S&P Global
Ratings

RatingsDirect®

New Issue: Bank fur Tirol und Vorarlberg AG Mortgage Covered Bond Program

Primary Credit Analyst:
Natalie Swiderek, Madrid + 34 91 788 7223; natalie.swiderek@spglobal.com

Secondary Contact:
Andreas M Hofmann, Frankfurt + 49 693 399 9314; andreas.hofmann@spglobal.com

Table Of Contents

New Issue: Bank fur Tirol und Vorarlberg AG Mortgage Covered Bond Program

Ratings Detail

Reference Rating Level	--
Resolution Regime Uplift	+2
Systemic Importance	Very Strong
Resolution Counterparty Rating	--
Issuer Credit Rating	--

+

Jurisdiction-Supported Rating Level	--
Assigned Jurisdictional Support Uplift	+3
Jurisdictional Support Assessment	Very Strong
Legal Framework	Very Strong
Systemic Importance	Very Strong
Sovereign Credit Capacity	Very Strong

+

Maximum Achievable Covered Bond Rating	aaa
Collateral Support Uplift	+3
Overcollateralization Adjustment	-1
Liquidity Adjustment	--
Potential Collateral Based Uplift	+4

=

Covered Bond Rating	**AAA/Stable**
Rating Constraints	aaa
Counterparty Risk	aaa
Country Risk	aaa

Major Rating Factors

Strengths

- The cover pool comprises seasoned Austrian and predominately residential mortgage loans for owner occupation.
- The mortgage pool only contains first lien-mortgage loans.
- Both residential and commercial mortgage loans have low current cover pool loan-to-value (LTV) ratios compared with peers.

Weaknesses

- The current small subportfolio of commercial mortgage loans attracts a 100% default probability assumption under our analytical approach.
- Concentration of mortgages in Tyrol and Vorarlberg, which we have considered in our determination of default frequency.
- There is a relatively high mismatch between the cover pool assets' weighted-average maturity and that of the outstanding covered bonds, which increases refinancing risk and is reflected in the target credit enhancement.

Outlook: Stable

S&P Global Ratings' stable outlook on the covered bond ratings reflects the cushion of one unused notch of collateral-based support that would protect the ratings on the covered bonds in the event of a deterioration of our view of the issuer's creditworthiness, all else being equal.

We would lower our ratings on the covered bonds if the available credit enhancement became insufficient to cover the credit enhancement required for the current rating, because of a reduction of the available credit enhancement, and/or because of deteriorations of the cover pool's credit risk profile.

Rationale

On April 11, 2023, S&P Global Ratings assigned its 'AAA' credit ratings to Bank für Tirol und Vorarlberg AG's (BTVAG's) mortgage covered bond program and related issuances (Pfandbriefe; see "Bank fur Tirol und Vorarlberg Austrian Covered Bonds Assigned 'AAA' Rating; Outlook Stable").

Our covered bond ratings process follows the methodology and assumptions outlined in our covered bonds criteria and our "Covered Bond Ratings Framework: Methodology And Assumptions," published on June 30, 2015. Accordingly, we performed a legal and regulatory review, an operational risk review, a resolution regime analysis, a jurisdictional support analysis, a collateral support analysis, and a counterparty and sovereign risk analysis.

From our analysis of the Austrian legal and regulatory framework, we consider that it effectively isolates the cover pool assets from the issuer's insolvency estate for the benefit of the covered bondholders. The protection of the cover pool assets and the continued management of the cover pool allows us to elevate the rating on the covered bonds above BTVAG's creditworthiness.

Based on our operational risk analysis, which covered a review of BTVAG's lending process, collection procedures, and default management procedures, as well as cover pool management and administration, we believe that the ratings on the covered bonds are not constrained by operational risk.

BTVAG is domiciled in Austria, which is subject to the EU's Bank Recovery and Resolution Directive (BRRD). We consider that mortgage covered bonds have a very strong systemic importance to Austria. These factors increase the likelihood that BTVAG would continue servicing its covered bonds without accessing the cover pool or receiving jurisdictional support, even following a bail-in of its senior unsecured obligations. We have therefore assigned two notches of uplift above our assessment of BTVAG's creditworthiness to determine the covered bonds' reference rating level (RRL).

