

NEW ISSUE REPORT

Vorarlberger Landes- und Hypothekenbank AG – Mortgage Covered Bonds

Covered Bonds/Austria

First Rating Assignment

2013

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Definitive Ratings

Cover Pool	Ordinary Cover Pool Assets	Covered Bonds	Rating
€3,255,978,125	Residential and Commercial Mortgage Loans	€1,420,000,000	Aaa

The ratings address the expected loss posed to investors. Moody's ratings address only the credit risks associated with the transaction. Other non-credit risks have not been addressed, but may have a significant effect on yield to investors.

Transaction Summary

We have assigned definitive Aaa long-term ratings to the covered bonds issued under Vorarlberger Landes- und Hypothekenbank AG's (Hypo Vorarlberg) mortgage covered bond programme.

The covered bonds are full recourse to the issuer (CR Assessment A3(cr)). If the issuer becomes insolvent, the covered bondholders will have priority claims over a pool of assets (cover pool). As of 31 December 2015, the assets in the cover pool amounted to €3.3 billion. Most of the loans in the cover pool (48.7%) are residential mortgage loans granted to borrowers in Austria. In addition, 46.9% of cover assets are commercial real estate mortgage loans originated as part of the issuer's SME and commercial real estate lending business. About 2.0% of the cover pool are residential mortgage loans granted to borrowers in Germany while about 2.4% are promoted housing loans. 23.8% of the cover pool consists of loans denominated in foreign currency most of them in Swiss francs (CHF). The outstanding covered bonds are euro-denominated and pay fixed-rate interest.

The rating takes into account the following factors:

- » The issuer's credit strength (A3(cr)).
- » The Austrian covered bonds legal framework.
- » The cover pool's credit quality, reflected by collateral score of 21.8%.
- » The level of over-collateralisation (OC) in the programme currently is 129.3%. The minimum OC commensurate with an Aaa rating is 38.0% on a nominal value basis.

We assign a TPI of "Probable" to the covered bonds.

The current covered bond rating relies on over-collateralisation over and above the minimum legal and contractual requirements. Based on data as of 31 December 2015, 38.0% over-collateralisation is required to maintain the current covered bond rating, which can be in uncommitted form. This shows that our analysis relies on over-collateralisation that is not in committed form.

As is the case with other covered bonds, we consider the transaction to be linked to the issuer's credit strength, particularly from a default probability perspective. Should the issuer's credit strength deteriorate, we expect all other things being equal that the covered bonds' rating will come under pressure.

In case of deterioration of the CB anchor or the pool quality, the issuer would have the ability, but not obligation, to increase the OC in the cover pool. Failure to increase the level of OC under these circumstances could lead to negative rating actions.

The principal methodology we use in rating the issuer's covered bonds is "Moody's Approach to Rating Covered Bonds", published in August 2015.

Other methodologies and factors that may have been considered in the rating process can also be found on <http://www.moody.com>. In addition, we publish a weekly summary of structured finance credit, ratings and methodologies, available to all registered users of our website, at www.moody.com/SFQuickCheck.

Opinion

Strengths of the Transaction

Issuer:

- » The covered bonds are full recourse to Hypo Vorarlberg (A3(cr)).

The Austrian legal framework:

The covered bonds are issued in accordance with the Austrian Pfandbrief Act (*Pfandbriefgesetz*), which explicitly protects covered bondholders. The bonds issued out of this programme are the first Austrian mortgage covered bonds according to the *Pfandbriefgesetz* that we rate. The legislation has several strengths including:

- » Under *Pfandbriefgesetz*, the issuer must be a specialised mortgage bank, supervised by the Austrian Financial

Services Authority (*Oesterreichische Finanzmarktaufsicht* or FMA) and licensed to issue covered bonds.

- » A cover pool monitor (*Treuhänder*) will monitor the day-to-day cover pool operations.
- » If the issuer becomes insolvent, the cover pool will be segregated from the issuer's general bankruptcy estate and the covered bondholders will have a priority claim on cover pool assets' cash flows.
- » A court-appointed cover pool administrator (*Besonderer Verwalter*) will undertake the necessary administrative measures to satisfy the covered bondholders' claims.
- » The Austrian Pfandbrief Act requires the issuer to maintain at least 2% of nominal OC.

Cover Pool Credit Quality:

- » The cover pool consists of loans secured by commercial (mainly SME borrowers) and residential properties. The cover pool's credit quality is reflected in the collateral score of 21.8%.
- » Each borrower's income has been independently verified; the income restricts the amount that can be lent.
- » All loans in the cover pool are secured by properties in Austria and Germany.

Refinancing Risk:

- » The ability of the cover pool administrator to raise funds against cover pool assets, e.g., using bridge loans or the sale of cover pool assets.

De-Linkage:

- » Following an issuer default,ⁱ covered bondholders benefit from a cover pool administrator that acts independently from the issuer's insolvency administrator.

Weaknesses and Mitigants

Issuer:

- » As with most covered bonds, until issuer default the issuer can materially change the nature of the programme. For example, new assets may be added to the cover pool, new covered bonds issued with varying promises and new hedging arrangements entered into. These changes could affect the cover pool's credit quality pool as well as overall market risks. **Mitigants:** (1) The covered bondholders have a direct claim on the issuer; and (2) the requirements and controls imposed by the Act.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody.com for the most updated credit rating action information and rating history.

Cover Pool Credit Quality:

- » For the purpose of analysing the cover pool's credit risk, we divided the cover pool into five sub-pools as per the table below.

EXHIBIT 1

Loan Type	Amount	Portion of Pool
Austrian Residential in EUR	€1,015,473,347	31.2%
Austrian Residential other than EUR	€570,578,425	17.5%
German Residential	€64,799,006	2.0%
Austrian promoted housing	€76,849,836	2.4%
Commercial Real Estate	€1,528,277,512	46.9%
Total	€3,255,978,125	100.0%

As per 31 December 2015, 23.8% of the cover pool assets are denominated in currencies other than euro, mostly in Swiss Franc. 17.5% of the cover pool consists of foreign currency denominated Austrian residential mortgage loans, and 11.4% of the commercial mortgage loans are denominated CHF. In our view these loans carry a much higher credit risk than similar euro-denominated loans. The recent appreciation of the CHF compared with EUR led to elevated LTVs for these loans compared with EUR-denominated loans. **Mitigant:** This is partially mitigated. Since the issuer originates only minor volumes of new of foreign currency denominated residential mortgage loans, foreign currency denominated loans have an above average seasoning. The strong recent house price inflation in Austria, together with the high seasoning supports these loans in respect of the expected loss severity in case of borrower default. Nevertheless we consider these loans' credit profile materially weaker than similar euro-denominated loans. We reflect the elevated credit risk of foreign currency denominated residential loans by increasing our model's collateral score result.

- » As of 31 December 2015, the cover pool had the following concentrations (1) geographical concentration as about two thirds of the Austrian residential mortgage loans in the cover pool are secured by properties located in Vorarlberg. Of the commercial mortgage loans 37.2% are secured by properties located in Vienna and 36.3% are secured by properties located in Vorarlberg; (2) obligor concentration as the 10 largest obligors within the commercial mortgage portfolio in the cover pool account for 14.9% of the commercial mortgages' loan balance. The Austrian residential mortgage portfolio consists of loans to 9,342 borrowers with the 20 largest borrowers representing 7.3% of the loan balance of Austrian residential mortgages. These regional concentrations together with the borrower concentration in the commercial mortgage sub-pool increase the probability of significant losses. In our credit analysis we gave benefit to

the fact that the cover pool consists of a number of sub-pools and considered the aggregate size of the cover pool when calculating the borrower concentration in the residential sub-pool. **Mitigant:** Our collateral score models take into account, *inter alia*, the impact of borrower, regional and country concentrations. The significant regional concentration in Vorarlberg and the borrower concentration in the commercial mortgage sub-pool were a driver of the collateral score for this programme.

- » The issuer could not provide information regarding the property type for 47% of the commercial mortgage sub-pool. We reflected the uncertainty introduced by this missing information in our modelling by using conservative assumptions for property type.
- » As with most covered bonds in Europe, there are few restrictions on the future composition of the cover pool, creating substitution risk. **Mitigants:** The quality of the cover pool, over time, will be protected by, among others, the requirements of the Austrian covered bond legislation. If the quality of the collateral deteriorates below a certain threshold, the issuer will have the ability, but not the obligation, to increase the OC in the cover pool. Failure to increase the level of OC following a deterioration of the cover pool could be credit negative.

