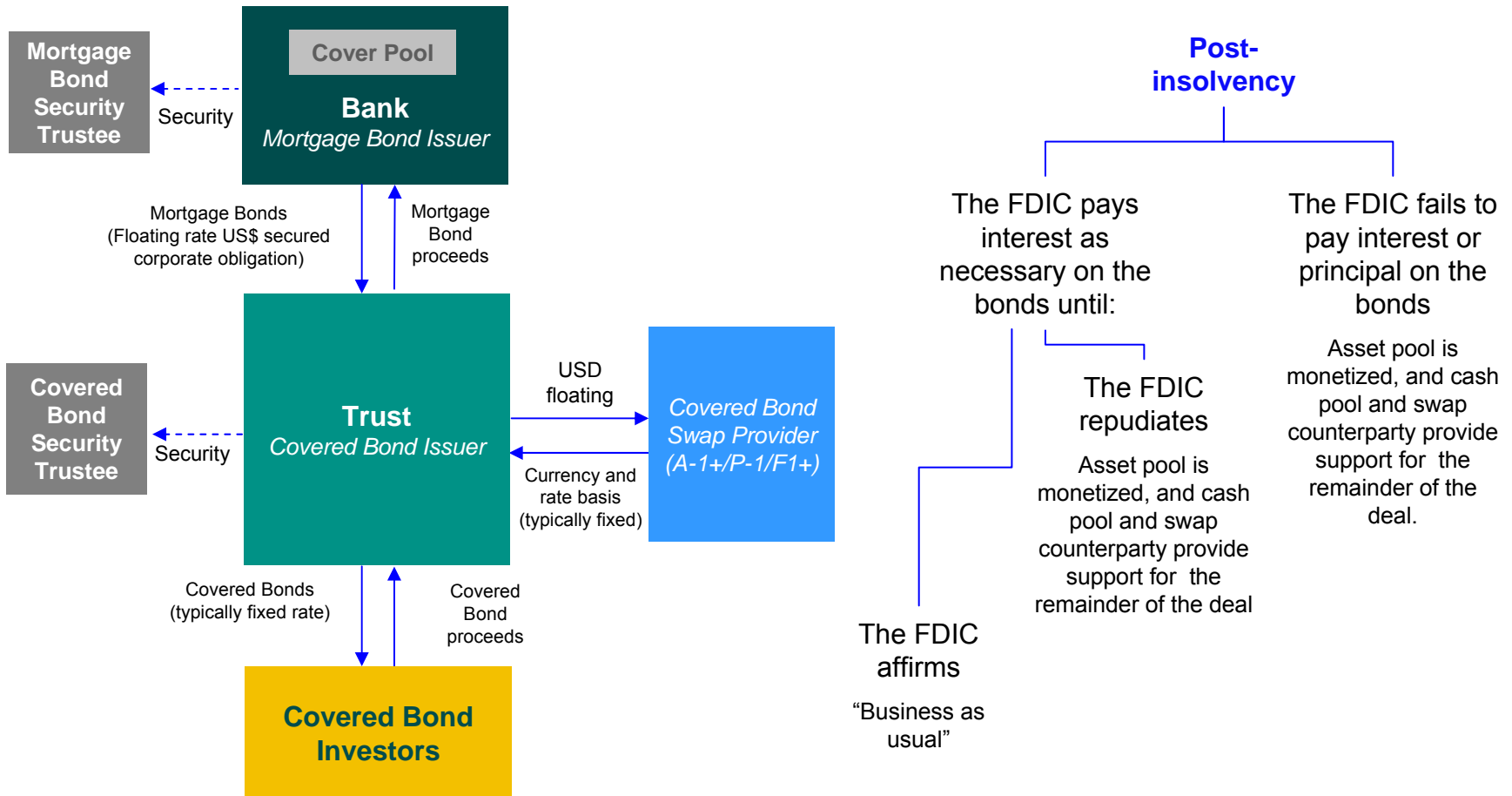
Canadian Covered Bond Architecture

- The structure first launched by RBC has been established as the market standard for Canadian issuers with CIBC, BMO and Scotiabank utilizing the same basic structure.
- Given the legal similarities between Canada and the UK, the Canadian covered bond architecture below closely resembles the UK covered bond architecture:
 - Covered bonds are issued to investors with full recourse to the Issuer and the cover pool.
 - The issuer, as Seller, sells mortgage loan assets to the Guarantor, which uses proceeds from the Intercompany Loan to purchase the mortgage loans from the Issuer and provide a guarantee to the covered bond investors.
- We have spent an extensive amount of time with rating agencies and Canadian counsel and regulators to develop a viable structure for the Canadian market.



Current U.S. Structure

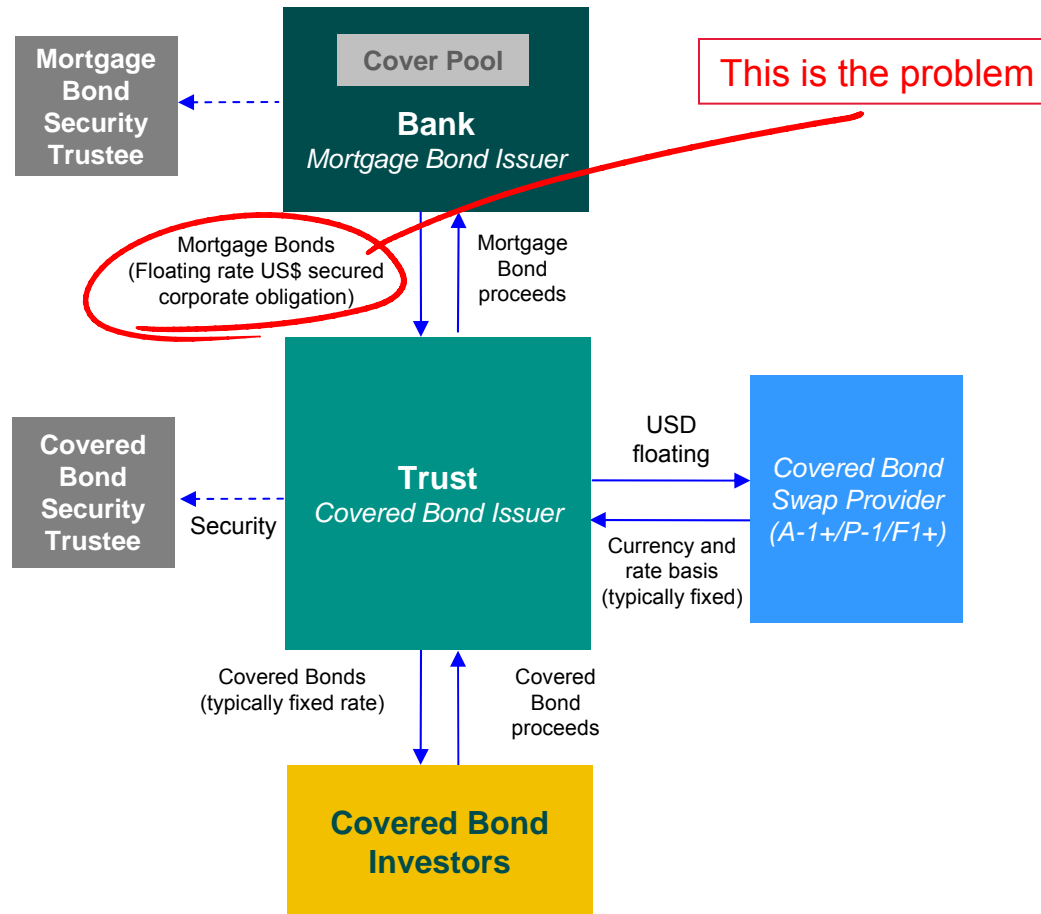
Issuing form (U.S.)