We considered the likelihood for the provision of jurisdictional support. Based on a very strong jurisdictional support assessment for mortgage covered bonds in Austria, we assigned three notches of uplift from the RRL to determine the covered bonds' jurisdiction-supported rating level (JRL).

We reviewed the cover pool information provided as of Dec. 31, 2022. The €280 million of outstanding covered bonds are secured by a €752.6 million cover pool comprising Austrian residential (77.68% of cover pool balance) and commercial mortgage loans (22.32% of the cover pool balance).

We assessed the residential mortgage cover pool's credit quality by estimating the credit risk associated with each loan in the pool. We base this loan-level analysis on the specific adjustments defined for Austria under our global residential loans criteria (see "Global Methodology And Assumptions: Assessing Pools Of Residential Loans," published on Jan. 25, 2019).

The current small size of the commercial mortgage loan subportfolio comprising less than 150 nonrelated mortgage loans, implies that this portfolio is not necessarily in scope of our commercial real estate (CRE) criteria, "Methodology And Assumptions: Analyzing European Commercial Real Estate Collateral In European Covered Bonds," published on March 31, 2015, and would likely require additional analytical considerations. Therefore, we have borrowed these criteria to analyze this portion of the portfolio because we believe the higher concentration risk of this subportfolio is already adequately captured through the application of a small pool adjustment factor to the default frequency of the commercial subportfolio as described in these criteria, which given the current composition of the pool, ultimately results in a default frequency assumption of 100%. In our opinion, the use of the existing loss severity assumptions outlined in the CRE criteria represent a sufficiently robust approach to analyze the small sub-set of commercial mortgage loans in this cover pool. Finally, in our view the underlying commercial mortgage loans exhibit characteristics similar to those generally observed in other rated covered bonds secured by commercial real estate assets.

Based on our collateral support analysis the available overcollateralization of 168.60% exceeds the target credit enhancement of 26.37% commensurate with a potential four-notch uplift above the JRL. From these four notches, we deduct one due to uncommitted overcollateralization. We do not apply a reduction for the lack of 180 days of liquid assets when we assign a covered bond rating that exceeds the foreign currency rating on the covered bond issuer's sovereign of domicile because our structured finance sovereign risk criteria already limit the number of notches of uplift above the long-term sovereign rating if refinancing risk is not addressed. Consequently, the assigned collateral support uplift is three notches above the JRL, permitting the covered bonds to achieve a 'AAA' rating (see table 1).

There are no rating constraints to the 'AAA' rating relating to legal, counterparty, or sovereign risks.

We have based our analysis on the criteria articles referenced in the "Related Criteria" section.

Program Description

Table 1

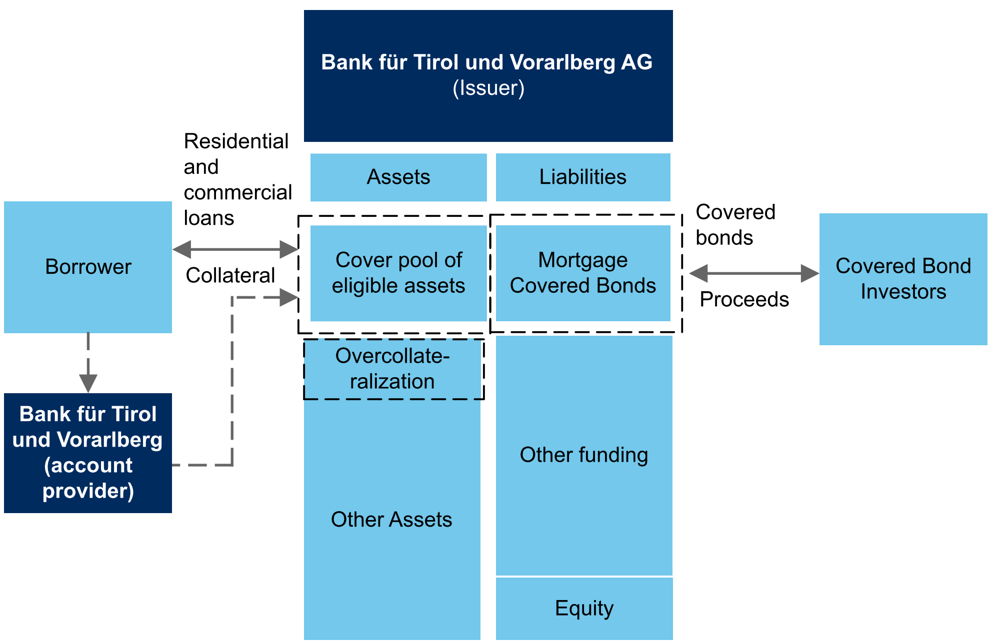
Program Overview	
Jurisdiction	Austria
Covered bond type	Legislation-enabled (Austrian Pfandbriefgesetz)
Cover pool assets	Residential and commercial mortgage loans
Covered bond rating	AAA/Stable
Cover pool notional amount as of Dec. 31, 2022 (mil. €)	752.63
Outstanding covered bonds as of Dec. 31, 2022 (mil. €)	280.00

