Transaction Update: DZ HYP AG (Public Sector Covered Bond Program)

Öffentliche Pfandbriefe

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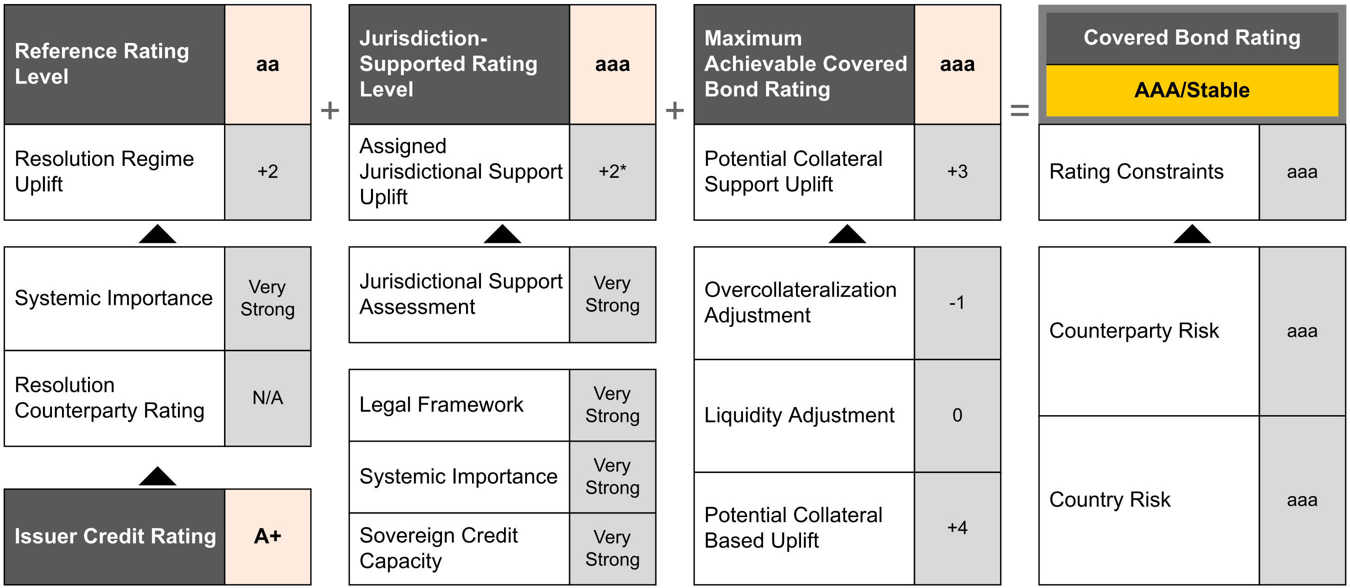
Ratings Detail



Reference Rating Level	**aa**
Resolution Regime Uplift	+2
Systemic Importance	Very Strong
Resolution Counterparty Rating	N/A
Issuer Credit Rating	**A+**

+

Jurisdiction-Supported Rating Level	**aaa**
Assigned Jurisdictional Support Uplift	+2*
Jurisdictional Support Assessment	Very Strong
Legal Framework	Very Strong
Systemic Importance	Very Strong
Sovereign Credit Capacity	Very Strong

+

Maximum Achievable Covered Bond Rating	**aaa**
Potential Collateral Support Uplift	+3
Overcollateralization Adjustment	-1
Liquidity Adjustment	0
Potential Collateral Based Uplift	+4

=

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

*The maximum jurisdictional support uplift is three notches above the RRL. However, only one notch is required to achieve a ‘AAA’ rating on the covered bonds. N/A--Not applicable.

Major Rating Factors

Strengths

- The program benefits from four unused notches of uplift, which would protect the 'AAA' rating if we downgraded the issuer.
- Granular, high-credit-quality portfolio of predominantly German public sector assets.

Weaknesses

- Commingling and bank account risk prior to the issuer's insolvency is not addressed structurally or by the German legal framework, but is mitigated by the available collateralization.
- The issuer is not committed to maintaining the level of overcollateralization that is commensurate with the current rating; therefore, we deduct one notch of collateral-based uplift.