Failings of current structure

- Current structure is overly expensive
 - It is a complicated structure borrowed from securitization
 - The “issuer” is not a bank
 - There is uncertainty about what the FDIC will do
 - There are high overcollateralization levels
 - Current law forces liquidation of the entire cover pool
 - There is a period when the collateral cannot pay interest on the bonds
 - No collateral standards – reduces liquidity
 - Current tax law reduces investment flexibility – choice must be made at issuance

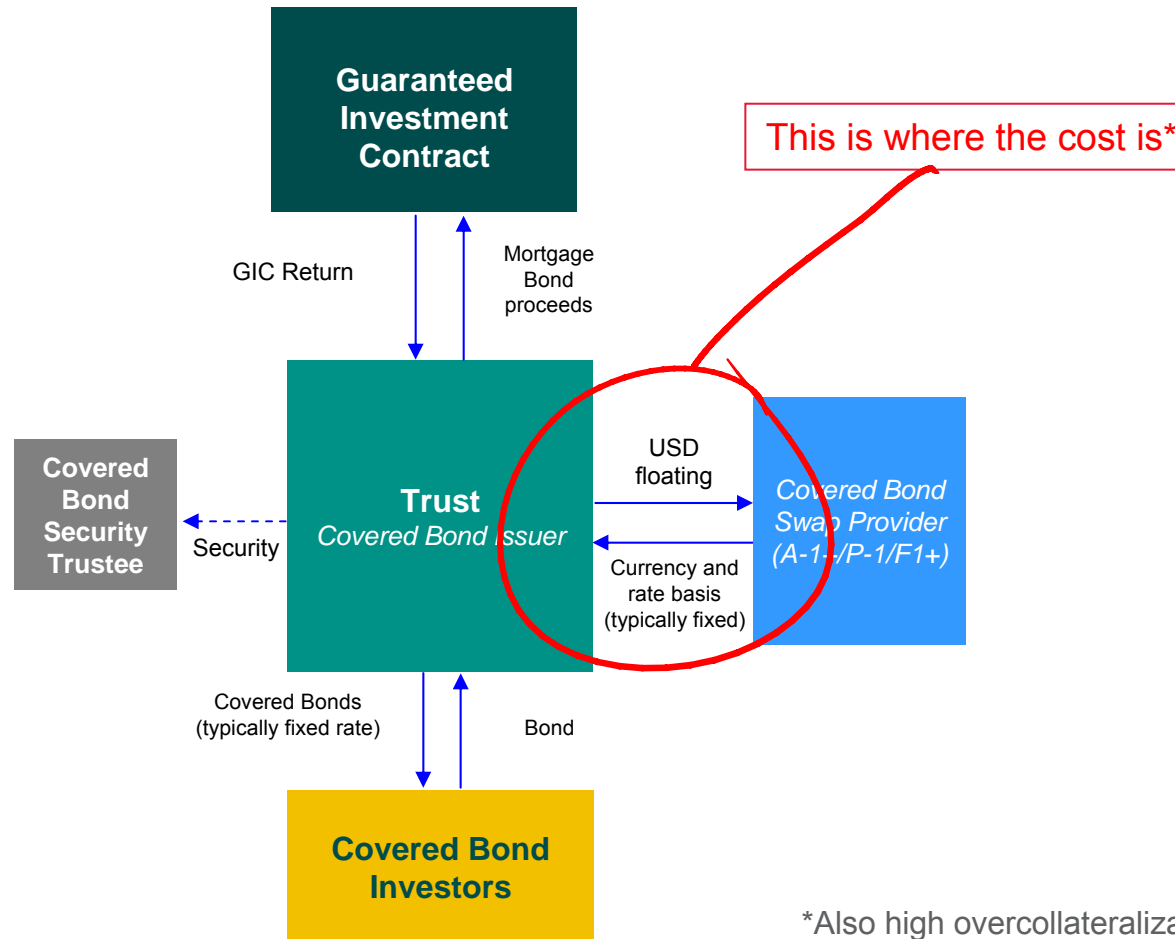
Issuing form (U.S.)



Obligation to Liquidate the Pool

- Under applicable U.S. law
 - a secured creditor cannot retain the collateral
 - the collateral must be sold and any excess proceeds over the debt owed to the creditor must be returned to the debtor
 - no interest may accrue on the debt post-insolvency
 - if sale of the collateral takes a significant amount of time, the lost interest will become a real factor to be dealt with

Post-Insolvency Structure



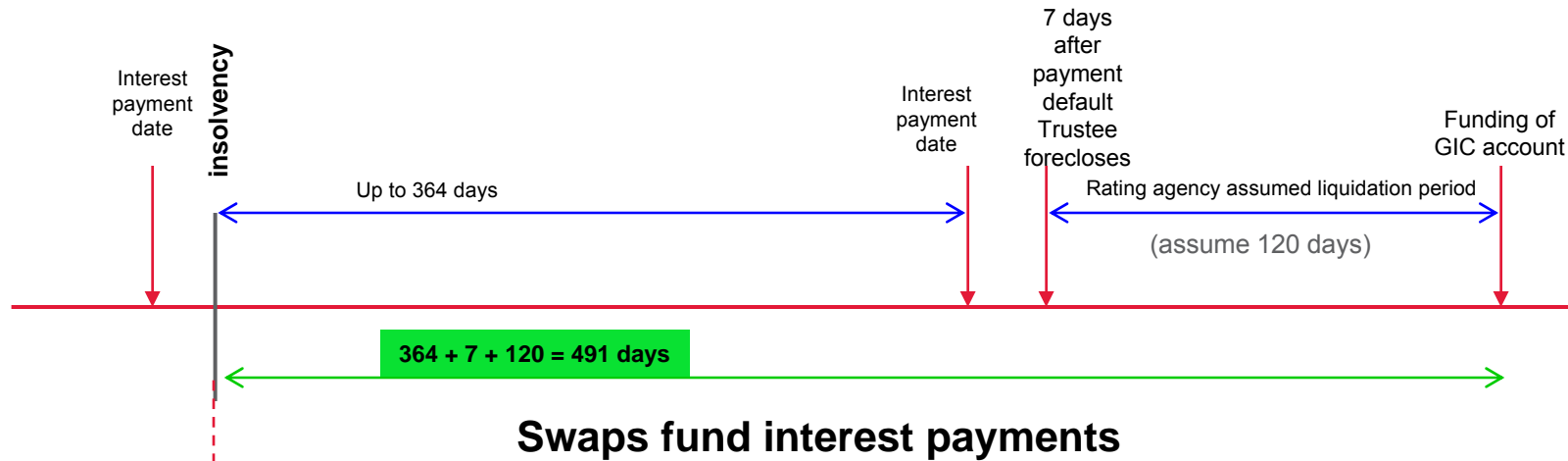
*Also high overcollateralization levels.

Role of the Swaps Post-Insolvency

- Reinvestment risk
 - The yield on the GIC will be less than the coupon on the covered bonds
- Interest rate risk
 - Low floating yield on the GIC to higher fixed yield on the covered bonds
- Currency risk
 - Dollar denominated GIC to foreign currency denominated covered bond
- Interest shortfall
 - The FDIC will only pay or permit the Trustee to take from collateral proceeds par plus accrued interest through the date of the appointment of the FDIC
 - The GIC do not generate a yield until funded
 - The swap provider must pay to the Trustee interest on the covered bonds for each day from the appointment of the FDIC until the GIC is funded

Source of the Cost

FDIC Timeline – Payment Default



Collateral proceeds may only cover interest accrued through the insolvency date

- **Assumptions:**
- FDIC fails to repudiate or affirm
 - Payment default occurs

Proposed Legislation in the U.S.

Advantages of a statute

- Improve funding efficiency
 - Simple structure; reduces costs
 - Increases certainty of FDIC outcome
 - Does NOT force liquidation of the cover pool at insolvency
 - Collateral continues to pay interest
 - Collateral standards improve liquidity
 - Improves temporary investment flexibility
- More certainty for investors means a lower coupon
- More uniformity means an improved secondary market
 - Improved secondary market means a lower coupon

Essential legal elements

- Federal legislation
- Creation of a separate insolvency estate
 - Necessary to protect the maturity of the bond
 - We have a 'unitary' insolvency system
 - Only a single estate to meet the claims of creditors
- Priority claim for bondholders
- Covered bond regulator
 - Regulatory oversight of the quality of covered bonds
 - Regulatory approval of issuance
 - Regulatory oversight of the administration of the separate estate
- No tax on separate estate or its activities

Proposed U.S. Legislation

Developments to Date

- On October 29, 2009, Rep. Scott Garrett (R-NJ) introduced a covered bond bill as an amendment to the Financial Reform legislation before the US House of Representatives.
- At the request of the Chairman of the Committee, the amendment was withdrawn for hearings.
- A hearing was held on December 15, 2009, before the House Financial Services Committee and the bill received strong bi-partisan support.
- On March 18, Rep. Garrett introduced a revised bill in the House: H.R. 4884, “The United States Covered Bond Act of 2010”.
- On March 19, Sen. Corker (R-TN) of the Senate Banking Committee introduced covered bond legislation as an amendment to the Financial Reform Bill in the US Senate.
- On March 22, the Senate Banking Committee passed a Manager’s bill on party lines without the amendment.
- In June, a bill similar to H.R. 4844 was introduced as an amendment to the Financial Reform Act in the Conference Committee, but the amendment failed to pass at the last moment.