Table 1

Program Overview (cont.)	
Redemption profile	Hard bullet
Resolution regime uplift	2
Jurisdictional support uplift	3
Unused notches for jurisdictional support	--
Target credit enhancement (%)	26.37
Credit enhancement commensurate with current rating (%)	23.96
Available credit enhancement (%)	168.60
Assigned collateral support uplift	2
Unused notches for collateral support	1
Total unused notches	1

Transaction Structure

Bank fur Tirol und Vorarlberg AG Mortgage Covered Bond Program



BTVAG received its license to issue covered bonds in 2002 and issued its first covered bond in 2012. The covered bonds are issued under its €450 million (with the possibility of increasing to €650 million) non-equity issuance program. As of Dec. 31, 2022, there are €280 million of mortgage covered bonds outstanding, representing about 2.3% of BTVAG's total funding. The covered bonds constitute senior secured unsubordinated obligations of the issuer and rank pari passu with all other obligations secured by the mortgage cover pool register. Covered bondholders have recourse to BTVAG and in the instance of its insolvency to the assets comprised in the cover pool register.

As of Dec. 31, 2022, the cover pool comprises €752.63 million Austrian residential and commercial mortgage loans.

BTVAG provides the bank account for the covered bond program. In the absence of structural mitigants, we have taken the associated counterparty risk into account when determining the required credit enhancement at a 'AAA' rating level.

There are no derivatives registered in the cover pool to mitigate interest and foreign exchange rate risk. Interest rate risk arises from differences in the interest payable on the cover assets (77.76% floating rate) versus the interest payable on the covered bonds (82.14% fixed rate paying). Cover pool assets are predominantly denominated in euro with a small share of 8% denominated in Swiss francs. We have taken the resulting interest rate and currency risk into account in our cash flow modelling.

Table 2

Program Participants

Role	Name	Rating	Rating dependency
Issuer	Bank für Tirol und Vorarlberg AG	--	Yes
Originator and servicer	Bank für Tirol und Vorarlberg AG	--	No
Collection account	Bank für Tirol und Vorarlberg AG	--	No

Rating Analysis

Legal and regulatory risks

We base our legal analysis on our "Europe Asset Isolation And Special-Purpose Entity Criteria--Structured Finance," criteria, published on March 29, 2017, and our covered bond ratings framework.

BTVAG's outstanding covered bonds were issued under the Austrian Law on Secured Bank Bonds ("Gesetz betreffend fundierte Bankschuldverschreibungen") while covered bonds issued from the program after July 7, 2022, are issued under Austria's new covered bond law ("Pfandbriefgesetz"), which implements the EU's Covered Bonds Directive. The revised law merges the three laws in force prior to July 8, 2022 ("Hypothekenbankgesetz," "Pfandbriefgesetz," and the "Gesetz betreffend fundierte Bankschuldverschreibungen") into one, lessening the legal complexity for Austrian covered bonds. An issuance made before July 8, 2022, will not be required to fulfill the requirements of the new law, and outstanding bonds will be grandfathered with the original designation.

The covered bonds constitute direct, unconditional, and unsubordinated obligations of the issuer and rank pari passu among themselves and with all other obligations secured by the cover pool register. Covered bondholders and registered derivative counterparties have recourse to the issuer and--in the event of an issuer insolvency--to the assets comprised in the cover register.

The new legislation includes--among others--a 180-day liquidity buffer requirement, a 2% minimum overcollateralization requirement, the possibility for the special cover pool administrator to extend the maturity of the covered bonds by a maximum of 12 months subject to certain conditions, the appointment of a cover pool monitor (which can be internal or external at the issuer's choice), and the requirement of a borrower's consent for a loan to be registered as a cover pool asset.