Refinancing Risk:

- » Following a CB anchor event, to achieve timely principal payment, covered bondholders may need to rely on proceeds being raised through the sale of, or borrowing against, assets in the cover pool. Following a CB anchor event, the market value of these assets may be subject to high volatility. **Mitigants:** (i) The credit strength of the issuer. The stronger the issuer's credit strength, the lower the chance of being exposed to this risk; (ii) the credit quality of the cover pool; and (iii) we used stressed refinancing margins in our modelling.

Interest-Rate and Currency Risks:

- » Currently, about 23.8% of the loans in the cover pool are foreign currency denominated, almost entirely in CHF, whilst the covered bonds are euro-denominated. We expect that covered bonds issued under this programme in the future will be mainly euro-denominated, leading to currency mismatches. Interest-rate risks are introduced by the fact that about 88.6% of cover pool assets pay a floating rate while the covered bonds mainly pay a fixed rate. This is common for most European covered bonds, as there is potential for exposure to interest-rate and currency risks. **Mitigant:** These market risks are also considered in the level of OC necessary for the Aaa rating and in particular the existing currency mismatch was a driver of the OC level necessary for the Aaa rating.

Liquidity:

- » The programme does not benefit from any designated source of liquidity if cash flow collections are interrupted.
Mitigants: The strengths of the Austrian framework for covered bonds, which include (1) the alternatives given to the cover pool administrator for raising funds against the cover pool; and (2) the minimum of 2% OC on a nominal basis.

Time Subordination:

- » After issuer default, later-maturing covered bonds are subject to time subordination. Principal cash collections may be used on a first-come-first-serve basis, paying earlier-maturing covered bonds before later-maturing covered bonds. This could lead to OC being eroded before any payments are made to later-paying covered bonds.

Structure Summary

Issuer:	Vorarlberger Landes- und Hypothekbank AG (A3(cr))
Covered Bond Type:	Mortgage Covered Bonds
Issued Under Covered Bonds Law:	Yes
Applicable Covered Bonds Law:	Austrian Pfandbrief Act (<i>Pfandbriefgesetz</i>)
Originator:	Vorarlberger Landes- und Hypothekbank AG
Servicer:	Vorarlberger Landes- und Hypothekbank AG
Intra-group Swap Provider:	None
Monitoring of Cover Pool:	Cover pool monitor (<i>Treuhänder</i>), mandatory by operation of the Austrian covered bond legislation
Trustees:	n/a
Timely Payment Indicator (TPI):	Probable
TPI Leeway:	1 notch

CB Anchor

CR Assessment	A3(cr)
Senior unsecured rating	Baa1
Adjusted BCA	baa3
CB Anchor	CR assessment + 1 notch

Covered Bonds Summary

Total Covered Bonds Outstanding:	€1,420,000,000
Main Currency of Covered Bonds:	Euro (100%)
Extended Refinance Period:	No
Principal Payment Type:	Hard bullet (no extension period)
Interest Rate Type:	Fixed rate covered bonds (100%); variable rate covered bonds may be issued as well

Collateral Summary

Size of Cover Pool:	€3,255,978,125
Main Collateral Type in Cover Pool:	Residential mortgages (50.7%), commercial mortgages (46.9%), promoted housing mortgages (2.4%)
Main Asset Locations:	Austria (85.8%), Germany (14.2%)
Loans Count:	Residential mortgage loans (12,653), commercial mortgage (1,628), promoted housing (210)
Main Currency of Cover Assets:	Euro (76.2%), Swiss francs (23.3%), Japanese yen (0.5%)
Concentration of 10 Largest Borrowers:	The 10 largest exposures are all commercial mortgage loans secured by commercial properties. The aggregate amount of these 10 exposures represents about 7.0% of the total cover pool.
WA Current LTV:	66.1% for Austrian residential mortgages denominated in EUR, 68.1% for non-EUR Austrian residential mortgages, 63.0% for commercial mortgages and 44.5% for promoted housing mortgages. These numbers are based on the properties' market values. The average LTVs reflect the whole loan amount. These numbers are further based on updated property valuations, as the issuer regularly updates the valuations of the properties and therefore could not provide the property values as at loan origination.
WA Seasoning:	51 months for Austrian residential mortgages denominated in EUR, 120 months for non-EUR denominated Austrian residential mortgages, 65 months for commercial mortgages, 124 months for promoted housing loans
WA Remaining Term:	258 months for Austrian residential mortgages denominated in EUR, 180 months for non-EUR denominated Austrian residential mortgages, 149 months for commercial mortgages, 200 months for promoted housing loans
Interest Rate Type:	Fixed-rate assets (11.4%), floating-rate assets (88.6%)
"Committed" Over - Collateralisation:	2% (mandatory minimum nominal OC based on statutory requirements)
Current OC	129.3% (nominal value basis)
Cover Pool Losses	36.2%
Collateral Score:	21.8%
Further Details:	See Appendix 1
Pool Cut-off Date:	31 December 2015

Structural and Legal Aspects

Mortgage covered bonds governed by *Pfandbriefgesetz*

Hypo Vorarlberg's mortgage covered bonds are governed by the Austrian Pfandbrief Act (*Pfandbriefgesetz*). This is one of three covered bond frameworks that exist in Austria. The law requires a minimum nominal OC of 2%.

Additional Structural Features

The cover pool includes loans with LTVs that are higher than 60%. For these loans, the issuer has also registered the loan parts above 60%. Moody's understands that these loan parts are available to covered bondholders on a priority basis.

Moody's Rating Methodology

The approach we use for rating covered bond transactions is detailed in our Rating Methodology.² The impact of the issuer's credit strength, collateral quality, refinancing and market risks are considered below.

Credit Strength of the Issuer

The covered bonds are full recourse to Hypo Vorarlberg (A3(cr)). For more information on Hypo Vorarlberg, please see "Related Research".

Cover Pool Credit Quality

As of 31 December 2015, 46.9% of the cover pool assets are commercial mortgage loans, 49.7% Austrian residential mortgage loans, 2.0% German residential mortgage loans and 2.4% loans secured by Austrian promoted housing properties. All mortgaged properties are located in Austria and Germany. Austrian assets are mainly located in Vorarlberg and Vienna.

The cover pool assets total €3.3 billion and back €1.4 million covered bonds. The OC on a nominal basis is 129.3%.

The issuer has opted to include loan parts above 60% LTV in the cover pool. In Moody's understanding these parts are available to the covered bondholders on a priority basis. However, loan parts with higher LTV have a lower buffer against decline in property values and are therefore more risky. This results in a higher collateral score compared to cover pools of issuers which decide to not include loan parts above a certain threshold, all other things being equal.

The valuations are annually updated. As in many other markets, regular updates of property values are common in

Austria. For further information on the cover pool, see Appendix 1. For further information on the income underwriting and valuation see Appendix 2.

Commercial Mortgages

The properties securing the commercial mortgages are located in Austria (74%) and Germany (26%). We view the following characteristics of the commercial mortgages loans as credit positive:

- » About 79.7% of the commercial mortgages are annuity or amortising loans.
- » Except for one loan which was granted to SPV (Special Purpose Vehicle) borrowers, the issuer has recourse to an operating entity or a private individual in respect of all loans in the initial cover pool.

We regard the following portfolio characteristics of the commercial mortgage loans as credit negative:

- » The average LTV of the commercial mortgage loans is 63.0%. The LTVs are based on annually updated property valuations conducted by the issuer. Due to the property price inflation since the origination of the loans in the cover pool, these reported LTVs are lower than they would be based on the initial property valuations at the time of loan origination.
- » There are borrower and regional concentrations. The 10 largest borrowers represent about 14.9% of the aggregate amount of the commercial loans. In addition, 37.2% of the commercial loans are secured by properties located in Vienna and 36.3% are secured by properties located in Vorarlberg.
- » About 2.4% of the commercial mortgage loans are currently in arrears.
- » For 46.9% of the initial cover pool the issuer was not able to provide the property type information.
- » The aggregate amount of prior-ranking loans is about €592 million, which compares with an aggregate balance of €1,528 million for commercial mortgage loans in the cover pool. Prior-ranking loans represent around 38.7% of the commercial mortgage loan amount in the cover pool.
- » 11.8% of the loans in this sub-pool are denominated in foreign currency, which exposes the respective borrowers to the risk of increased interest and principal repayment obligations if the exchange rate moves against them. Due to the recent appreciation of the CHF against the euro, these borrowers currently face increased loan amounts in terms of current euro equivalent.