Outlook: Stable

S&P Global Ratings' stable outlook on DZ HYP AG's (DZ HYP) public sector covered bonds ("Öffentliche Pfandbriefe") reflects the cushion of four unused notches--comprising one notch of jurisdictional support and three notches of collateral-based support--that would protect the ratings on the covered bonds if we were to lower the long-term issuer credit rating (ICR) on DZ HYP.

We would lower our ratings on the covered bonds if we lowered the ICR by more than four notches or if the available credit enhancement became insufficient to cover credit risk as defined in our covered bonds criteria.

Rationale

We are publishing this transaction update as part of our periodic review of DZ HYP's public sector covered bond program.

Our rating process follows the methodology and assumptions outlined in our covered bonds criteria (see "Covered Bonds Criteria," published on Dec. 9, 2014) and the criteria articles referenced in the "Related Criteria" section.

In our analysis, we assume the issuer's insolvency and look to the resolution regime, the jurisdictional support, and the cover assets to repay the covered bonds. The ratings reflect the likelihood of the covered bonds being fully repaid in a timely manner at their legal final maturity.

From our analysis of the legal and regulatory framework for covered bonds in Germany, we have concluded that the assets in DZ HYP's cover pool are isolated from the risk of the issuer's bankruptcy or insolvency. This asset isolation allows us to potentially assign a higher rating to the covered bonds than our long-term ICR on DZ HYP.

DZ HYP is domiciled in Germany (unsolicited; AAA/Stable/A-1+), which is subject to the EU's Bank Recovery and Resolution Directive (BRRD). We consider that covered bonds have a very strong systemic importance to Germany. These factors increase the likelihood that DZ HYP (A+/Stable/A-1) 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. Under our covered bonds criteria, a very strong systemic importance means the reference rating level (RRL) is the maximum of (i) two notches above the long-term ICR and (ii) the resolution counterparty rating (RCR). Given that we have not assigned an RCR to DZ HYP, the RRL is 'aa', which reflects the two-notch uplift from the ICR.

We consider the likelihood for the provision of jurisdictional support, which we assess as very strong for public sector covered bonds in Germany. As a result, the covered bonds are eligible for up to three notches of uplift from the RRL, leading to a jurisdiction-supported rating level (JRL) of 'aaa'. Given the RRL of 'aa', the covered bonds only need two notches of jurisdictional support uplift to achieve a JRL of 'aaa' leaving a rating cushion of one unused notch of jurisdictional support.

Under our covered bonds criteria, to achieve a 'AAA' rating solely based on jurisdictional support, overcollateralization must at least cover the credit risk that is commensurate with a 'AAA' level of stress. Based on our credit analysis as of

Sept. 30, 2022, and our cash flow analysis as of Dec. 31, 2022, the available overcollateralization of 30.29% exceeds the overcollateralization required to cover 'AAA' credit risk of 9.53%.

Furthermore, the covered bonds have sufficient credit enhancement to qualify for four notches of potential collateral-based uplift under our covered bonds criteria. However, because overcollateralization is uncommitted, we reduce this potential collateral-based uplift by one notch resulting in three available notches of collateral-based uplift. This, together with the one notch of unused jurisdictional support, results in a total rating cushion of four unused notches.

There are currently no rating constraints for the covered bonds related to legal, operational, counterparty, and sovereign risks.

Program Description

Table 1

Program Overview

As of Dec. 31, 2022

Jurisdiction	Germany
Covered bond type	Legislation-enabled
Outstanding covered bonds (bil. €)	9.61
Redemption profile	Soft-bullet
Underlying assets	Predominantly local and regional governments and related municipal enterprises, and sovereigns
Assigned jurisdictional support uplift	2
Unused notches for jurisdictional support	1
Target credit enhancement (%)	11.48
Credit enhancement commensurate with current rating (%)	9.53
Available credit enhancement (%)	30.29
Assigned collateral support uplift	0
Unused notches for collateral support	3
Total unused notches	4

DZ HYP is a majority owned subsidiary of DZ BANK AG Deutsche Zentral-Genossenschaftsbank (DZ BANK) and a core member of the German cooperative banking sector. It is a major covered bond issuer in Germany, issuing public sector and mortgage covered bonds.