Derivatives are allowed for risk hedging purposes and must be registered in the cover register subject to prior consent of the counterparty.

Under the new legislation, LTV limits can be deduced from the reference of eligible cover assets to CRR Art 129 (1), including an LTV limit of 80% of the value of the property for residential real estate, and 60% for commercial real estate. For commercial real estate, a limit of up to 70% is also possible. At the same time, issuers can set lower LTV limits in their articles of association.

Borrowers do not have the right to set off any deposits they have with the issuer against their mortgages in the cover pool register. The prohibition of set off does not apply to derivative contracts, when netting occurs for receivables arising under one and the same master agreement.

Our analysis of the Austrian Pfandbriefgesetz concluded that it addresses the main legal aspects that we assess in a covered bond legislation. The cover pool register is effectively isolated from the issuer's insolvency estate for the benefit of the covered bondholders. If the issuer becomes insolvent, a bankruptcy court, after consultation with the Austrian regulator (the Financial Market Authority), will appoint a cover pool administrator to continue the cover pool's management and to satisfy the covered bondholders' claims. The cover pool assets' protection and the cover pool's continued management allows us to assign a higher rating to the covered bond program than BTVAG's creditworthiness.

Operational and administrative risks

Our analysis of operational risk follows the principles laid out in our covered bond ratings framework and our covered bonds criteria.

In our opinion, there is no operational risk from the cover pool's management and loan origination that would constrain the covered bond rating to the same level as BTVAG's creditworthiness.

We believe that a replacement cover pool manager would be available if the issuer were to become insolvent. We consider Austria to be an established covered bond market, and we believe that the mortgage assets in the cover pool do not comprise product features that would materially limit the range of available replacement cover pool managers or servicers.

With total assets of €14.25 billion as of Sept. 30, 2022, BTVAG is a small universal Austrian bank. It has a strong regional focus in Tirol, Vorarlberg, and Vienna, complemented by operations in Switzerland, Southern Germany, and Northern Italy. The bank primarily lends to small to medium enterprises (SMEs) and retail clients. BTVAG is traditionally closely involved in tourism and tourist infrastructure in its core market of Tyrol. It is part of the 3 Banken Group, a partnership-based cooperation with Oberbank AG and BKS Bank AG.

BTVAG originated all mortgage loans in the pool. Housing loans are subject to a maximum LTV ratio of 80%, and a debt service-to-income ratio of maximum 40%, among others. The maximum loan term for private clients is 30 years. The maximum LTV for commercial mortgage loans is 60% of the property's market value. All properties are located in Austria. Loans are mostly repayment where borrowers pay monthly installments of principal and interest. Interest-only loans are granted for a limited period of time only. The interest rate on the loans is predominantly variable or fixed over a certain term.

Mortgage loans are mostly granted in euro. The share of foreign currency denominated loans in BTVAG's loan book overall is about 3.9% as of Dec. 31, 2022, and is declining since the Austrian regulator largely prohibited new foreign exchange lending to unhedged households starting in 2010. Therefore, BTVAG does not grant any new foreign currency loans exempt those that meet Austrian Financial Market Authorities' (FMA) minimum standards.

The examination of the creditworthiness of the consumer always precedes any granting of a loan. As part of the origination process, the bank requires proof of income and conducts affordability and credit history checks. Next to economic aspects including pay slips, insurance policies, accounts, and balance sheets (in the instance of self-employed borrowers), personal aspects such as qualifications, lifestyle, and reputation are also assessed. The creditworthiness of customers is updated monthly by means of an account behavior rating. In addition, a bank internal credit scoring is performed at least annually.

Property valuations are carried out centrally by the credit management department. Valuation occurs through an onsite property inspection. Property values are monitored at a minimum once every year for commercial property and once every three years for residential properties. In addition, for residential real estate BTVAG performs an annual, automated re-evaluation. The basis for this is the initial valuation, based on the evolution of Austria's house-price index.

BTVAG does not include loans with the following characteristics in the cover pool: speculative financings; loans that mature in less than three years; loan amounts of less than €100,000; loans backed by non-Austrian collateral; and loans to borrowers having a bank internal rating of below a certain threshold, among others. BTVAG removes loans from the cover pool if a borrower's credit quality deteriorates beyond a predetermined threshold as measured by the borrower's bank internal rating.