Austrian Residential Mortgages

The description below refers to the Austrian residential mortgages included in the cover pool. The German residential mortgages in the cover pool only represent a small portion of the aggregate cover pool which we expect not to grow significantly over time. The characteristics of German residential mortgage loans are similar to Austrian residential mortgages in respect of characteristics that are most important for our credit analysis.

We view the following characteristics of the Austrian residential mortgages loans as credit positive:

- » About two thirds of the loans are secured by owner-occupied properties.
- » The loans have an average seasoning of 76 months.

We regard the following portfolio characteristics of the residential mortgage loans as credit negative:

- » About 36.0% of the residential mortgages in the pool are denominated in foreign currency, which exposes the respective borrowers to the risk of increased interest and principal repayment obligations if the exchange rate moves against them. Due to the recent appreciation of the CHF against the euro, these borrowers face increased loan amounts in terms of current EUR equivalent. For the portion of the cover pool that consists of foreign currency denominated loans, we have reflected the higher credit risk due the borrowers' exposure to exchange rate risk by adjusting our model result.
- » The Austrian residential loans in the cover pool have an average reported LTV of 66.8%. Even though this number seems relative moderate, we note that it is based on property values that the issuer updates frequently after origination. The LTV thus reflects house-price inflation in the respective regions since the origination of the loans. We have reflected the fact that the reported LTVs are based on updated property valuations in our model as our standard expectation for EMEA covered bonds is that issuers provide cover pool information based on property valuations as per loan origination.
- » About 1.0% of the residential mortgage loans in the cover pool are in arrears.
- » There are regional concentrations in the Austrian residential mortgage sub-pool, because 65.3% of the properties are located in Vorarlberg, and the 20 largest borrowers represent about 4.9% of the aggregate amount of the residential loans.

Summary Collateral Analysis: Collateral Score

The factors discussed in the sections Residential Mortgages and Commercial Mortgages have been incorporated into our analysis. The result of the cover pool analysis is the collateral

score.³ We calculate a collateral score based on the credit quality of the cover pool assets. In addition, the collateral score published in this report reflects all adjustments made; this number therefore includes the cushion built in to address the factors described above.

More generally we calculate the collateral score using a multi-factor model solved through a Monte Carlo simulation to assess the credit quality of the commercial mortgages and a scoring model for the residential mortgages in the cover pool. Our analysis takes into account *inter alia* the impact of concentration on borrower, regional and country levels as well as the different types of properties securing the loans. We calculated the aggregate collateral score for this programme as the weighted average of the collateral scores of the six sub-pools mentioned above. For the CHF-denominated portion of the residential mortgages, we applied an additional stress to reflect the exchange-rate risk borrowers are exposed to.

For this transaction, the collateral score of the current pool is 21.8%, which is higher than the average collateral score for mortgage covered bonds that we rate (see Related Research: [Moody's Global Covered Bonds Monitoring Overview: Q2 2015](#), published in November 2015). Other Credit Considerations

Legal risks for assets located outside Austria

If the issuer becomes insolvent, we believe that any cover pool assets located outside Austria are less protected against claims of other creditors of the issuer than assets located in Austria. In particular, we have identified and analysed the following scenarios:

- » **Claims against borrowers located outside Austria, or loans not governed by Austrian law:** For loans not governed by Austrian law, the borrower may be allowed to exercise set-off, thereby reducing the amount payable by the borrower.
- » **Loans to borrowers outside the European Economic Area (EEA):** We understand that cover pool assets located outside the EEA may not be available to the covered bondholders on a priority basis because other (unsecured) creditors of the issuer may successfully access the assets in the cover pool. This may – due to secondary proceedings being commenced under the respective domestic law, for example – result in lower recoveries on these assets.⁴ The cover pool does currently not contain any non-EEA assets.

Substitution risks are mitigated by the Act

As with most covered bonds in Europe, there are few restrictions or limitations on the future composition of the cover pool. This may create substitution risk. **Mitigants** to substitution risk, which should protect the quality of the cover pool over time, include:

- » Legal framework requirements
- » Cover pool composition monitoring

If the collateral quality deteriorates below a certain threshold, the issuer can increase the OC in the cover pool to support the current rating. If additional OC is not added following collateral deterioration, this could lead to a negative rating actions on the covered bonds.

Refinancing Risk

Following default CB anchor event, when the "natural" amortisation of the cover pool assets alone is not sufficient to repay principal, we assume that funds must be raised against the cover pool at a discount if covered bondholders are to receive timely principal payment. Where the portion of the cover pool that is potentially exposed to refinancing risk is not contractually limited, our expected loss analysis typically assumes that this amount exceeds 50% of the cover pool.

Following CB anchor event, the market value of these assets may be volatile. Examples of the stressed refinancing margins that we use for different types of prime-quality assets are published in our Rating Methodology.

Aspects of this covered bond programme that are positive with respect to refinancing risk include:

- » The Pfandbrief Act: If the issuer defaults, the cover pool administrator has the ability (1) to transfer the cover pool together with the covered bonds to another suitable bank, which will assume the liabilities under the transferred covered bonds; or (2) to sell all or part of the cover pool to raise liquidity if cash is needed for due payments on the outstanding covered bonds. The cover pool administrator may also raise funds against the cover pool assets through bridge loans.

Aspects of this covered bond programme that are negative with respect to refinancing risk include:

- » The programme does not benefit from any contractual provisions to allow for an extension of a principal refinancing period.
- » All covered bonds issued under this programme have a hard-bullet repayment with no extension period.
- » The proportion of commercial mortgages in the cover pool is high and there is a significant portion of the cover pool denominated in CHF and other currencies.

Interest-Rate and Currency Risk

As with most European covered bonds, there is potential for interest-rate and currency risks. Following CB anchor event, covered bondholders may be exposed to interest-rate risk,

which could arise from the different payment promises and durations made on the cover pool and the covered bonds.

EXHIBIT 2

Overview Assets and Liabilities

	Assets (%)	Liabilities (%)	WAL Assets (Years)	WAL Liabilities (Years)
Fixed rate	11.4%	100.0%	6.3	5.4
Variable rate	88.6%	0.0%	15.7	n/a

WAL = weighted-average life

Aspects specific to this covered bond programme that are positive with respect to interest-rate and currency risk include:

- » Exposure to currency risk is reduced by the fact that the issuer needs to consider the current exchange rate to calculate OC.

Aspects specific to this covered bond programme that are negative with respect to interest-rate and currency risk include:

- » Exchange-rate risk is introduced to the programme by the 23.8% of foreign currency denominated cover assets while covered bonds are euro-denominated.
- » Interest-rate risk arises because the covered bonds pay a fixed rate whilst 88.6% of the assets pay a floating rate. This is currently mitigated by the low interest-rate environment, because significantly lower interest rates are unlikely.

If the issuer becomes insolvent, we do currently not assume that the cover pool administrator will always be able to efficiently manage any natural hedge between the cover pool and the covered bonds.

Following a CB anchor event, our Covered Bond Model looks separately at the impact of increasing and decreasing interest rates on the expected loss of the covered bonds, taking the path of interest rates that leads to the worst result.

As of the date of this report, the issuer has not registered any swaps or derivatives in the cover pool register of this programme and we understand that this is not planned for the near future.

Linkage

All covered bonds are linked to the underlying issuer rating. The covered bonds will therefore come under rating stress if the issuer's credit strength deteriorates. Reasons for this include:

- » Refinancing risk: Following a CB anchor event, if principal receipts from collections of the cover pool are not sufficient to meet the principal payment due on a covered bond, funds may need to be raised against the cover pool. However, the fact that the issuer has defaulted may negatively impact the ability to raise funds against the cover pool.
- » The exposure to decisions made by the issuer in its discretion as manager of the covered bond programme that could negatively affect the value of the cover pool. For example, before a CB anchor event, the issuer may add new assets to the cover pool, issue further bonds and enter into new hedging arrangements. These actions could negatively affect the value of the cover pool.
- » More generally, by the incorporation of the issuer's strength in accordance with our rating methodology.