DZ HYP issues public sector covered bonds under Germany's covered bond legislation. The covered bonds are issued directly by the bank, and the cover pool assets are segregated from the issuer's remaining assets through entry in a cover pool register. Investors in covered bonds have recourse to DZ HYP and to a portfolio of public sector cover assets assigned to the cover pool as collateral.

Program Structure

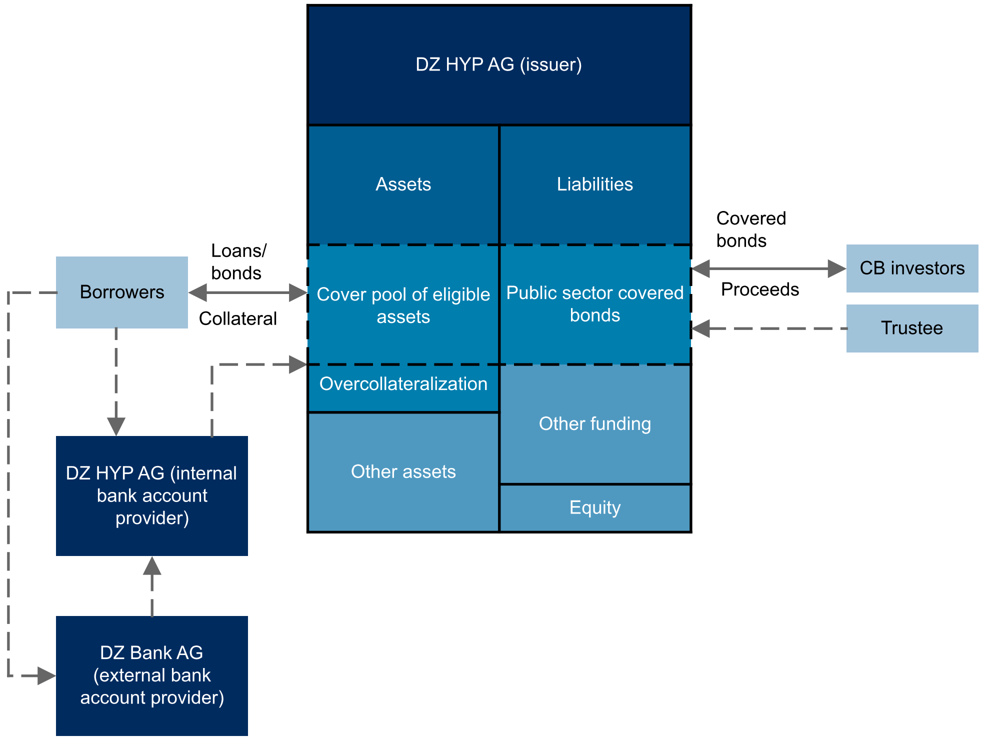


Table 2

Program Participants

Role	Name	Rating	Rating dependency
Issuer	DZ HYP AG	A+/Stable/A-1	Yes
Account provider	DZ HYP AG	A+/Stable/A-1	No
Account provider	DZ Bank AG Deutsche Zentral-Genossenschaftsbank	A+/Stable/A-1	No

Legal and regulatory risks

We base our analysis of legal risk on our criteria "Structured Finance: Asset Isolation And Special-Purpose Entity Methodology," published on March 29, 2017, as well as our "Covered Bond Ratings Framework: Methodology And Assumptions," published on June 30, 2015.

The German Covered Bond Act (Pfandbriefgesetz; "PfandBG") and the relevant secondary legislation provide the legal framework for the issuance of German covered bonds ("Pfandbriefe"). On April 15, 2021, and May 7, 2021, the German Bundestag and the Bundesrat, respectively, approved amendments to the PfandBG, implementing the EU's Covered Bonds Directive into German Pfandbrief law and adjusting it to reflect changes to article 129 of the Capital Requirements Regulation (CRR). The amendments came into force on July 8, 2022.

The main changes to the PfandBG include, among others:

- The introduction of an option for the cover pool administrator to extend the maturities of principal payments of an insolvent issuer's covered bonds by up to one year;
- The introduction of an option for the cover pool administrator to extend maturities of interest and principal within the first month after his appointment to end a one-month period without further requirements;
- An additional nominal statutory overcollateralization requirement of 2% for mortgage and public sector covered bonds and 5% for ship and aircraft covered bonds;
- Derivative eligibility amendments;
- Amendments to provisions for the liquidity buffer and the cover pool monitor's reporting duty; and
- The expansion of transparency provisions.