Overall, we believe there are sufficiently prudent and effective underwriting and servicing procedures in place to support our rating on the covered bonds.

Resolution regime analysis

As part of our covered bonds criteria, our analysis considers the resolution regime in place in Austria to determine the RRL. The RRL on BTVAG is two notches above our assessment of its creditworthiness. We consider the following factors:

- BTVAG is domiciled in Austria, which is subject to the EU's BRRD, which excludes covered bonds from bail-in-able debt.
- We assess the systemic importance for Austrian mortgage covered bonds as very strong.

Therefore, the RRL is the greater of (1) our assessment of the issuer's creditworthiness plus two notches; and (2) the resolution counterparty rating (RCR) on the issuer, where applicable.

This uplift recognizes that resolution regimes like the BRRD increase the probability that an issuer could service its covered bonds even following a default on its senior unsecured obligations. This is because the law exempts covered bonds from bail-in if there is a bank resolution. We consider this as an internal form of support, because the bail-in of certain creditors of the issuer does not require direct government support. This increases the likelihood that an issuer would continue to service its covered bonds without accessing the cover pool or receiving jurisdictional support, even if it were to face failure.

Jurisdictional support analysis

In our jurisdictional support analysis, we determine the covered bonds' JRL, which is our assessment of the likelihood that a covered bond program facing stress would receive support from a government-sponsored initiative instead of liquidating cover assets in the open market.

Our jurisdictional support analysis assesses three factors: the legal framework's strength, the covered bonds' systemic importance, and the sovereign's credit capacity. For Austrian mortgage covered bonds, we assess all three factors as very strong leading to an overall jurisdictional support assessment of very strong. In addition, our sovereign rating on Austria (AA+/Stable/A-1+) does not constrain the JRL. As a result, the covered bonds benefit from three notches of jurisdictional support uplift above the RRL.

Collateral support analysis

We have reviewed the cover pool information as of Dec. 31, 2022. The €752.63 million cover pool includes residential (77.68%) and commercial loans (22.32%) granted to borrowers, on some occasions, backed by different properties. The residential mortgage loan portfolio contains about 3,176 loans with on average a cover pool current LTV ratio of 40.64% after house price indexation.

The weighted-average seasoning of the residential portfolio is about six years and the interest rate on most of the loans is floating (mostly linked to three-month EURIBOR). Most of the residential loans are for owner occupation with about 7% being for buy-to-let purposes.

The current commercial mortgage loan subportfolio contains a small number of loans, with the largest exposures to hotels.

The below tables provide an overview on the cover pool's composition.

Table 3

Cover Pool Composition

	As of Dec. 31, 2022	
Asset type	**Cover pool balance (€)**	**Cover pool balance (%)**
Residential mortgages	584,653,051	77.68
Commercial mortgages	167,972,648	22.32
Total	752,625,699	100

Table 4

Key Credit Metrics

	As of Dec. 31, 2022
Residential mortgages	
Average loan size (€)	201,861
Weighted-average effective LTV ratio (%)*	65.67
Weighted-average original LTV ratio (%)	70.34
Weighted-average cover pool LTV ratio (%)	40.64
Weighted-average loan seasoning (months)§	72.20
Balance of loans in arrears (%)	1.47
Residential mortgages credit analysis results	
WAFF (%)	18.86
WALS (%)	26.68
Commercial mortgages	
Weighted-average cover pool LTV ratio (%)	41.58
WAFF (%)	100
WALS (%)	48.79
Combined mortgage pool credit analysis results	
WAFF (%)	39.00
WALS (%)	32.17
'AAA' credit risk (%)	16.74

*Calculated weighting 80% of the original LTV and 20% of the current LTV. LTVs are based on the loan balances secured on the property, including loan parts outside the asset pool and prior- and second-ranking balances if any. Adjusted for developments in the house-price index. §Seasoning refers to the elapsed loan term. LTV--Loan-to-value. WAFF--Weighted-average foreclosure frequency. WALS--Weighted-average loss severity.