As a result of this linkage, the probability of default of the covered bonds may be higher than expected for a senior unsecured debt with the same rating. However, our primary rating target is the expected loss, which also takes severity of loss into account, which in this case is consistent with the covered bond rating.

Our Timely Payment Indicator (TPI)⁵ assesses the likelihood that timely payments will be made to covered bondholders following a CB anchor event, and thus determines the maximum rating a covered bond programme can achieve with its current structure, while allowing for the addition of a reasonable amount of OC.

Aspects to this covered bond programme that are TPI-positive include:

- » The level of support expected for covered bonds in Austria.
- » The Austrian Pfandbrief Act, including:
 - At the time of the declaration of issuer's bankruptcy, a cover pool administrator will take over management responsibility of the covered bond programme. The cover pool administrator will act independently from the issuer's bankruptcy receiver. Having an independent administrator may reduce potential conflicts of interest between the covered bondholders and other creditors.
 - Set-off: We understand that setting-off against claims registered in the cover pool is not permitted in context of cover pool assets that are located in Austria and governed by Austrian law.
 - Ability of the cover pool administrator to raise funds against the cover pool assets.
 - 2% minimum OC on a nominal value basis

- » Cover pool assets' credit quality, which is reflected by the collateral score of 21.8%.

Aspects to this covered bond programme that are TPI negative include:

- » All covered bonds outstanding will have a bullet repayment at maturity, without any extension period for the repayment of the bonds.
- » The covered bond programme does not benefit from any designated source of liquidity if cash flow collections are interrupted.
- » High exposure to market risk via exchange rate and interest rate risk, which could significantly impact cash flows from the cover pool in case these risk should materialise.
- » Commingling risk: We understand that, upon the appointment of the cover pool administrator, the cover pool administrator has a priority claim on all cash flows stemming from the cover pool assets. However, the cover pool administrator must separate these cash flows from other cash flows to the issuer, before this cash can be used to make payments to covered bondholders.

In line with the other mortgage covered bonds issued under the Austrian covered bond legislation, we have assigned a TPI of Probable to this transaction.

The TPI Leeway measures the number of notches by which Moody's might lower the CB anchor before the rating agency downgrades the covered bonds because of TPI framework constraints. The TPI Leeway for this programme is 1 notch.

Monitoring

We expect that the issuer will deliver to us certain performance data on an ongoing basis. If this data is not made available to us, our ability to monitor the ratings may be impaired. This could negatively impact the ratings or, in some cases, our ability to continue to rate the covered bonds.

Moody's Related Research

For a more detailed explanation of our approach to this type of transaction as well as similar transactions please refer to the following reports.

Rating Methodology:

- » [Moody's Approach to Rating Covered Bonds, August 2015 \(SF412595\)](#)

Special Reports:

- » [Moody's Global Covered Bonds Monitoring Overview: Q2 2015, November 2015 \(SF430320\)](#)
- » [European Covered Bond Legal Frameworks: Moody's Legal Checklist, German Translation, January 2006 \(SF67969\)](#)
- » [European Covered Bond Legal Frameworks: Moody's Legal Checklist, December 2005 \(SF66418\)](#)

Announcements:

- » [Moody's updates on non-EEA assets in German and Austrian covered bond transactions, April 2010](#)

Performance Overview:

- » [Vorarlberger Landes- und Hypothekenbank - Mortgage Covered Bonds, February 2016 \(SF422326\)](#)

Credit Opinion:

- » [Vorarlberger Landes- und Hypothekenbank](#)

Webpage:

- » www.moody.com/coveredbonds

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Appendix 1: Cover Pool Information

Austrian Residential Mortgage Loans (EUR denominated)

Overview	
Asset Type	Residential
Asset balance:	1,015,473,347
Average loan balance:	124.644
Number of loans:	8,147
Number of borrowers:	6,642
Number of properties:	10,440
WA Remaining Term (in months):	258
WA Seasoning (in months):	51
Details on LTV	
WA current LTV :	n/a
WA Indexed LTV:	66.1%
Valuation type:	Market Value
LTV threshold:	n/a
Junior ranks:	n/d
Prior ranks:	28.7%

Specific Loan and Borrower characteristics	
Loans benefiting from a guarantee:	n/a
Interest Only Loans:	17.3%
Loans for second homes/Vacation:	0.0%
Buy to Let loans/Non owner occupied properties:	25.1%
Limited income verified	0.0%
Adverse Credit Characteristics(*):	0.0%
Performance	
Loans in arrears (≥ 2months - < 6months):	0.3%
Loans in arrears (≥ 6months - < 12months):	0.1%
Loans in arrears (> 12months):	1.0%
Loans in a foreclosure procedure:	0.2%
Multi-Family Properties	
Loans to tenants of tenant-owned Housing Cooperatives:	n/a
Other type of Multi-Family loans	n/a

(*) Refers to borrowers with previous missed payments, borrowers with a previous personal bankruptcy or borrowers with record of court claims against them at time of origination