We consider that the German covered bond legal framework satisfies the relevant legal aspects of our covered bonds criteria. This enables us to assign ratings to the covered bonds that exceed the long-term ICR on the issuer.

Covered bond investors have a preferential claim to a cover pool of assets, which for public sector covered bonds may comprise exposures to state, regional, and local public sector authorities of EU/European Economic Area countries, as well as exposures to public sector entities in the U.K., Canada, the U.S., Japan, and Switzerland. Additionally, the cover pool can also comprise other, eligible substitute assets.

According to the legal framework, the issuer must maintain overcollateralization of at least 2% on both nominal and a net present value basis for the outstanding covered bonds as well as ensure that 180 days of liquidity needs are covered by liquid assets at all times.

An independent trustee is responsible for monitoring the cover pool (cover pool monitor) until an independent cover pool administrator is appointed in case of the issuer's insolvency.

The administrator can extend maturity of all outstanding covered bonds, subject to certain conditions, including avoiding imminent insolvency of the ringfenced Pfandbriefe, confirming it is not overindebted, and having no reason to believe it will not be solvent when the extension period ends.

In addition, the extension cannot affect the ranking of covered bond investors or invert the sequencing of the covered bond programs' original maturities.

Our rating analysis considers the coverage of refinancing costs, which is the additional credit enhancement expected to be required to be able to refinance the cover pool in a stressed environment (see "Related Criteria"). Our analysis of German covered bonds therefore considers the covered bonds' extended maturity date when estimating the refinancing cost of a program. In a stressed environment, we assume that an administrator will initiate an extension of all outstanding covered bonds (see "Approach To Analyzing German Covered Bonds Clarified Following Changes To The German Covered Bond Law," published on Oct. 6, 2021).

BaFin, the German supervisory authority for financial institutions, appoints and supervises the cover pool monitor and cover pool administrator. BaFin also regularly conducts a covered bond audit.

We have also analyzed the risk that, if the issuing bank becomes insolvent, cash received from the cover pool assets could be commingled with the cash belonging to the bank, resulting in a loss to the cover pool. In our view, the German Covered Bond Act segregates cash received after the issuing bank's insolvency, but cash received shortly before insolvency and not reinvested in cover pool assets could be exposed to commingling risk. We address this risk in our counterparty risk analysis (see "Counterparty risk").

Operational and administrative risks

We review operational risk according to our covered bonds criteria. We have considered the procedures used by the issuing bank in the origination and monitoring of cover pool assets.

In our opinion, there are no operational risks from the cover pool's management and loan origination that would constrain the covered bond ratings to the same level as the long-term ICR on the issuer. DZ HYP voluntarily maintains overcollateralization levels that exceed the legal minimum requirement, to support the current ratings on the covered bonds.

In our view, potential backup servicers would be available, if DZ HYP became unable to manage the program considering that Germany is an established covered bond market and that the cover pool does not comprise product features that would materially limit the range of available servicers.

Resolution regime analysis

As part of our covered bonds criteria, our analysis considers the resolution regime in place in Germany to determine the RRL. The RRL on DZ HYP, which is the starting point for any further ratings uplift in our analysis, is 'aa'. We consider the following factors:

- DZ HYP is domiciled in Germany, which is subject to the EU's BRRD.
- Absent an assigned RCR for DZ HYP, we add two notches of uplift to the ICR because we assess the systemic importance for German public sector covered bonds as very strong.

Jurisdictional support analysis

Under our covered bonds criteria, we conduct a jurisdictional support analysis to assess the likelihood that a covered bond program facing stress would receive support from a government-sponsored initiative. This is reflected in our JRL, which is our assessment of the creditworthiness of a covered bond program considering jurisdictional support, but before giving benefit to a covered bond program's ability to access other refinancing sources.

Our assessment of the expected jurisdictional support for German public sector covered bonds is very strong. Therefore, under our covered bonds criteria, the program can receive up to three notches of jurisdictional support uplift from the RRL. The covered bonds make use of two notches to achieve a 'aaa' JRL, leaving an unused notch for jurisdictional support.