Table 5

Loan-To-Value Ratios

WAFF-effective LTV/whole LTV ratios (%)	As of Dec. 31, 2022
Residential mortgages - effective LTV ratios (%)	
0-40	17.82
40-50	12.77
50-60	13.2
60-70	16.33
70-80	12.28
80-90	10.9
90-100	8.15
>100	8.56
Weighted-average effective LTV ratio	65.67
Commercial mortgages - current LTV ratios (%)	
0-40	34.01
40-50	8.2
50-60	18.72
60-70	4.19

Table 5

Loan-To-Value Ratios (cont.)	
70-80	0.18
80-90	14.2
90-100	6.33
>100	14.17
Weighted-average whole LTV ratio	76.16
WALS-cover pool LTV ratios (%)	
Residential mortgages - current LTV ratios after HPI, based on cover pool balance (%)	
0-40	52.65
40-50	14.02
50-60	15.59
60-70	12.18
70-80	1.79
80-90	0.5
90-100	1.99
>100	1.28
Weighted-average cover pool LTV ratio	40.64
Commercial mortgages - current LTV ratios, based on cover pool balance (%)	
0-40	42.04
40-50	24.78
50-60	32.08
60-70	0.6
70-80	0.09
80-90	0
90-100	0.29
>100	0.12
Weighted-average current LTV ratio	41.58

WAFF--Weighted-average foreclosure frequency. LTV--loan to value. WALS--Weighted-average loss severity.

Table 6

Loan Seasoning Distribution*

As of Dec. 31, 2022

	Current residential mortgage loan balance (%)
In arrears (no seasoning benefit)	1.47
<=5 years	48.84
>5 and <=6 years	8.83
>6 and <=7 years	8.05
>7 and <=8 years	7.34
>8 and <=9 years	3.29
>9 and <=10 years	3.23
>10 years	18.96
Weighted-average residential loan seasoning (years)	6.02

*Seasoning refers to the elapsed loan term.

Table 7

Geographic Distribution Of Loan Assets

As of Dec. 31, 2022

	Current residential mortgage loan balance (%)	Current commercial mortgage loan balance (%)
Burgenland	0.34	1.09
Carinthia (Kaernten)	0.36	0.00
Lower Austria (Niederoesterreich)	5.12	0.00
Upper Austria (Oberoesterreich)	0.49	0.00
Salzburg	0.5	1.03
Styria (Steiermark)	0.45	0
Tyrol (Tirol)	60.78	64.05
Vorarlberg	17.3	14.68
Vienna (Wien)	14.65	19.16

We assess a typical residential mortgage cover pool's credit quality by estimating the credit risk associated with each loan in the pool. We base this loan-level analysis on the specific adjustments defined for Austria under our global residential loans criteria (see "Global Methodology And Assumptions: Assessing Pools Of Residential Loans," published on Jan. 25, 2019).

The current small size of the commercial mortgage loan subportfolio comprising less than 150 nonrelated mortgage loans implies that this portfolio is not necessarily in scope of our criteria CRE criteria, and would likely require additional analytical considerations. Therefore, we have borrowed these criteria to analyze this portion of the portfolio because we believe the higher concentration risk of this subportfolio is already adequately captured through the application of a small pool adjustment factor to the default frequency of the commercial sub portfolio as described in these criteria, which given the current composition of this subportfolio, ultimately results in a default frequency assumption of 100%. Furthermore, in our opinion, the use of the existing loss severity assumptions outlined in the CRE criteria represent a sufficiently robust approach to analyze the small sub-set of commercial mortgage loans in this cover pool. Finally, in our view the underlying commercial mortgage loans exhibit characteristics similar to those generally observed in other rated covered bonds secured by commercial real estate assets.

We then calculate the aggregate risk to assess the cover pool's overall credit quality. In order to quantify the potential losses associated with the entire pool, we weight each loan's foreclosure frequency and loss severity by its percentage of the total pool balance. The product of this weighted-average foreclosure frequency (WAFF) and weighted-average loss severity (WALS) estimates the required loss protection, assuming all other factors remain unchanged.

As of Dec. 31, 2022, we estimate a residential WAFF of 18.86% and a WALS of 26.68%. For the current commercial mortgage loan subportfolio, our WAFF after applying our small pool adjustment factor is 100% and our WALS 48.79%. The combined residential and commercial mortgage loan portfolio's WAFF is 39.00% and WALS is 32.17%. We based these metrics on the 'AAA' credit stresses that we applied.