EXHIBIT A

Balance per LTV-band

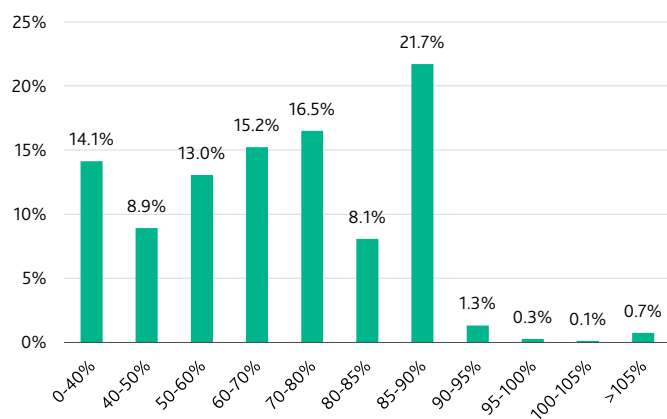


EXHIBIT B

Cover Pool Composition

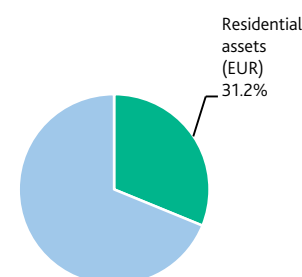


EXHIBIT C

Seasoning

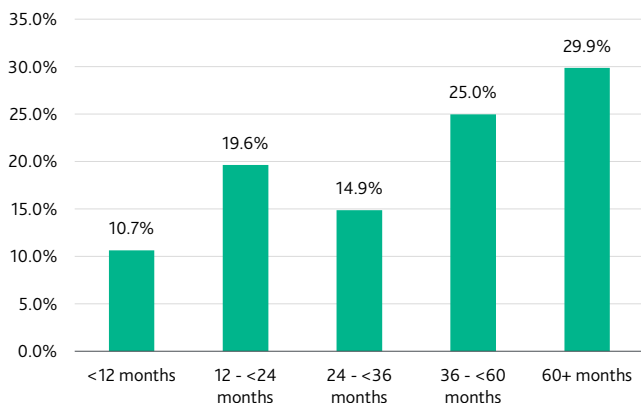


EXHIBIT D

Interest Rate Type

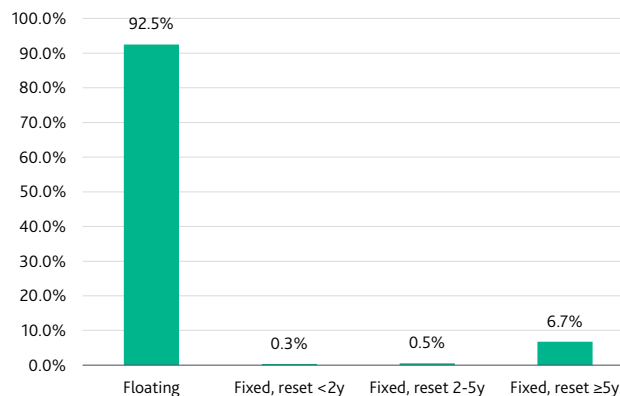
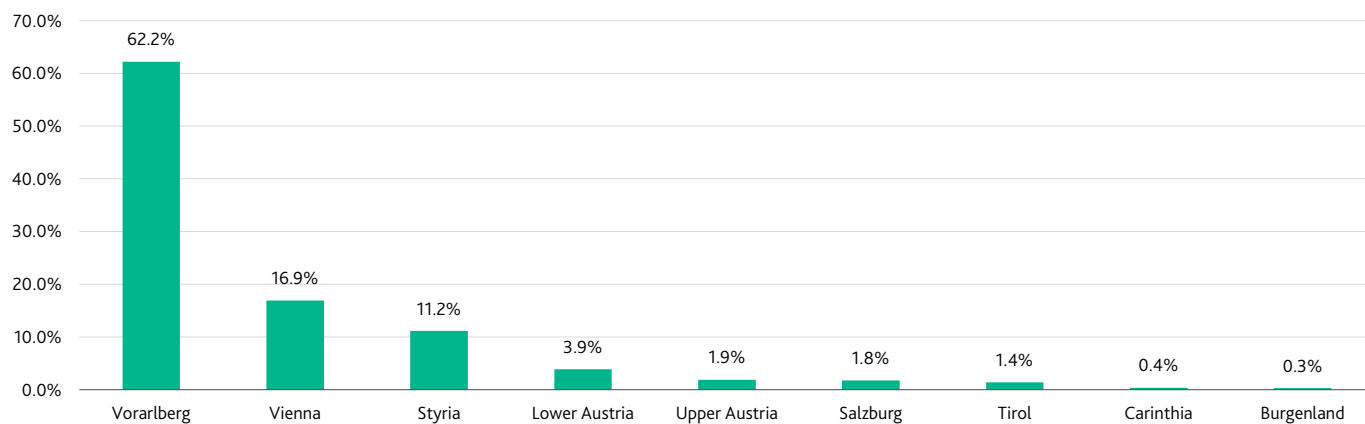


EXHIBIT E

Main Country Regional Distribution

Austrian Residential Mortgage Loans (non-EUR)

Overview	
Asset Type	Residential
Asset balance:	570,578,425
Average loan balance:	137,555
Number of loans:	4,148
Number of borrowers:	3,573
Number of properties:	5,186
WA Remaining Term (in months):	180
WA Seasoning (in months):	120
Details on LTV	
WA current LTV:	n/a
WA Indexed LTV:	68.1%
Valuation type:	Market Value
LTV threshold:	n/a
Junior ranks:	n/d
Prior ranks:	48.2%

Specific Loan and Borrower characteristics	
Loans benefiting from a guarantee:	n/a
Interest Only Loans:	56.5%
Loans for second homes/Vacation:	0.0%
Buy to Let loans/Non owner occupied properties:	9.8%
Limited income verified	0.0%
Adverse Credit Characteristics(*):	0.0%

Performance	
Loans in arrears (≥ 2months - < 6months):	0.0%
Loans in arrears (≥ 6months - < 12months):	0.1%
Loans in arrears (> 12months):	0.3%
Loans in a foreclosure procedure:	0.0%

Multi-Family Properties	
Loans to tenants of tenant-owned Housing Cooperatives:	n/a
Other type of Multi-Family loans	n/a

(*) Refers to borrowers with previous missed payments, borrowers with a previous personal bankruptcy or borrowers with record of court claims against them at time of origination

EXHIBIT A

Balance per LTV-band

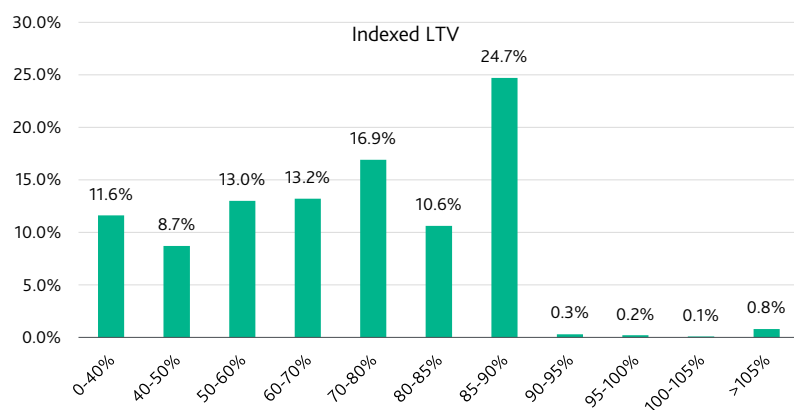


EXHIBIT B

Cover Pool Composition

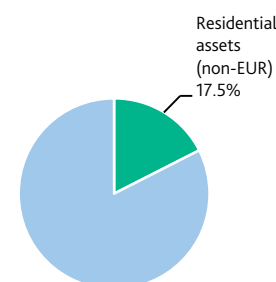


EXHIBIT C

Seasoning

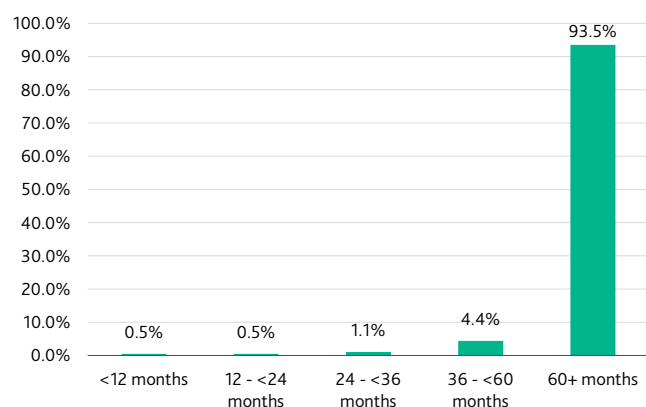


EXHIBIT D

Interest Rate Type

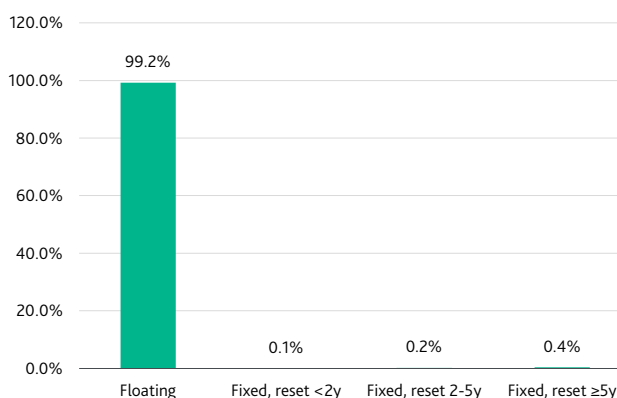
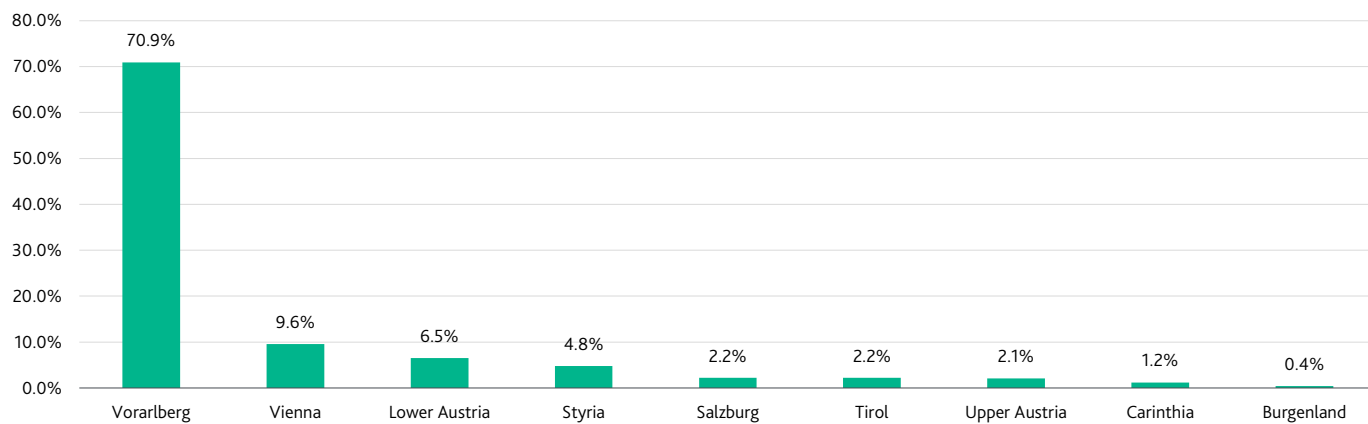