We also consider that the cover pool continues to comply with legal and regulatory minimum standards in Germany and that sovereign risk does not constrain the ratings on the covered bonds.

Collateral support analysis

We base our analysis on the cover pool data provided by the issuer as of Sept. 30, 2022, and on our "Methodology And Assumptions For Assessing Portfolios Of International Public Sector And Other Debt Obligations Backing Covered Bonds And Structured Finance Securities," criteria, published on Dec. 9, 2014.

Since our previous review, the cover pool notional amount has reduced, and its composition has shifted towards more German exposures and less public sector assets located in Southern Europe. Also, the share of local and region governments has increased while the exposures to sovereigns is lower than in our previous analysis.

The portfolio comprises LRGs (90%), of which 82% are located in Germany. Sovereigns make up about 6% of the cover pool, and the remaining small share are loans backed by non-LRG international public finance (IPF) entities.

We view the credit quality of about 88% of the cover pool as 'A-' or higher (compared to 83% previously). Our weighted-average rating of the cover pool improved to 'A' from 'A-' and we determined a 'AAA' scenario default rate (SDR) of 17.43% (19.71% previously).

Our recovery rate assumptions are higher and our time-to-recovery assumptions are longer for LRGs than for sovereign or non-LRG IPF assets. Therefore, our recovery rate and time-to-recover assumptions on the portfolio increased to 83.66% from 78.24% and 3.6 years versus 3.5 years, respectively (see table 6).

Obligor concentration has remained broadly unchanged with somewhat higher concentration in the top five obligors (12.83% versus 11.96% previously) but lower concentration of the top 20 exposures, with 24.84% in the current analysis compared with 26.85% previously.

The available credit enhancement covers all our concentration test results (see table 3).

The German LRG assets are well-diversified across the federal states, but the share of LRGs in Rheinland-Palatine and Saarland are higher than these states' share in the German GDP. However, as these exposures have stayed stable over the past several years at about 10% combined and do not represent a material portion of the cover pool, we continue applying our standard correlation assumption (15%) among the LRGs, under our public sector criteria.

Based on our covered bonds criteria, we have determined a stressed refinancing spread of 179 basis points (bps).

Table 3

Key Credit Metrics

	As of Sept. 30, 2022	As of Dec. 31, 2021
Weighted-average cover pool asset rating	A	A-
Weighted-average loan asset maturity (years)	7.84	8.34
Five largest obligors (% of the cover pool)	12.83	11.96
20 largest obligors (% of cover pool)	24.84	26.85
Credit analysis results		
Scenario default rate (%)	17.43	19.71
Weighted-average recovery rate (%)	83.66	78.24
Weighted-average time to recovery (years)	3.61	3.52
Largest obligor test result (% of cover pool)	4.46	4.80

Table 3

Key Credit Metrics (cont.)

	As of Sept. 30, 2022	As of Dec. 31, 2021
Largest industry test result (% of cover pool)	2.97	2.65
Largest sovereign test result (% of cover pool)	2.64	5.73
Stressed refinancing spread (basis points)	179.03	218.53

Table 4

Asset Distribution By Geography

	Percentage of cover pool (%)	
	As of Sept. 30, 2022	As of Dec. 31, 2021
Germany	86.64	81.23
Austria	3.56	3.15
Canada	3.49	2.80
Switzerland	1.26	1.28
Italy	0.92	2.50
Portugal	0.00	2.00
Spain	2.64	5.73
Other	1.49	1.32
Total	100.00	100.00

Table 5

Asset Distribution By Rating

	Percentage of cover pool (%)	
	As of Sept 30, 2022	As of Dec. 31, 2021
AAA	4.67	4.77
AA	37.23	34.44
A	45.61	43.51
BBB	11.35	14.51
BB	0.80	1.96
B or lower	0.34	0.81
Total	100.00	100.00

Table 6

Recovery Assumptions For Cover Pool Assets*

			Percentage of cover pool (%)	
Borrower type	'AAA' recovery rate (%)	Time to recovery (years)	As of Sept. 30, 2022	As of Dec. 31, 2021
Category A LRGs	90	4	87.27	56.81
Category B LRGs	75	4	3.08	31.08
Sovereigns and sovereign-related	37	0	5.63	8.73
Non-LRG IPF assets	18	0	4.02	3.39
Total			100.00	100.00

*According to our criteria for pools of public sector assets. LRG--Local and regional governments. IPF--International public finance.