Proposed U.S. Legislation (cont'd)

- On July 22, 2010 Congressman Garrett introduced a covered bond bill for the fifth time – H.R. 5823
 - This was similar to the amendment to the Financial Reform Act
- On July 28, 2010 the House Financial Services Committee held a markup hearing on the proposed legislation and after accepting several amendments the Committee passed the bill and sent it to the floor of the House.
- On September 15, 2010 the Senate Committee on Banking, Housing and Urban Affairs held a hearing entitled *Covered Bonds: Potential Uses and Regulatory Issues*.
- A hearing is scheduled for March 11, 2011 before the Capital Markets Subcommittee in the House
- To date, no bill has been introduced in the Senate

Proposed Legislation

Current status – why hasn't legislation advanced?

- Financial regulatory reform took priority
 - Too many more pressing issues to be addressed in Dodd-Frank
- Covered bonds legislation has not met with strong opposition and has had strong bi-partisan support
 - Some constituencies are very invested in securitization and have commented that covered bonds will “cannibalize” the securitization market
 - FDIC continues to express concerns
- Covered bonds legislation has not had strong supporters nor has it enjoyed any “grassroots” support
 - Not enough awareness/education regarding covered bonds
 - Community banks, regional banks and credit unions are focusing their attention on addressing all of the new challenges posed by regulatory reform

Proposed Legislation (cont'd)

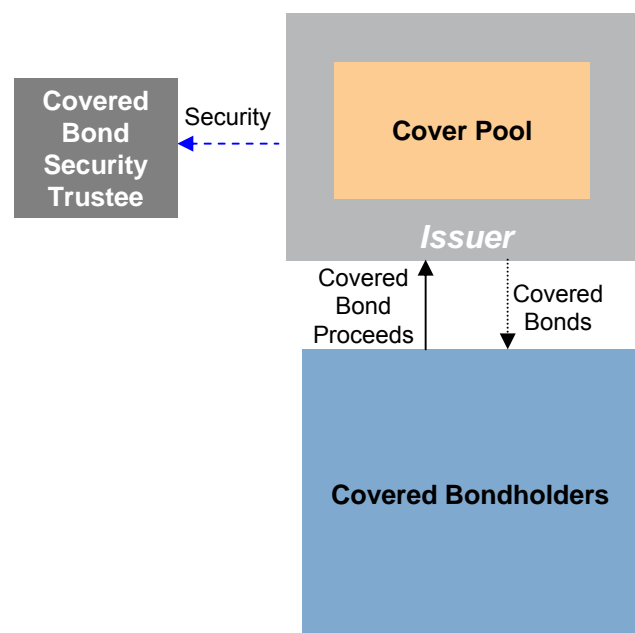
- They have told us that they will wait and see if a market is developed by big banks
- Market participants still trying to assess the future of securitization
 - Hard to calculate comparative funding costs
- Many market participants and trade groups have told us that they are suffering from “regulatory reform fatigue”
 - Devoting their resources to urgent priorities
- Big banks are supporters but have many legislative/regulatory priorities
- Uncertainty regarding future of the GSEs

Proposed U.S. Legislation

Proposed Issuance Structure

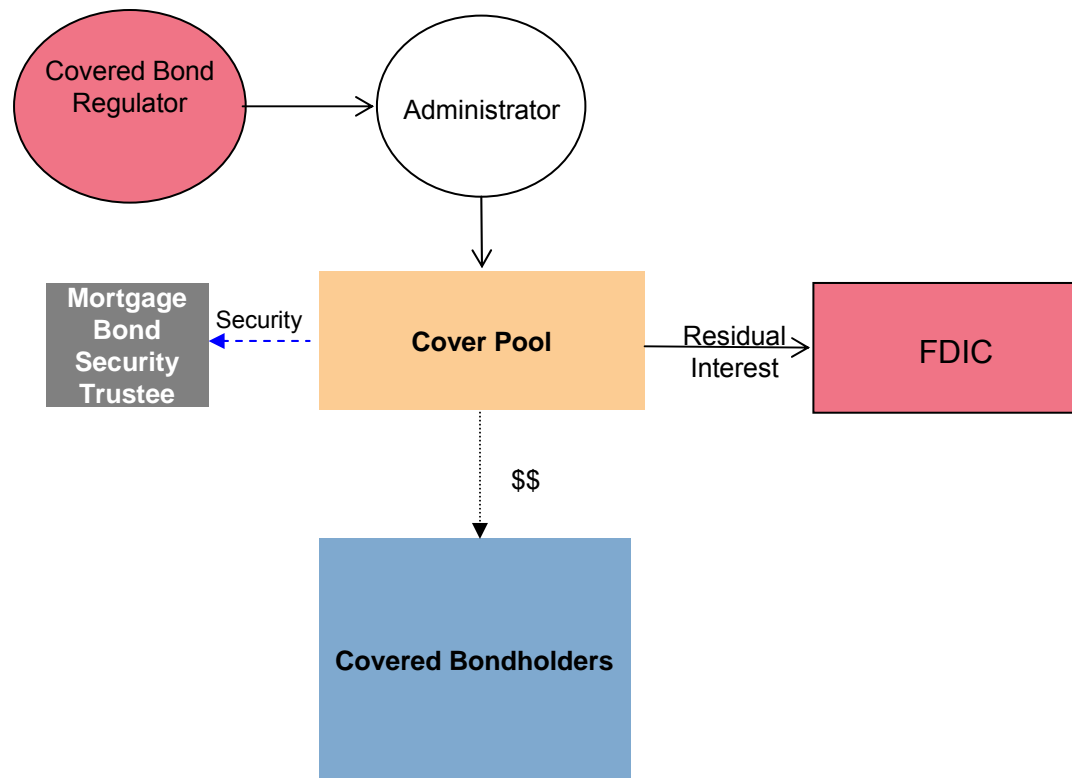
Legislation enables direct issuance from the bank to investors while ensuring the assets are segregated in the event of an issuer insolvency

- The statute generally enables cash flow from the collateral to continue to pay Covered Bonds as scheduled notwithstanding the insolvency of the issuer.



Proposed U.S. Legislation (cont'd)

Post-Insolvency Structure



Key Elements of the Legislation

Defining Covered Bonds

- “*Covered Bond*”
 - Senior bond full recourse of an “eligible issuer”.
 - Secured by a “cover pool” of “eligible assets” owned by the issuer.
 - Issued under a “covered bond program”.
- “*Covered Bond Program*”
 - Approved by the covered bond regulator.
 - One or more series or tranches of bonds issued against a cover pool.
 - An issuer can have more than one covered bond program.

Key Elements of the Legislation (cont'd)

Who Can Issue Covered Bonds

- “*Eligible Issuer*”
 - Any insured depository institution or subsidiary
 - Bank holding company or subsidiary
 - S&L holding company or subsidiary
 - Any non-bank financial company approved by the Covered Bond Regulator or subsidiary.
 - An entity sponsored by an eligible issuer for pooled issuance.

Key Elements of the Legislation (cont'd)

Cover Pool Assets

- “*Eligible Asset*”
 - complying first-lien residential mortgage loan
 - complying home equity loan
 - complying commercial mortgage loan
 - loans or securities of States or municipalities
 - complying auto loan or lease
 - complying student loan
 - complying revolving credit receivable
 - any loan made or guaranteed under a Small Business Administration program
 - any other asset designated by the covered bond regulator in consultation with the primary financial regulatory agency of the issuer
 - “substitute asset” – cash, overnight Federal funds, US Government obligations and GSE obligations ≤20% of pool

Key Elements of the Legislation (cont'd)

Legal Attributes of Statutory U.S. Covered Bonds

- Only one asset type permitted in a cover pool.
- The Issuer's primary Federal financial regulator to be the covered bond regulator.
- Upon insolvency of a bank issuer, 180 days for the FDIC to transfer to the covered bonds to another bank.
- The cover pool becomes a separate "estate" if the covered bonds are not transferred or if the FDIC is not the receiver.
- Upon default prior to insolvency, the cover pool becomes a separate estate immediately.