EXHIBIT E

Main Country Regional Distribution

Commercial Mortgage Loans

Overview	
Asset Type	Commercial
Asset balance:	1,528,277,512
Average loan balance:	9 38,745
Number of loans:	1,628
Number of borrowers:	894
Number of properties:	2,180
Largest 10 loans:	14.2%
Largest 10 borrowers:	14.9%
WA Remaining Term (in months):	149
WA Seasoning (in months):	65
Main Countries:	Austria (74%) Germany (26%)

Specific Loan and Borrower characteristics	
Bullet loans:	20.3%
Loans in non-domestic currency:	11.8%
Percentage of fixed rate loans:	17.1%
Performance	
Loans in arrears (≥ 2 months):	2.3%
Loans in a foreclosure procedure:	0.1%
Details on LTV	
WA current LTV:	n/d
WA Indexed LTV:	63.0%
Valuation type:	Market Value
LTV Threshold:	n/a
Junior ranks:	n/d
Prior ranks:	n/d

n/d : information not disclosed by issuer

EXHIBIT A

Balance per LTV-band

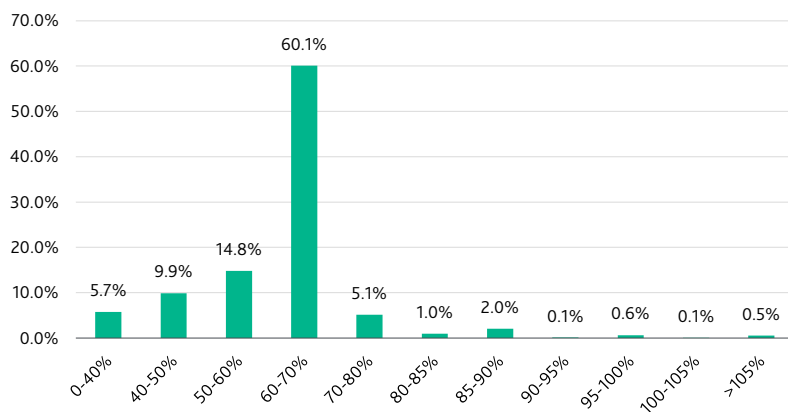


EXHIBIT B

Cover Pool Composition

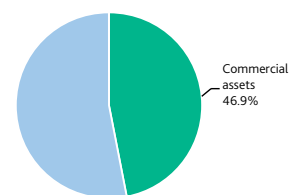


EXHIBIT C

Borrower Concentration

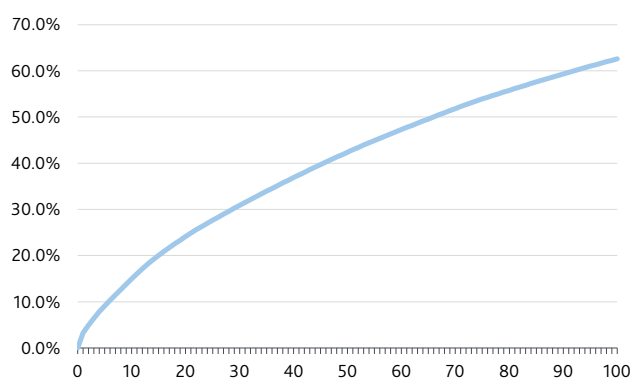


EXHIBIT D

Property by Type

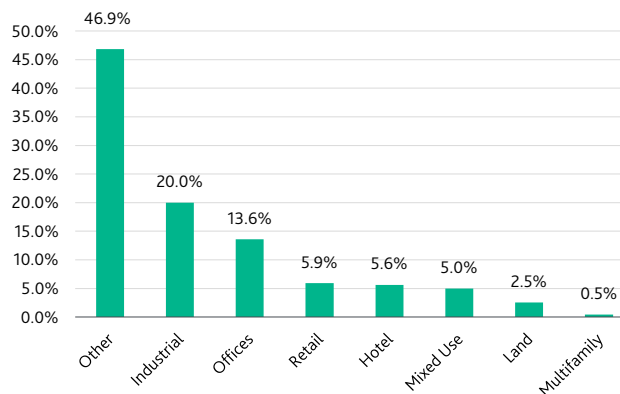
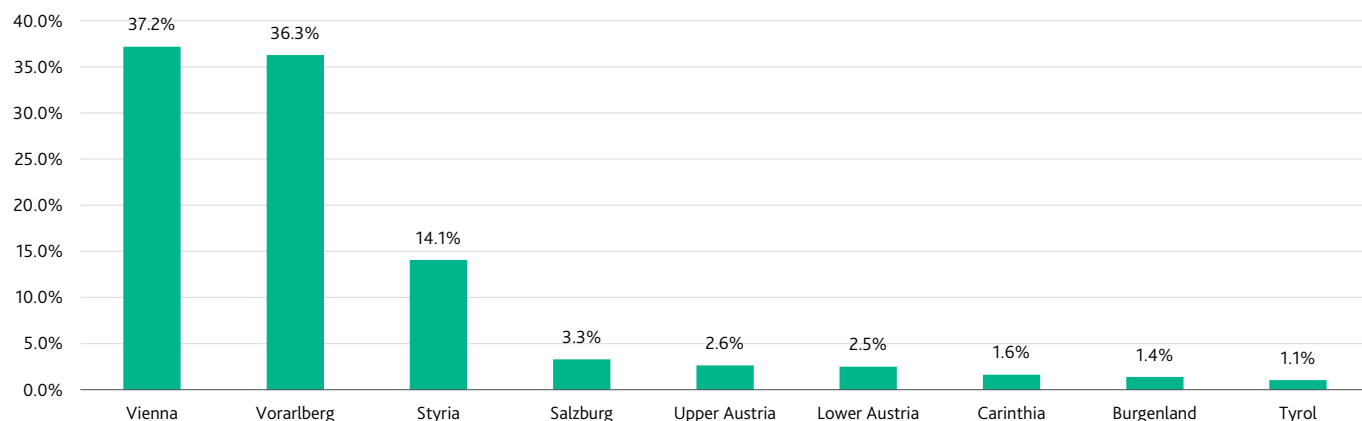


EXHIBIT E

Regional Distribution for Main Country (Austria)**Qualitative Collateral Information**

All cover pool characteristics are actual levels (rather than assumed levels) based on reports from Vorarlberger Landes- und Hypothekenbank AG.

Appendix 2: Income Underwriting and Valuation

1. Income Underwriting	
1.1 Is income always checked?	Yes
1.2 Does this check ever rely on income stated by borrower ("limited income verification") income stated by the borrower?	No
1.3 Percentage of loans in Cover Pool that have limited income verification	None
1.4 If limited income verification loans are in the Cover Pool, describe what requirements lender has in place for these loans.	Not applicable
1.5 Does income in all cases constrain the amount lent (for example through some form of Income Sufficiency Test ("IST").	Yes
1.6 If not, what percentage of cases are exceptions.	No exceptions
<i>For the purposes of any IST</i>	
1.7 Is it confirmed income after tax is sufficient to cover both interest and principal.	Yes
1.8 If so over what period is it assumed principal will be paid (typically on an annuity basis)? Any exceptions?	Payment of interest and principal on an annuity basis over 25 years
1.9 Does the age of the borrower constrain the period over which principal can be amortised?	Yes
1.10 Are any stresses made to interest rates when carrying out the IST? If so when and for what type of products?	Yes, borrower has to be able to repay a loan with an interest rate of 6% and a maturity of 25 years
1.11 Are all other debts of the borrower taken into account at point loan made?	Yes
1.12 How are living expenses of the borrower calculated? And what is the stated maximum percentage of income (or income multiple if relevant) that will be relied on to cover debt payments. (specify if income is pre or post tax)	Expenses are based on standard indices prepared by a committee of experts. These standard indices are the minimum expenses. That means if the effective expenses are higher, the issuer will take the effective expenses into account. The percentage of post tax income that is assumed to be available for both, the debt repayment and living expense together is 50%.
Other comments	
2. Valuation	
2.1 Are valuations based on market or lending values?	Market values with corresponding discounts (minimum 10%)
2.2 Are all or the majority of valuations carried out by external (with no direct ownership link to any company in the Sponsor Bank group) valuers?	No
2.3 How are valuations carried out where external valuer not used?	All internal valuations have to be verified by court-certified expert who is employed by subsidiary Hypo Immobilien and Leasing
2.4 What qualifications for external valuers require?	They must be court-certified experts
2.5 What qualifications do internal valuers require?	All our internal valuations have to be verified by court-certified expert who is employed by subsidiary Hypo Immobilien and Leasing
2.6 Do all external valuations include an internal inspection of a property?	No
2.7 What exceptions if any?	Not applicable
2.8 Do all internal valuations include an internal inspection of a property?	No
2.9 What exceptions if any?	Not applicable
Other comments	