Under our global residential loans criteria, we apply multiples to the base foreclosure frequency based on the effective LTV ratio, weighting 80% of the original LTV and 20% of the whole loan current LTV. We have determined a weighted-average effective LTV for the residential cover pool of 65.67%. A further key factor influencing the WAFF is the seasoning of the assets. About 50% of residential loans are more than five years seasoned and therefore benefit from a reduction to their base foreclosure frequency. On the other hand, exposure of residential loans in Tyrol and Vorarlberg that exceed the regional concentration limits defined in our residential loan criteria attract a 20% increase to their base foreclosure frequency on the excess above the limits (see table 7). Another main driver influencing the residential WAFF is the share of loans to self-employed borrowers (about 25%).

The main drivers behind the WALS for residential properties are current cover pool LTV ratios after house price indexation and our market value decline assumptions. The higher current LTV ratios are, the higher our WALS, all else being equal. We have determined a relatively low weighted-average current LTV ratio for the cover pool of 40.64%. On the other hand, the cover pool's residential WALS is affected by jumbo valuations. Our analysis shows that jumbo valuations (exceeding €500,000) account for about 76% of the residential pool. We believe properties with higher valuations could experience higher loss severities, owing to their smaller and less liquid market. To take this into consideration, we applied an adjustment of 20% on the excess valuation above the limit of €500,000.

The commercial cover pool's WALS is driven by current LTV ratios. We have determined a relatively low weighted-average current LTV ratio for the commercial cover pool of 41.58%.

The results of our credit analysis, including the combined cover pool's WAFF of 39% and weighted-average recovery rate (1-WALS) equivalent to 67.83%, represent inputs to our cash flow analysis. Our analysis of the covered bonds' payment structure shows that cash flows from the cover pool assets would be sufficient, at the given rating, to make timely payment of interest and ultimate principal to the covered bond on its legal final maturity. We have performed our cash flow analysis as of Dec. 31, 2022.

We stress the cover pool's cash flows, incorporating various default patterns, default timings, interest rate paths, and currency stresses to address foreign exchange rate fluctuations between the small share of Swiss franc denominated assets and the euro denominated covered bonds. We also stress cash flows under different prepayment rate, and delinquency assumptions, which we run at different points over the weighted-average life of the covered bonds.

The program is exposed to structural asset-liability mismatch risk because the covered bonds' repayment profile is not aligned with that of the assets. Our model simulates a stressed sale of assets whenever a liquidity shortfall occurs in our analysis. The discount applied for the combined portfolio of mortgage assets is 567.74 basis points, on top of the stressed interest rate at the time of the shortfall.

The cover pool register does not include derivatives to mitigate interest rate and foreign exchange rate risk. We have taken both into account in our cash flow analysis. We also stressed basis risk. In addition, we considered the possibility that the spread on the mortgage loans reduces over time, due to defaults, prepayments, and product switches. To account for this, we reduce margins, assuming that a percentage of the higher-yielding loans exit the portfolio.

We also modeled commingling risk by sizing a portion of collections to be lost in our cash flow model because cash collections from the cover pool assets are not segregated in the cover pool before the insolvency of the issuer.

By applying our credit and cash flow stresses, we calculate a target credit enhancement of 26.37%, below the available credit enhancement of 168.6%, allowing for a potential four notches of collateral-based uplift above the JRL. As outlined above, a one-notch deduction applies resulting in a maximum collateral-based uplift of three notches above the JRL (see table 8). The covered bonds use two notches to achieve a 'AAA' rating with a required credit enhancement of 23.96% ('AAA' credit risk and 75% refinancing costs). This results in one unused notch of collateral support, which would protect the ratings on the covered bonds in the event of a deterioration of our view of the issuer's creditworthiness, all else being equal.

Table 8

Collateral Support Uplift Metrics	
As of Dec. 31, 2022	
Asset weighted average maturity (years)	9.17
Liability weighted average maturity (years)	4.74
Maturity gap (years)	4.43
Available credit enhancement (%)	168.6
'AAA' credit risk (%)	16.74
Required credit enhancement for first notch of collateral-based uplift (%; 'AAA credit risk' and 25% refinancing costs)	19.15
Required credit enhancement for second notch of collateral-based uplift (%; 'AAA credit risk' and 50% refinancing costs)	21.56
Required credit enhancement for third notch of collateral-based uplift (%; 'AAA credit risk' and 75% refinancing costs)– credit enhancement required for current rating	23.96
Target credit enhancement for maximum potential collateral-based uplift (%)	26.37
Potential collateral-based uplift (notches)	4
Adjustment for liquidity (Y/N)	N
Adjustment for committed overcollateralization (Y/N)	Y
Collateral based uplift (notches)	3

WAM--Weighted-average maturity.