Key Elements of the Legislation (cont'd)

Legal Attributes of Statutory U.S. Covered Bonds

- The covered bond regulator as the trustee of the pool.
 - Appoints one or more servicers or administrators.
 - Administers the estate for the benefit of the bondholders and other secured parties (e.g., swap counterparties).
- Authority for the cover pool to borrow for liquidity purposes.
- FDIC granted a residual interest in the cover pool.
- Covered bonds issued by a bank are deemed to be issued under Section 3(a)(2) of the Securities Act
 - Covered bonds are not an “asset-backed security”

Key Elements of the Legislation (cont'd)

Legal Attributes of Statutory U.S. Covered Bonds

- Tax treatment
 - Separate estate not taxable as a separate entity
 - Sale of assets not taxable event
 - Foreign investors are not engaged in a U.S. lending business
 - The Treasury may limit state and local taxes on the separate estate
- Legal protection
 - No court may take any action to affect or restrain the resolution of the separate estate and may not issue an attachment or execution on any asset

Legislative Considerations

Concerns raised by the FDIC

- Should not result in a perception that there is a government guarantee
- FDIC wants to preserve the right to repudiate
- Depositor subordination
- Concern about overcollateralization

Other Policy Considerations

- Liquidity
- Residual interest to FDIC
 - Residual can be monetized
- Blue ribbon product
 - $\leq 80\%$ LTV
 - 1st lien
 - Owner occupied
 - Uniformity
 - Price tiered off the issuer, not the collateral
- Preferential capital treatment for bank investors
 - 10% of regulatory capital in EU
- Banks only as issuers?
- Strong secondary market
 - Unitary market, not fractured
 - RMBS market too fragmented by tranching and collateral variety
 - Need to trade like agency securities

Other Considerations

- A protected maturity provides funding access to a distinct investor class
 - These investors buy sovereign debt and agency debt
 - This investor base does not buy unsecured bank debt or RMBS or ABS
 - Selling covered bonds to this investor class will not cannibalize senior debt or RMBS
- Failure to protect the maturity of covered bonds will cannibalize senior debt and RMBS or ABS
- Failure to provide legislative protection for the maturity of covered bonds and use of structure features to achieve maturity protection will create significant additional expense
- Query whether covered bond issuance is worth the additional expense

Other Potential Issues

- SEC/registration and disclosure questions
 - 3(a)(2) exemption
 - SEC guidance regarding availability of 3(a)(2) for Canadian-type structures
 - Reg AB questions
 - For “registered” covered bonds, 40 Act exemption needed?
- Trading market questions
 - Currently, the USD market is 144A only
 - Limits the size of the market
 - Investors have restrictions on the amount that they can hold of “restricted” securities
 - 144A securities cannot be included in bond indices

Other Potential Issues (cont'd)

- 3(a)(2) securities would be considered “freely tradeable” by investors and would be eligible for inclusion in bond indices
- Non-bank issuers will not be eligible for 3(a)(2) exemption
 - Need an alternative issuance framework
- For covered bonds to be broadly used it would be best to facilitate issuance by non-banks
- In order to make covered bonds accessible to community and regional banks, either some “pooled” structure would be necessary or a “private” market would have to develop
 - Pooled trust preferreds or CDOs of trust preferreds have had a negative history, which may affect perceptions regarding a pooled structure

Market Data

Covered Bonds vs. Unsecured Bonds

Covered bonds are a unique asset class, sitting in between unsecured and asset-backed debt in terms of key characteristics

	Covered Bonds	Unsecured Bonds
Ratings	<ul style="list-style-type: none"> Statutory and structural enhancements and overcollateralization enable covered bonds to achieve ratings above the issuers unsecured ratings. 	<ul style="list-style-type: none"> Unsecured bond ratings are dependent on the rating of the issuer.
Cost of Funding	<ul style="list-style-type: none"> Due to their dual recourse nature, covered bonds provide a supplemental source of liquidity at a lower cost than unsecured funding. 	<ul style="list-style-type: none"> Unsecured bonds experience a greater level of volatility, especially during downturns in the credit cycle.
Collateral	<ul style="list-style-type: none"> Assets are generally limited to mortgage or public sector assets (in the future there may also be a range of consumer assets). One cover pool maintains assets which supports all covered bonds. The cover pool is dynamic with the ability to substitute assets, e.g., remove non-performing loans (cover pools will consist of one type of asset, e.g. all mortgages, or all public sector). 	<ul style="list-style-type: none"> Unsecured bonds do not encumber assets, and consequently additional protection is not provided to investors in an unsecured transaction.
Maintenance	<ul style="list-style-type: none"> A covered bond program requires a higher level of maintenance than unsecured bonds – e.g., ongoing maintenance of over-collateralization through an Asset Coverage Test. 	<ul style="list-style-type: none"> Minimal maintenance required.
Size	<ul style="list-style-type: none"> Increased flexibility given recent developments in the US and Canadian markets. 	<ul style="list-style-type: none"> Flexibility in terms of deal size.

•The existing covered bond investor base is a global constituency comprised of banks, central banks, asset managers, and financial institutions that are familiar with the product’s nature, i.e., high rating profile, collateral maintenance, generic structures, etc.

Covered Bonds vs. Asset Backed Securities

The assets backing covered bond issuance are in place to support the obligation in the event the issuer is unable to service the covered bonds. Until such a time, the issuer is responsible for making payments on the outstanding debt

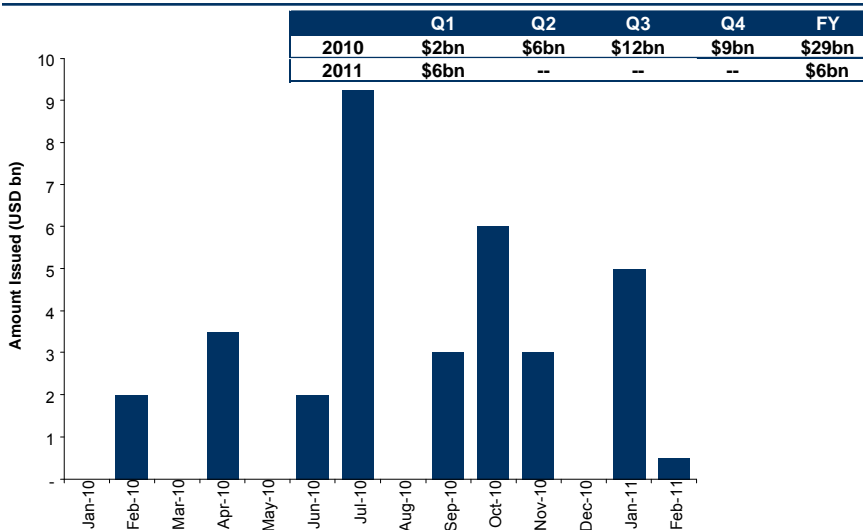
	Covered Bonds	Asset Backed Securities
Issuer	<ul style="list-style-type: none"> • Issuer is generally a bank who is the originator of the assets and is a regulated financial institution. 	<ul style="list-style-type: none"> • The issuer is a special purpose vehicle.
Collateral	<ul style="list-style-type: none"> • Assets are generally limited to mortgage or public sector assets (in the future there may also be a range of consumer assets). • One cover pool maintains assets which supports all covered bonds. • The cover pool is dynamic with the ability to substitute assets, e.g., remove non-performing loans (cover pools will consist of one type of asset, e.g. all mortgages, or all public sector). 	<ul style="list-style-type: none"> • There are no restrictions on the type of underlying assets. • Asset pool is typically static, i.e. no substitution of assets.
Recourse	<ul style="list-style-type: none"> • Covered bonds possess dual recourse with the originator ultimately being held responsible for repayment of the bonds, independent of the performance of the collateral. 	<ul style="list-style-type: none"> • Only the cash flows from the collateral of each specific pool will repay investors.
Regulation	<ul style="list-style-type: none"> • Where they exist, legislative statutes, as well as regulation, of the issuer provide comfort to covered bond investors. • An Asset Coverage Test of the cover pool monitor performance of the underlying assets. 	<ul style="list-style-type: none"> • The issuers are generally not regulated. • Asset pool transparency can be limited.
Characteristics	<ul style="list-style-type: none"> • Covered bonds are traditionally standard, i.e. fixed rate bullet repayment, however as a domestic investor base develops, expect a broader range of acceptable issuance characteristics. 	<ul style="list-style-type: none"> • Securitization notes are either fixed or floating rate and the term and amortization profile of the notes relies on the type of collateral.