Commercial Underwriting and Valuation

1 Business focus		
1.1	What kind of CRE loans form part of the cover pool?	Principally all kinds of loans that comply with the laws of Austria and with our internal credit policy
1.2	What CRE property types do you finance?	Principally all kinds of property types that comply with the laws of Austria and with our internal credit policy
1.3	What kind of restrictions do you have in terms of property location and quality	Only properties located in Austria, Germany and Switzerland
1.4	Does the cover-pool only contain self-originated loans or loan participations (e.g., syndicated loans, mezzanine loans)?	The cover-pool contains practically only self originated loans. In exceptional cases, syndicated loans might be considered for inclusion into the cover pool.
2 Loan underwriting policy		
2.1	Do you accept loans with refinancing risk? If yes, do you have a maximum Exit-LTV limit at loan maturity?	No, the loan has to be repaid within the useful life of the property. There are only some exceptional cases where the maximum Exit-LTV is the land value without the building.
2.2	Do you have a maximum LTV ratio that is covenanted in the loan agreement? Do max. LTV ratio vary by property type? Please specify.	We don't have any maximum LTV covenanted in our loan agreement. According to our credit policy the target for the maximum LTV is 80%.
2.3	Do you have a minimum DSCR ratio that is covenanted in the loan agreement? Do min. DSCR ratio vary by property type? Please specify.	We don't have a DSCR ratio covenanted in our loan agreement.
2.4	Do you always require full hedging in terms of interest rate and currency risk? If not, which stresses are used to calculate the DSCR ratios?	Not always. At the moment the DSCR is calculated with an interest rate of 6.5% (which will be adjusted when the interest rates will rise). If the borrower has a fixed rate for at least 10 years, the rate of the fixed-rate loan can be used.
2.5	Do you require a minimum exit debt yield? Please specify	No
2.6	Do you allow exceptions to and what reasons would justify exceptions?	No
3 Cash flow analysis		
3.1	Is a cash-flow assessment always carried out?	Yes
3.2	Do you consider in the DSCR calculation (cash-flow assessment) possible reduction in property cash flow (e.g., due to lease roll-over, changing market rents, capex requirements)?	Yes, usually a 15% loss of rent is calculated, in some very pessimistic cases, we would also calculate with a higher reduction.
3.3	Do you rely in the DSCR calculation (cash-flow assessment) on possible increases in property cash flow (e.g., due to expected reduction in property vacancy, rent increase, property disposal income, or sponsor support)?	No
3.4	Do you consider in the cash flow assessment the quality (tenant) and diversity of cash flows? How do you assess tenant quality?	Analysis of balance sheets, cash flow statements, credit agencies, KSV, Dun & Bradstreet
3.5	How often is the property cash flow and loan DSCR assessment updated?	At least once a year
4 Borrower		
4.1	Do you accept SPV as a borrower?	Yes
4.2	Do you always require direct recourse to the borrower and sponsor (natural person) holding the equity stake? If not, please provide details/limits on non-recourse business.	No, depends on the LTV and/or the cash flow situation. If there is no direct recourse, we require more capital resources from the borrower.
4.3	Do you have minimum requirements as for the borrower's quality? Please detail.	Yes, the loan must be repayable, the rating must be acceptable, etc.
4.4	How do you assess borrower's quality?	Analysis of balance sheets, cash flow statements, credit agencies, KSV, Dun & Bradstreet
4.5	Do you allow exceptions to 4.3?	Yes, for top-quality properties in a top location and tenants with a very good credit rating
	What reasons would justify exceptions?	See above
5 Valuation		
5.1	Are valuations based on market or lending values?	Market Values
5.2	Do you consider vacant possession values for single-tenanted properties?	No
5.3	Do valuations always comply with standards of the RICS Red Book?	Our valuations have to comply with Austrian laws
5.4	Do you always require that valuations include a review of the lease contracts, a technical report and environment report?	Not always, depends on the properties
5.5	Do you always require that valuations provide reference to comparable recent property transactions?	No
5.6	Could the value of a property portfolio exceed the value of the individual properties?	No
5.7	How often is the property value updated and how often is checked that the LTV covenant is not breached? (annually, ad-hoc, depending on general market movement)?	At least once a year

Source: Vorarlberger Landes- und Hypothekenbank

Appendix 3: Legal Framework for Austrian Covered Bonds

General Provisions in the Austrian Pfandbrief Act

In Austria, there are three different covered bond acts, under which Austrian covered bond issuers can issue covered bonds.

The three acts are:

- (i) Mortgage Bank Act (*Hypothekbankgesetz*);
- (ii) Austrian Pfandbrief Act (*Pfandbriefgesetz* or *PfandbriefG*); and
- (iii) Austrian Pfandbrief Act (*Gesetz betreffend fundierte Bankschuldverschreibungen* or *FBSchVG*), see chart 1 below.

For the purposes of this report, our references to Austrian covered bond legislation relates to all these three types of act and other relevant regulation, if not stated otherwise.

This covered bond transaction is governed by the Austrian Pfandbrief Act, under which covered bonds will be issued from time to time, in each case constituting direct, unconditional and senior obligations of the issuer. The issuer is a regulated bank and supervised by the Financial Supervisory Authority of Austria (*Österreichische Finanzmarktaufsicht* or FMA).

The covered bonds are secured by a pool of assets (cover pool). The covered bond issuer has to establish a cover register for its covered bonds, which secures covered bondholder's claims upon insolvency of the covered bond issuer. Upon insolvency of the covered bond issuer, all cover assets, including, in our understanding, the actual over-collateralisation at that point in time, would be available for the covered bondholder on a priority basis. If a covered bond issuer issues more than one type of covered bond, the Austrian covered bond legislation requires the covered bond issuer to maintain a separate cover register for each covered bond type.

The Austrian Pfandbrief Act sets out rules detailing which assets qualify as cover assets for public-sector covered bonds. Eligible assets for a mortgage cover pool are claims backed by properties located in Austria and member states of the EEA, or Switzerland.

In the event of the issuer's insolvency, it is possible that assets located outside Austria (i.e., public-sector borrowers located outside Austria) will be less protected against claims of other creditors of the issuer compared with assets located in Austria. For claims against borrowers located outside Austria and for assets governed by non-Austrian law, the amount due by the borrowers could be determined based on foreign law. This law may allow the borrower to exercise set-off, hence, the amount payable by such borrower may be reduced accordingly.

In case of Swiss cover assets, we understand that, in the event of an issuer default, a Swiss court might open a secondary

insolvency proceeding against the issuer in Switzerland. From an expected loss point of view, we do not consider this as a significant concern, because we understand that only a small group of Swiss creditors of the issuer – for example Swiss employees of the issuer – would be able to make their claims within these proceedings. However, we also understand that payments on the cover pool assets in Switzerland might not be available for the cover pool administrator for as long as the secondary insolvency proceedings continue in Switzerland.

Pursuant to the Austrian Pfandbrief Act, the covered bond issuer has to comply with a nominal cover test. This test requires a minimum over-collateralisation of 2%. In addition the interest income on the cover pool assets must also cover the coupon payments on the outstanding covered bonds at all times. The Austrian Pfandbriefgesetz allows issuers to commit themselves to a present value test (PV test). It is Moody's understanding that the issuer becomes legally obliged to maintain this PV test by operation of the Austrian covered bond legislation if this has been included in the articles of association of the issuer.

The covered bond issuer may include derivatives in the cover pool. We understand that claims of hedge counterparties rank equally with those of covered bondholders.

OeNB has established a reporting mechanism, whereby the covered bond issuer must regularly report key figures to the regulator. In addition, a cover pool monitor will monitor various operations with respect to the cover pool on a day-to-day basis. For example, we understand that cover assets may not be de-registered from the cover pool without the prior consent of the cover pool monitor.

In the event of an issuer default, the cover pool will be segregated from the bankruptcy estate of the issuer and a cover pool administrator (*besonderer Verwalter*) will be appointed upon the commencement of bankruptcy procedures. This cover pool administrator shall undertake the necessary administrative measures to satisfy claims by the covered bondholders by collecting claims that are due, selling individual cover assets or organising bridge financing.