Counterparty risk

The rating on the covered bonds is not constrained from a counterparty risk perspective (see "Counterparty Risk Framework: Methodology And Assumptions," published March 8, 2019).

Borrowers effect their payments into the accounts held with BTVAG. Based on our legal risk analysis we have concluded that cash collections from the cover assets received after an issuer insolvency, upon which a special administrator will be appointed to manage the cover assets, would form part of the separate cover pool estate and therefore are not available to the issuer's general creditors. However, cover pool collections standing or paid in the collection account pre issuer insolvency are potentially exposed to commingling risk because these collections are not segregated in the cover pool.

There is no documented replacement mechanism in place, which would protect the covered bondholders from the bank account providers' credit deterioration. Therefore, we considered the risk that cover pool collections may be lost if they have not been reinvested in cover assets or used to pay the covered bonds.

There are no derivatives registered in the cover pool.

Sovereign risk

We analyze sovereign risk by applying our structured finance sovereign risk criteria (see "Incorporating Sovereign Risk In Rating Structured Finance Securities: Methodology And Assumptions," published Jan. 30, 2019).

Under these criteria, covered bonds issued in a jurisdiction that is within a monetary union that do not include structural coverage of refinancing needs over a 12-month period exhibit moderate sensitivity to country risk. This means we can rate the covered bonds up to four notches above the sovereign rating. Given our 'AA+' long-term rating on Austria, sovereign risk does not constrain our rating on the covered bonds.

Environmental, social, and governance factors

ESG Credit Indicators

E-1	**E-2**	E-3	E-4	E-5	S-1	**S-2**	S-3	S-4	S-5	G-1	G-2	**G-3**	G-4	G-5

Environmental	Social	Governance
- N/A	- N/A	- Risk management, culture, and oversight

ESG credit indicators provide additional disclosure and transparency at the entity level and reflect S&P Global Ratings' opinion of the influence that environmental, social, and governance factors have on our credit rating analysis. They are not a sustainability rating or an S&P Global Ratings ESG Evaluation. The extent of the influence of these factors is reflected on an alphanumerical 1-5 scale where 1 = positive, 2 = neutral, 3 = moderately negative, 4 = negative, and 5 = very negative. For more information, see our commentary "ESG Credit Indicator Definitions And Applications," published Oct. 13, 2021.N/A--Not applicable.

Environmental and social credit factors have no material influence on our credit rating analysis of BTVAG's mortgage covered bonds. However, governance factors are a moderately negative consideration in our credit rating analysis of its mortgage covered bonds. The issuer has not committed to maintain a minimum level of overcollateralization in the program. This reduces the unused notches of uplift by one.

Related Criteria

- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings , Oct. 10, 2021
- Criteria | Structured Finance | General: Global Framework For Payment Structure And Cash Flow Analysis Of Structured Finance Securities , Dec. 22, 2020
- Criteria | Structured Finance | General: Counterparty Risk Framework: Methodology And Assumptions , March 8, 2019
- Criteria | Structured Finance | General: Incorporating Sovereign Risk In Rating Structured Finance Securities: Methodology And Assumptions , Jan. 30, 2019
- Criteria | Structured Finance | RMBS: Global Methodology And Assumptions: Assessing Pools Of Residential Loans , Jan. 25, 2019
- Legal Criteria: Structured Finance: Asset Isolation And Special-Purpose Entity Methodology , March 29, 2017
- Criteria | Structured Finance | Covered Bonds: Covered Bond Ratings Framework: Methodology And Assumptions , June 30, 2015
- Criteria | Structured Finance | Covered Bonds: Methodology And Assumptions: Analyzing European Commercial Real Estate Collateral In European Covered Bonds , March 31, 2015
- Criteria | Structured Finance | Covered Bonds: Covered Bonds Criteria , Dec. 9, 2014
- General Criteria: Principles Of Credit Ratings , Feb. 16, 2011

Related Research

- Austria, Feb. 27, 2023
- Global Covered Bond Insights Q4 2022, Dec. 16, 2022
- S&P Global Ratings Definitions, Nov. 10, 2021
- Covered Bond Monitor: Technical Note, Sept. 6, 2019
- Glossary Of Covered Bond Terms, April 27, 2018