USD Covered Bond Market Supply Overview

23 covered bond transactions have priced in the USD market since 2010 for an aggregate issuance volume of over USD 34 billion – with a significant pipeline for the coming months.

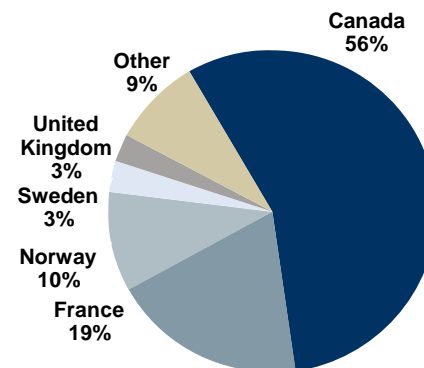
- Most market participants believe the USD covered bond market will continue to develop with expectations for repeat issuance and new entrants throughout 2011.
 - In addition to increased Yankee bank issuance, the emergence of domestic supply is expected, subject to legislative developments.
 - The investor base is in the process of forming new positions or teams to become better educated on the asset class.

USD Covered Bond Benchmark New Issuance (2010 – 2011 YTD)

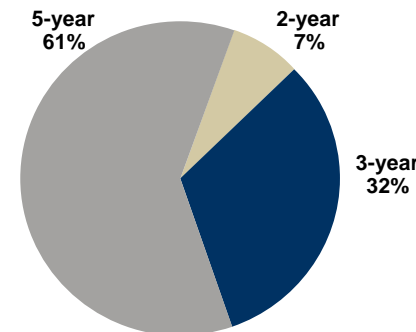


Sources: RBC Capital Markets

USD Covered Bond Issuance by Jurisdiction (2010-2011 YTD)



USD Covered Bond Issuance by Tenor (2010-2011 YTD)



USD Covered Bond Market Overview

Secondary trading levels for USD covered bonds

Issuer	Ticker	Ratings	Issue Date	Coupon (%)	Maturity	Amount Issued (U.S.\$ mm)	U.S. Treasury Benchmark	Current Spread vs. Treasury (Bid / Ask)	Current Spread vs. Libor (Bid / Ask)
US Market - European Issuers									
Cie Financement Foncier	CFF	Aaa/AAA	22Jul10	1.625	23Jul12	1,500	T 0 5/8 01/31/13	60/50	54/44
			22Apr10	2.125	22Apr13	2,000	T 0 5/8 01/31/13	110/100	80/70
			16Sep10	2.500	16Sep15	1,000	T 2 01/31/16	105/95	102/92
Stadshypotek AB	SHBASS	Aaa/NR	30Sep10	1.450	30Sep13	1,000	T 1 1/4 02/15/14	47/37	48/38
Barclays Bank PLC	BACR	Aaa/AAA	21Sep10	2.500	21Sep15	1,000	T 2 01/31/16	105/95	102/92
DNB Nor Boligkreditt AS	DNBNOR	Aaa/AAA	14Oct10	2.100	14Oct15	2,000	T 2 1/8 12/31/15	75/70	68/63
Sparebanken 1 Boligkreditt	SPABOL1	Aaa/AAA	26Oct10	1.250	25Oct13	1,500	T 1 1/4 02/15/14	47/40	44/37
BNP Paribas Home Loan	BNPPCB	Aaa/AAA	02Nov10	2.200	02Nov15	2,000	T 2 01/31/16	107/97	98/88
US Market - Canadian Issuers									
Canadian Imperial Bank	CM	Aaa/AAA	03Feb10	2.000	04Feb13	2,400	T 0 5/8 01/31/13	39/36	19/16
Bank of Nova Scotia	BNS	Aaa/AAA	26Jul10	1.450	26Jul13	2,500	T 0 5/8 01/31/13	70/67	24/21
National Bank of Canada	NACN	Aaa/AAA	24Jan11	1.650	30Jan14	1,000	T 1 1/4 02/15/14	44/41	25/22
Royal Bank of Canada	RY	Aaa/AAA	14Apr10	3.125	15Apr15	1,500	T 2 01/31/16	44/41	61/58
Bank of Montreal	BMO	Aaa/AAA	09Jun10	2.850	09Jun15	2,000	T 2 01/31/16	34/31	44/41
Canadian Imperial Bank	CM	Aaa/AAA	02Jul10	2.600	02Jul15	1,850	T 2 01/31/16	38/35	45/42
Toronto-Dominion Bank	TD	Aaa/AAA	29Jul10	2.200	29Jul15	2,000	T 2 01/31/16	40/37	43/40
Bank of Nova Scotia	BNS	Aaa/AAA	29Oct10	1.650	29Oct15	2,500	T 2 01/31/16	53/50	44/41
Bank of Montreal	BMO	Aaa/AAA	19Jan11	2.625	25Jan16	1,500	T 2 01/31/16	63/60	45/42
Canadian Imperial Bank	CM	Aaa/AAA	20Jan11	2.750	27Jan16	2,000	T 2 01/31/16	63/60	45/42

Source: RBC Capital Markets

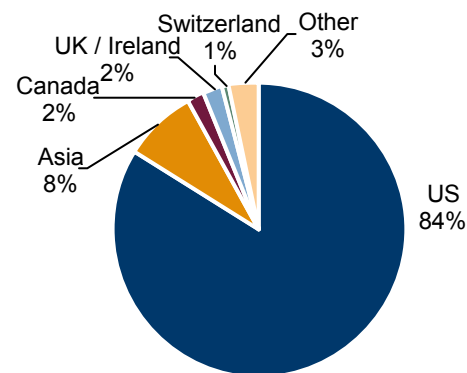
CIBC USD \$2 billion 2.000% Covered Bond Feb 2013

CIBC launched and priced the first USD 144A/Reg S covered bond in 2010 on January 27th

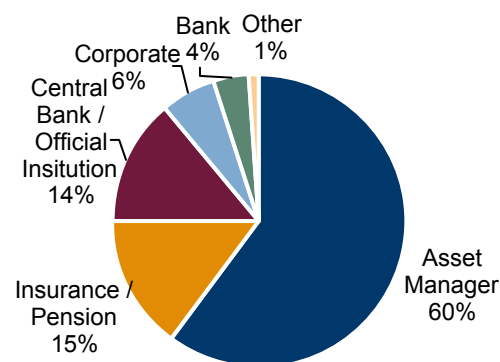
Transaction Highlights

- We highlight the successful execution of the CIBC USD 144A covered bond transaction as it may serve as a proxy for a potential BMO USD 144A covered bond.
 - CIBC's cover pool is fully insured by CMHC (Canadian Mortgage Housing Corporation), which partially drove investor demand in the transaction.
- The CIBC USD \$2 billion 3 year covered bond marked the re-opening of the USD covered bond market.
 - The transaction was launched on January 26th with guidance ranging from mid-swaps +30 to 32 bps.
 - The orderbook reached in excess of \$4 billion before the deal was priced at mid-swaps +30 bps (Treasuries + 66.1 bps).
 - The distribution was heavily weighted toward US investors as shown to the right.
 - The majority of the book was placed with rates buyers as pricing was optically attractive in comparison to more traditional rates products.
- The CMHC guarantee on the collateral offered an additional benefit, achieving greater investor attraction and ultimately pricing on the tight end of guidance.