Payments and receivables on the cover pool assets are not required to be separated from other cash flows of the covered bond issuer before a declaration of bankruptcy. Upon the commencement of bankruptcy proceedings, the covered bondholders would have a preferential claim on all receivables in the cover pool. The appointed cover pool administrator will be obliged by operation of the Austrian Pfandbrief Act to apply all collections to satisfy the preferential claims against the cover pool.

We understand that no set-off may be exercised by the borrower against the Austrian cover assets registered in the cover pool and governed by Austrian law by the operation of the act.

In the event of an issuer default, the following scenarios may occur:

- » If feasible, the cover pool administrator may transfer the cover pool together with the obligations under the covered bonds to another suitable bank, which will assume the obligations under the covered bond and will take over the cover pool.
 - » If the cover pool and the outstanding covered bonds are not transferred and the cover pool assets are not sufficient to satisfy all claims of covered bondholders, the outstanding covered bonds would accelerate. The cover pool administrator would dispose of the cover pool assets, subject to the approval of the competent court and distribute the proceeds stemming from the disposal of the cover pool assets among the cover bondholders on a *pari passu* basis. If the proceeds prove insufficient to meet all claims of the *pari passu* creditor of the cover pool, then the covered bondholders will have a senior unsecured claim against the general bankruptcy estate of the covered bond issuer.
- » Subject to the approval of the competent court, the cover pool administrator may sell the cover pool assets and satisfy the claims of the covered bondholders by an early redemption of the covered bonds at the then-current present value, provided certain conditions were met, which include the following:
 - A transfer of the cover pool together with the outstanding covered bond to another suitable bank is not possible;
 - There is sufficient cover for all *pari passu* claims against the cover pool; and
 - The covered bond issuer has opted for an early redemption at present value in its articles of association in this scenario. We understand that Hypo Tirol has not used this option for its public-sector covered bonds.

EXHIBIT 3

Overview of Covered Bond Acts in Austria

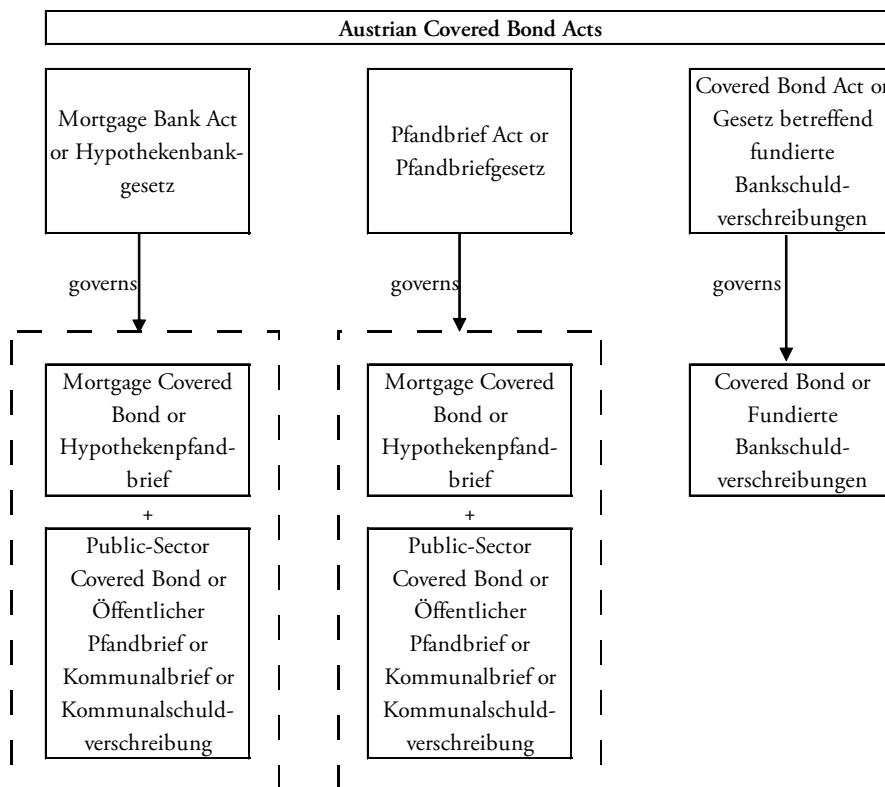
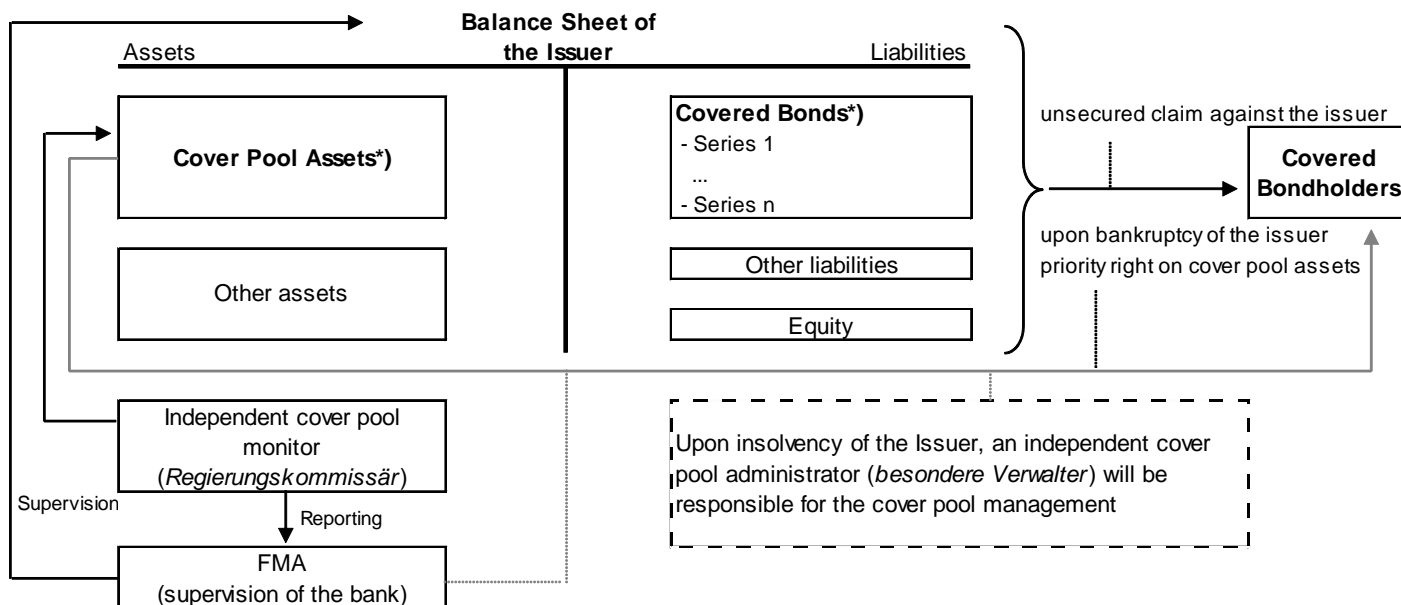


EXHIBIT 4

General Structure of an Austrian covered bond



* A covered bond issuer may have more than one covered bond programme. Covered bond series from different programmes would be covered by different cover pools.

FMA = Österreichische Finanzmarktaufsicht (Austrian Financial Supervisory Authority)

-
- ¹ A CB anchor event is defined as removal from the cover pool of (i) support provided by entities within the issuer, (ii) ancillary activities of the issuer (i.e. those not related to the cover pool) and (iii) usually, management functions of the issuer.
 - ² "[Moody's Rating Approach to Covered Bonds](#)", published in August 2015 (see Related Research).
 - ³ The collateral score can be seen as the amount of risk-free enhancement required to protect an Aaa rating from otherwise unsupported assets – therefore, the stronger the credit quality of the collateral, the lower the collateral score. This only considers the credit deterioration of the assets and ignores any market risk (see Rating Methodology "[Moody's Rating Approach to Covered Bonds](#)" published in August 2015 (see Related Research)).
 - ⁴ Please see Press Releases "[Moody's updates on status of non-EEA assets in Austrian and German Covered Bond transactions](#)", June 2009 and "[Moody's updates on non-EEA assets in German and Austrian covered bond transactions](#)", 13 April 2010.
 - ⁵ "[Moody's Rating Approach to Covered Bonds](#)", published in August 2015 (see Related Research).

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