The results of our credit analysis represent the inputs to our cash flow analysis. Most of the cover pool assets are denominated in euros (95%) with the remainder being mainly in Canadian dollar, U.S. dollar, and Swiss franc. The currency composition of the assets broadly matches that of the outstanding covered bonds. There are no derivatives registered in the cover pool, and we have modeled foreign exchange as well as interest rate risk in our cash flow model. In addition, we have assumed a stressed servicing fee of 10 bps.

We also considered the risk that cash collections received from the cover pool assets shortly before the issuer's insolvency, and not reinvested in cover pool assets, could be lost through commingling with the issuer's cash (see "Counterparty risk").

The aim of the cash flow analysis is to assess whether the stressed cash flows from the cover pool assets suffice, at the 'AAA' rating level, to make timely payments of interest and ultimate payment of principal on the covered bonds.

Our cash flow analysis determines the target credit enhancement needed to achieve the maximum potential collateral-based uplift, inclusive of 100% refinancing costs, and the credit enhancement required to cover 'AAA' credit risk assuming no asset-liability maturity mismatch. We determined the credit enhancement required to cover 'AAA' credit risk of 9.53% and a target credit enhancement of 11.48%.

As of Dec. 31, 2022, 'AAA' credit risk increased and target credit enhancement decreased compared to our previous analysis. This is the result of two main changes: (i) the increase in the market rates had an overall negative credit effect on the program cash flows because the share of variable assets (2.1%) is less than the share of variable rate bonds (6.5%); and (ii) the improvement in the credit results mitigated the negative effect stemming from the change in interest rate environment. In addition, the shorter weighted-average maturity of assets together with longer weighted-average maturity of the covered bonds had a positive effect on the asset-liability maturity match.

With available overcollateralization of 30.29%, the covered bonds' maximum potential collateral-based uplift above the JRL is four notches. According to our covered bonds criteria, we reduce the potential collateral-based uplift by one notch if the covered bonds do not benefit from at least six months of liquidity, and by a further notch if overcollateralization is uncommitted. DZ HYP maintains 180 days of liquid assets at all times, as is required by the German covered bond legal framework. However, because overcollateralization is uncommitted, we have reduced the potential collateral-based uplift by one notch, resulting in a final collateral-based uplift of three notches.

The covered bonds do not use these notches of uplift as their 'AAA' rating is based on their JRL assessment. As a result, the program currently has four unused notches comprising three unused notches of collateral-based support and one unused notch of jurisdictional support.

Table 7

Collateral Uplift Metrics

	As of Dec. 31, 2022	As of Dec. 31, 2021
Asset WAM (years)	7.92	8.42
Liability WAM (years)	8.71	8.08
Maturity gap (years)	(0.79)	0.34
Available credit enhancement (%)	30.29	14.79
'AAA' credit risk (required credit enhancement for 'AAA' rating based on JRL; %)	9.53	9.16
Required credit enhancement for first notch of collateral uplift (credit risk at 'AAA'; %)	10.02	10.13
Required credit enhancement for second notch of collateral uplift (credit risk at 'AAA' and 50% of refinancing costs; %)	10.51	11.09
Required credit enhancement for third notch collateral uplift (credit risk at 'AAA' and 75% of refinancing costs; %)	10.99	12.06
Target credit enhancement (credit risk at 'AAA' and 100% of refinancing costs; %)	11.48	13.02
Potential collateral-based uplift (notches)	4	4
Adjustment for liquidity (Y/N)	N	N
Adjustment for committed overcollateralization (Y/N)	Y	Y
Collateral support uplift (notches)	3	3

WAM--Weighted-average maturity. JRL--Jurisdiction-supported rating level.

Counterparty risk

We analyze counterparty risk by applying our counterparty criteria (see "Counterparty Risk Framework: Methodology And Assumptions," published on March 8, 2019).

DZ HYP's public sector covered bonds rely on bank accounts, which DZ HYP and DZ BANK provide. This potentially exposes investors to bank account and commingling risks.