Distribution by Region



Distribution by Investor Type



Source: Barclays Capital

RBC USD \$1.5 billion 3.125% Covered Bond

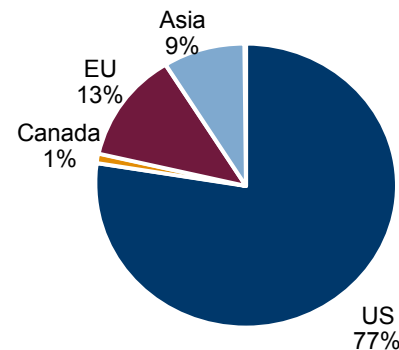
Apr 2015

RBC launched and priced its first USD 144A/Reg S covered bond on April 7, 2010

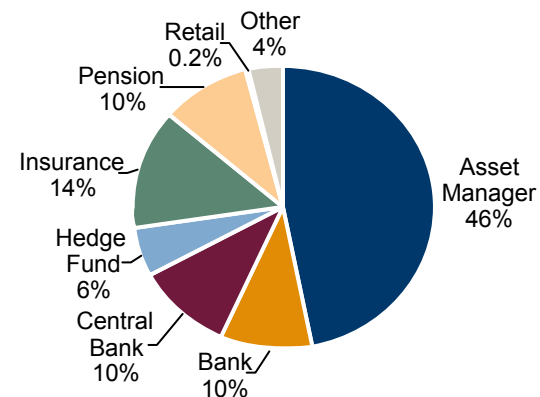
Transaction Highlights

- The successful execution of the RBC USD \$1.5 billion 5 year covered bond further supports the re-opening of the USD covered bond market.
 - The transaction was launched prior to US market open on April 7th with guidance at mid-swaps +30 bps.
 - Due to strong investor demand, the deal was priced shortly after market open at mid-swaps +30 bps (Treasuries + 45.85 bps).
 - The distribution was heavily weighted toward US investors, but also attracted Asian and European buyers.
 - The book was placed primarily with asset managers and insurance companies.
- This transaction is marked as the:
 - Second USD covered bond in 2010 (and since 2007).
 - Second USD covered bond by a Canadian issuer.
 - First USD covered bond not backed by assets fully insured by CMHC (Canadian Mortgage Housing Corporation), which benefits from the faith and credit of the Government of Canada, as did the prior CIBC USD covered bond.
- The RBC covered bond program was established in October 2007 and arranged by Barclays Capital and RBC Capital Markets.

Distribution by Region



Distribution by Investor Type



Source: Barclays Capital

CFF USD \$2 billion 2.125% Covered Bond

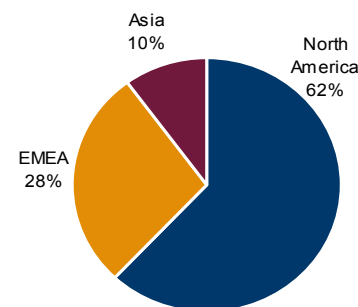
Apr 2013

CFF launched and priced its first USD 144A / Reg S Obligation Foncière on April 15th 2010

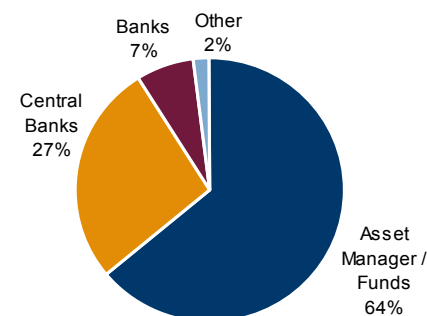
Transaction Highlights

- Compagnie de Financement Foncier ("CFF") successfully launched a USD 144A \$2 billion 3-year Obligation Foncières (French legislative Covered Bonds) rated AAA / Aaa / AAA:
 - After an extensive two week / two team roadshow earlier this year in the U.S., CFF was able to capitalize on the increasing U.S. investors' appetite in the asset class, as exhibited by the recent success of the two US dollar denominated covered bonds for CIBC and RBC
- Initial guidance was whispered in the mid-swaps +40 bps area when the transaction hit the screen yesterday afternoon, allowing US accounts to start their credit work on CFF
- The orderbook reached in excess of \$1 billion overnight, including interest from Europe and Asia:
 - Given the continued momentum, the joint bookrunners announced a benchmark size of \$1.5 billion and formal guidance of mid-swaps +40 bps upon New York open this morning
 - The final orderbook reached \$3 billion, with very little price sensitivity, before the larger-than-expected \$2 billion transaction was priced at noon at mid-swaps +40 bps, leaving some room for performance in the secondary market
- The deal benefited from a wide geographic distribution, with greater European and Asian participation compared to the prior two USD 144A covered bonds by the Canadians
- This is the first ever Obligation Foncière launched in the USD 144A market and marks the re-opening of the USD covered bond market for European issuers since the last wave of issuance in 2007

Distribution by Region



Distribution by Investor Type



Source: Barclays Capital

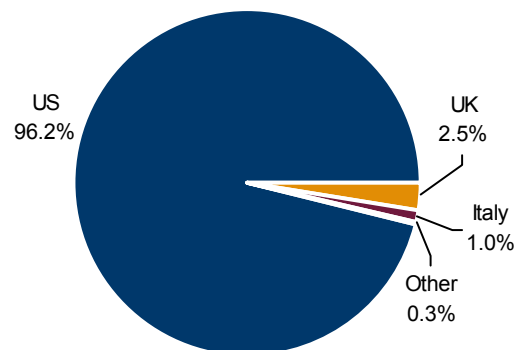
BMO USD \$2 billion 2.85% Covered Bond June 2015

BMO launched and priced its first USD 144A/Reg S covered bond on June 2nd 2010

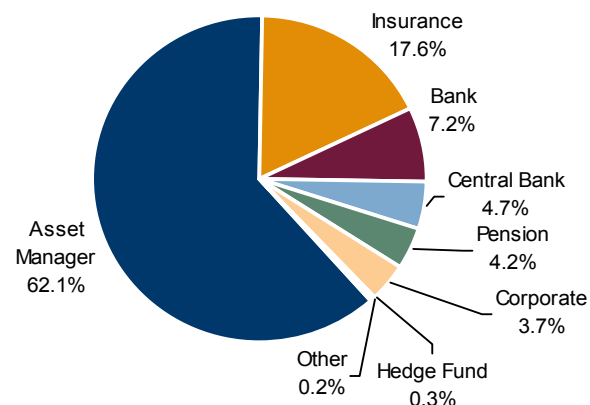
Transaction Highlights

- Despite market volatility driven by the European sovereign debt crisis and US financial reform legislation, BMO was able to successfully execute an inaugural 144A / Reg S \$2 billion 5 year covered bond transaction:
 - After closely monitoring the markets, BMO capitalized on a window of market stability and announced its transaction on June 2nd with price whispers in the mid-swaps +low 40 bps area
- Given the strength of the BMO credit and CMHC-wrapped cover pool, the transaction quickly garnered \$2.5 billion of orders, allowing for an official launch with price guidance in the mid-swaps +40 bps area:
 - Due to strong investor demand, the transaction priced prior to close of business with over \$3 billion of orders from 55 investor accounts (translating to 1.5x oversubscription)
 - The transaction ultimately priced at mid-swaps +39 bps (Treasuries +72.3 bps)
- The transaction was heavily weighted toward US investors as shown to the right:
 - The book was placed primarily with asset managers and insurance companies, within the rate portfolios
- This transaction marks BMO's inaugural USD-denominated covered bond transaction and the fourth USD covered bond transaction of 2010:
 - This successful covered bond transaction will facilitate future access for BMO in the USD markets for future covered bond issuance as well as access to other asset classes and investor bases

Distribution by Region



Distribution by Investor Type

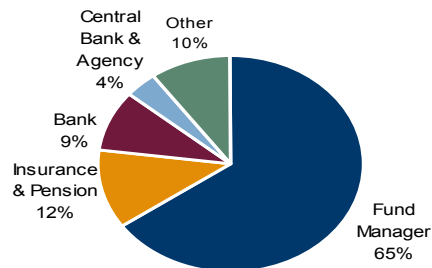


Source: Barclays Capital

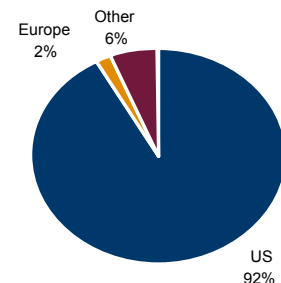
DnB NOR Boligkreditt – USD2bn 5 yr Covered Benchmark

Summary Term Sheet	
Issuer	DnB NOR Boligkreditt
Issue Rating	Aaa/AAA/AAA
Issue Size	\$2bn
Issue Date	6 October 2010
Settlement Date	14 October 2010
Maturity	14 October 2015
Issue Price	99.91%
Coupon	2.10%
Re-offer Spread	ms+68bps
Barclays Capital's Role	US\$ Programme Arranger, Joint Lead Manager, Swap Provider, Billing & Delivery

Account Allocation – Investor Type



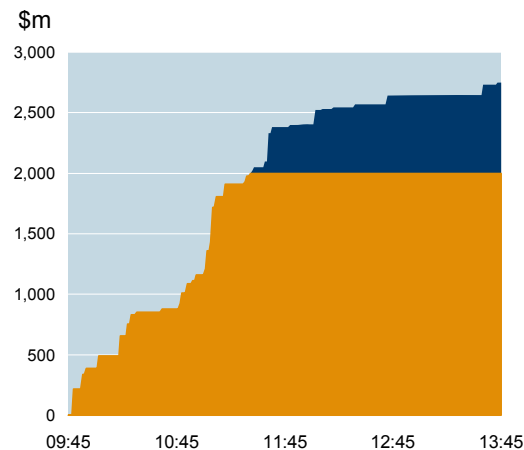
Account Allocation – Region



Transaction Overview

- On Wednesday 6th October, DnB NOR successfully launched and priced its inaugural USD2bn 5-year benchmark covered bond in the 144A/Reg S market, rated Aaa/AAA/AAA. Barclays Capital acted as Arranger of DnB NOR's USD programme, Joint Lead Manager, Swap Provider and Billing and Delivery Agent
- This transaction represents DnB NOR's debut USD covered bond and the first public USD denominated covered bond issued under the Norwegian covered bond legislation
- Following a series of investor meetings in late September encompassing San Francisco, Los Angeles area, Minneapolis and New York area, DnB NOR was able to capitalise on the positive investor feedback and the increasing US investor interest in the asset class and bring a transaction to market
- The deal was announced as a benchmark sized 5-year on Wednesday morning New York time. With an initial whisper of ms+ high 60s to 70 the book built quickly, exceeding USD1bn within an hour of bookbuilding. Shortly thereafter a price guidance of ms+68bps was released
- Books closed early afternoon with a final book in excess of USD2.75bn, with interest out of 47 accounts, allowing the issuer to upsize the deal to a USD2bn transaction whilst maintaining the spread guidance
- The orderbook was of high quality with the majority of bonds being placed with fund managers (65%), with several large names placing sizeable tickets. In terms of geographical distribution, 92% was bought by US investors with European investors and Others taking 2% and 6% respectively