Bank account risk. Accounts held at DZ BANK are swept intraday so that there is no overnight exposure. We therefore consider that bank account risk arising from exposures to DZ BANK is mitigated.

Commingling risk. Commingling risk in the covered bond program arises where cash collections received from the cover pool assets shortly before the issuer's insolvency are not reinvested in cover pool assets, and therefore could be lost through commingling with the bank's other cash.

In the absence of legal assurance or structural mitigants, we considered commingling risk when determining the required credit enhancement assuming that the highest one-day net cash inflow over the life of the covered bonds is lost, using information provided by the issuer. As of Dec. 31, 2022, the amount assumed lost is about €260 million (€292 million previously). The commingling risk is reflected in the 'AAA' credit risk and target credit enhancement figures.

There are no derivatives registered in the cover pool. We model any interest and foreign exchange risks in our cash flow model.

Sovereign risk

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

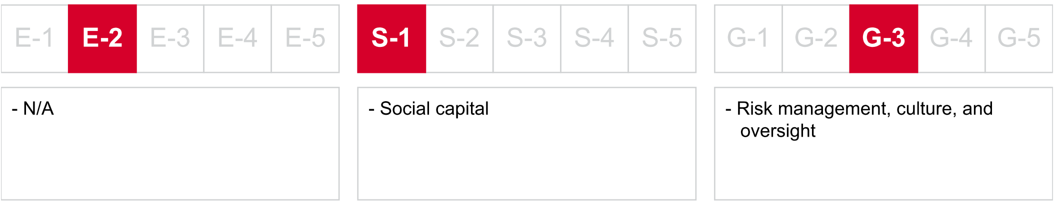
This is a multi-jurisdictional pool of loans to public sector entities in Germany (over 81%) and other developed countries. The issuer is located in Germany, which is part of a monetary union, and liquidity risk is covered for 12 months via the potential maturity extensions of the covered bonds. This results in a low sensitivity to refinancing risk, which implies a maximum rating differential of five notches between the covered bonds and the issuer's host sovereign.

The multi-jurisdictional treatment for covered bonds under the sovereign risk criteria, including the supplemental test--largest sovereign default test (2.64%)--results in the rating on the program not being constrained by sovereign default risk.

As a result of the above, and based on our unsolicited long-term rating on Germany, our structured finance sovereign risk criteria do not constrain our ratings on the covered bonds.

Environmental, Social, And Governance

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

- N/A	- Social capital	- Risk management, culture, and oversight

N/A--Not applicable. 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.

Social factors are a positive consideration in our credit rating analysis of DZ HYP's public sector covered bonds. DZ HYP funds public infrastructure with social goals, which benefit from guarantees from German municipalities. Governance factors are a moderately negative consideration in our credit analysis of this program because the issuer does not commit to maintain a minimum level of overcollateralization above the legal minimum level, which reduces the unused notches of uplift by one.

Related Criteria

- Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021
- Counterparty Risk Framework: Methodology And Assumptions, March 8, 2019
- Incorporating Sovereign Risk In Rating Structured Finance Securities: Methodology And Assumption, Jan. 30, 2019
- Asset Isolation And Special-Purpose Entity Methodology, March 29, 2017
- Covered Bond Ratings Framework: Methodology And Assumptions, June 30, 2015
- Criteria - Structured Finance - Covered Bonds: Methodology And Assumptions For Assessing Portfolios Of International Public Sector And Other Debt Obligations Backing Covered Bonds And Structured Finance Securities, Dec. 9, 2014
- Covered Bonds Criteria, Dec. 9, 2014
- Principles Of Credit Ratings, Feb. 16, 2011

Related Research

- Global Covered Bond Insights Q4 2022, Dec. 16, 2022
- German Covered Bond Market Insights 2022, Oct. 17, 2022
- DZ HYP AG, May 11, 2022
- ESG Credit Indicator Report Card: Covered Bonds, April 7, 2022
- S&P Global Ratings Definitions, Nov. 10, 2021
- Approach To Analyzing German Covered Bonds Clarified Following Changes To The German Covered Bond Law,

Oct. 6, 2021

- ESG Industry Report Card: Covered Bonds, Nov. 9, 2020
- Covered Bond Monitor: Technical Note, Sept. 6, 2019
- Glossary Of Covered Bond Terms, April 27, 2018

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