Bookbuilding Progress

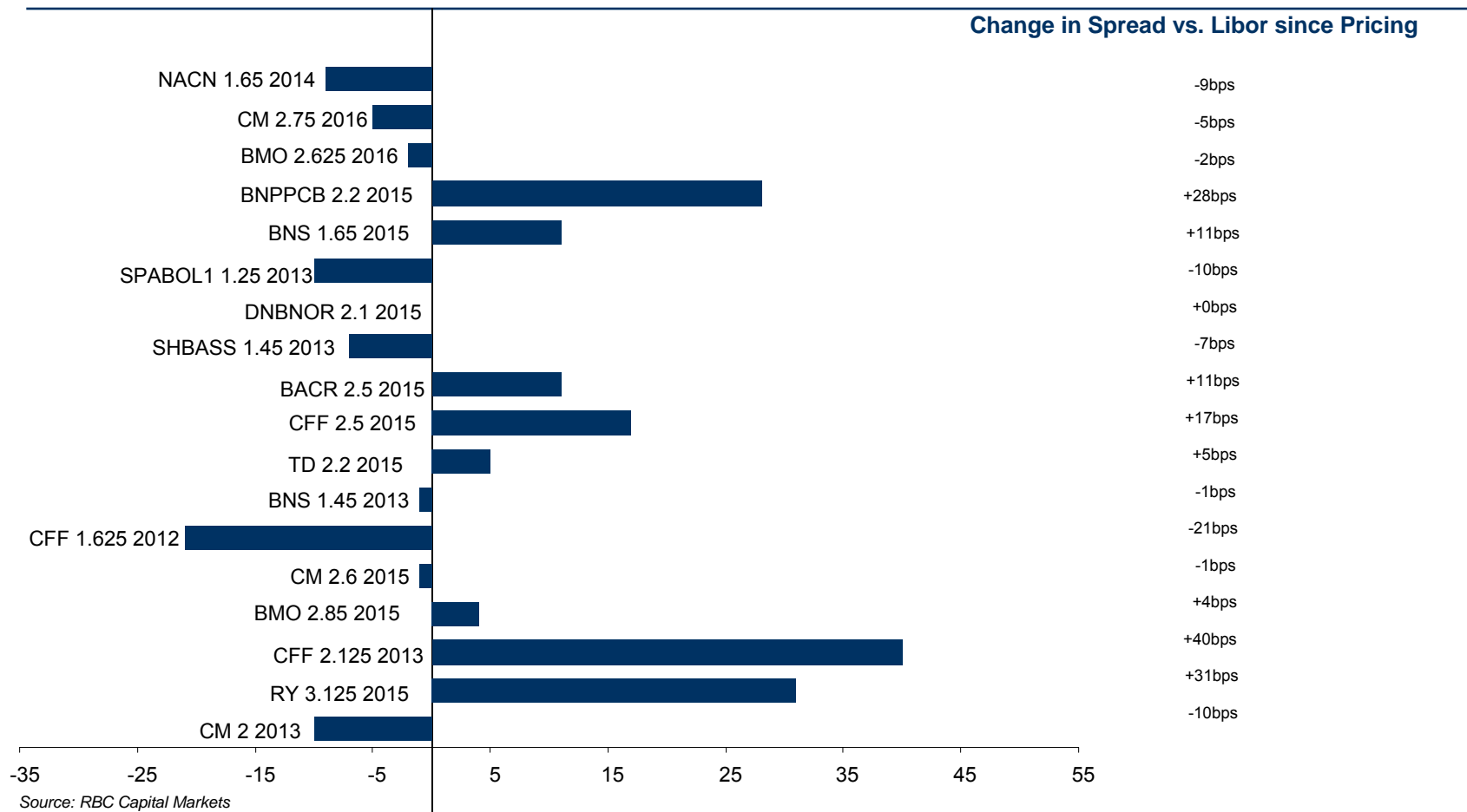


Source: Barclays Capital

USD Covered Bond Secondary Market

Secondary market performance for select USD covered bonds

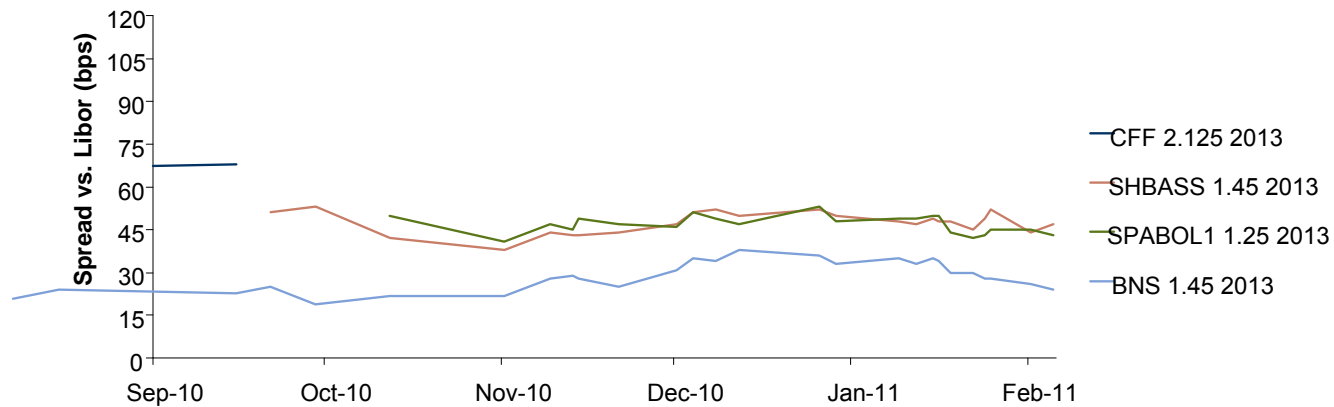
USD Covered Bond Spread Performance



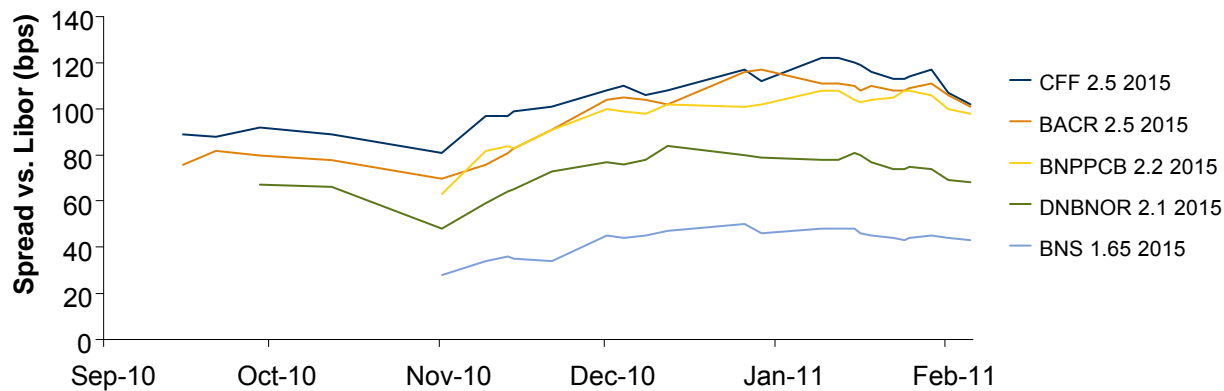
USD Covered Bond Secondary Market (cont'd)

Recent new issues have out performed relative to seasoned secondary paper, however, the overall sector remains near the historic wides.

USD Covered Bond 3-year Spread Performance



USD Covered Bond 5-year Spread Performance

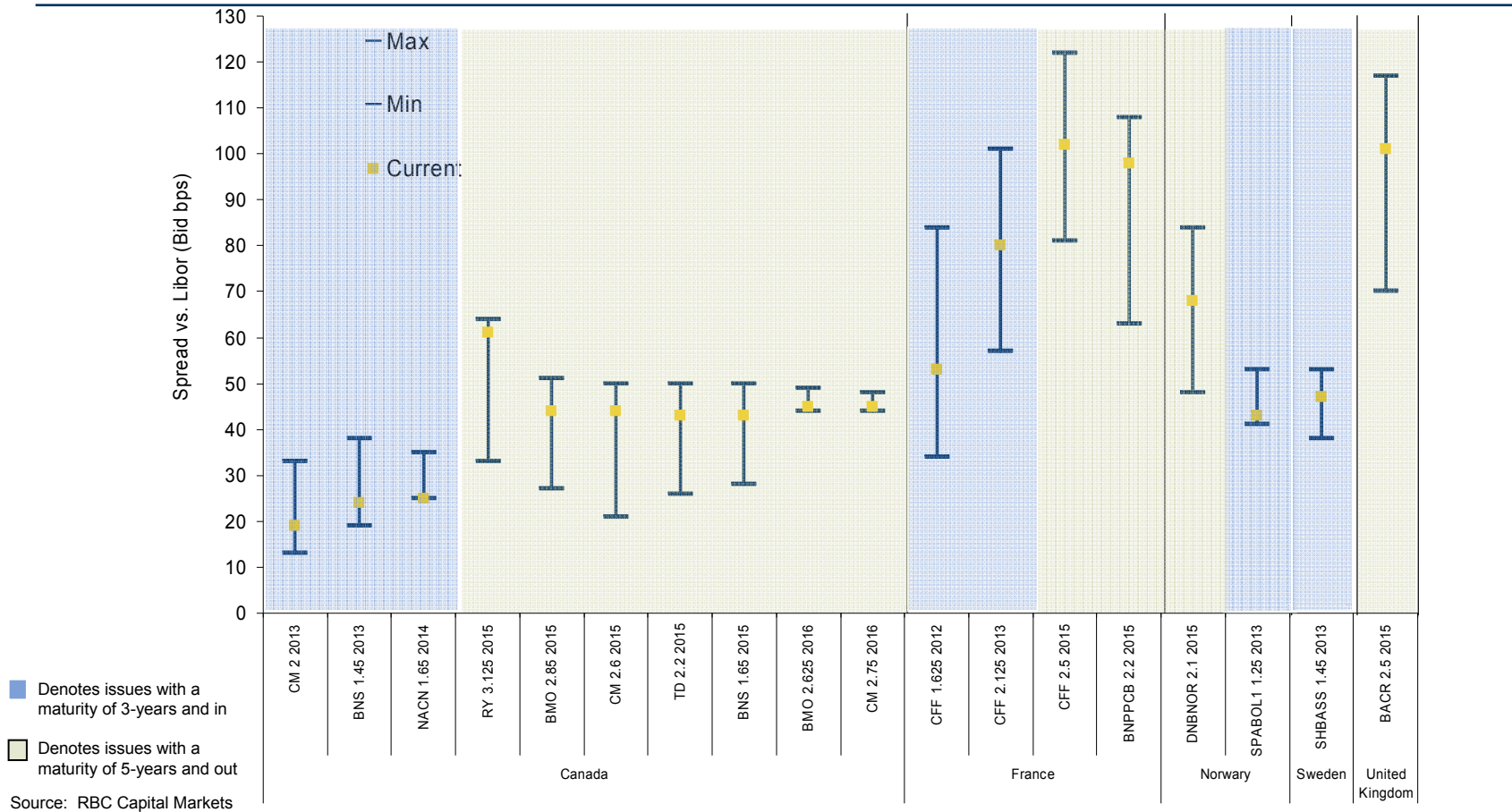


Sources: RBC Capital Markets

USD Covered Bond Secondary Market (cont'd)

Covered bond spreads, as measured on a Libor basis, have demonstrated volatility throughout the year primarily due to movement in underlying credit and market volatility.

USD Covered Bond Swap Spread Volatility (2010 – 2011 YTD)



USD Covered Bonds vs. Other AAA Supply

	USD Covered Bonds	FDIC TLGP	GSE	European Agency	Asset Backed Securities	Senior Unsecured
Product familiarity for US investors	Mixed	✓	✓	Name specific	Asset class specific	Name specific
Access to global investor base	✓	✓	✓	✓	✓	✓
Availability of paper in primary US market	Improving	Program expired	✓	✓	✓	✓
Secondary market liquidity in US market	Improving	✓	✓	Mixed	Mixed	Mixed
Rating	Aaa / AAA / AAA	Aaa / AAA / AAA	Aaa / AAA / AAA	Aaa / AAA / AAA	Structural enhancements and O/C can achieve triple-A ratings	Dependent on the rating of the issuer
Size per issue	\$500mm to \$2bn	\$3 to \$5bn	\$2 to \$5bn	\$2 to \$5bn	\$750mm	\$500mm to \$2bn
Tenor	3 to 10 year	2 or 3 year	5 year	5 year	3 year	1 to 10 year
Current secondary spread range	S + 10 to S + 80	S - 5 to S + 30	S - 10 to S + 20	S - 10 to S + 50	S + 20 to S + 200	S + 50 to S + 200

Source: RBC Capital Markets

USD Covered Bonds vs. Other AAA Supply (cont'd)

	USD Covered Bonds	FDIC TLGP	GSE	European Agency	Asset Backed Securities	Senior Unsecured
Collateral	Yes ⁽¹⁾	No	No	No	Yes ⁽²⁾	No
Recourse	Dual recourse	Single recourse	Single recourse	Single recourse	Evolving towards dual recourse	Single recourse
Legal framework	None in US ⁽³⁾	Explicit guarantee of US government	Quasi guarantee of US government	Mixed level of guarantees	None	None
Regulation	Typically regulated by federal overseer	Final Rule on TLGP	Mixed	Mixed	The issuers are generally not regulated	Typically regulated by federal overseer
Maintenance	Yes ⁽⁴⁾	None	None	None	None	None

1. Limited to mortgage or public sector assets; one dynamic cover pool, with the ability to substitute assets, maintains assets which covers all covered bonds.
2. There are no restrictions on the type of underlying assets; asset pool is often static, i.e. no substitution of assets.
3. Legislative statutes in other jurisdictions exist.
4. Asset Coverage Tests (ACT) ensure surveillance of the cover pool and provide transparency of the underlying assets.

Source: RBC Capital Markets