

CREDIT OPINION

11 August 2023

Update



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RATINGS

DZ HYP AG

Domicile	Hamburg, Germany
Long Term CRR	Aa2
Type	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Aa2
Type	Senior Unsecured - Dom Curr
Outlook	Stable
Long Term Deposit	Aa2
Type	LT Bank Deposits - Fgn Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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DZ HYP AG

Update to credit analysis

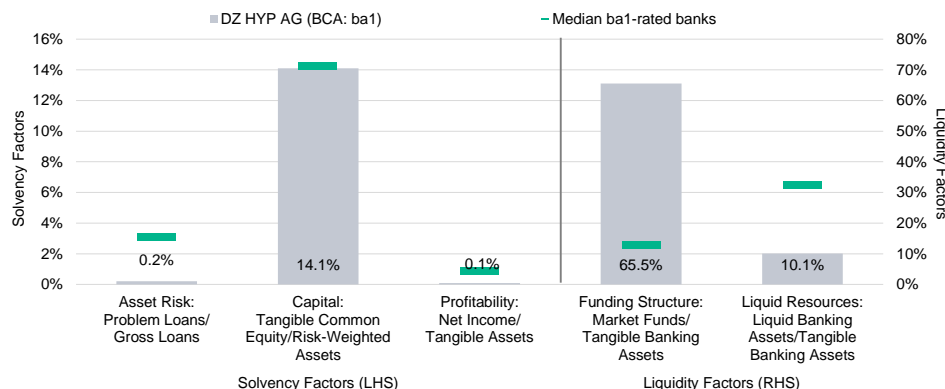
Summary

[DZ HYP AG's](#) (DZ HYP) Aa2 deposit and senior unsecured debt ratings reflect the bank's ba1 Baseline Credit Assessment (BCA), the alignment of its a3 Adjusted BCA with that of its parent [DZ BANK AG](#) (DZ BANK, Aa2/Aa2 stable, baa2)¹, and our assumption to include DZ HYP into the resolution perimeter of DZ BANK. The outcome of our Advanced Loss Given Failure (LGF) analysis, which incorporates the relative loss severity of a liability class results in three notches of rating uplift. Because of DZ HYP's membership of Germany's systemically relevant Genossenschaftliche FinanzGruppe, the bank's long-term ratings benefit from a one-notch uplift resulting from government support.

DZ HYP's ba1 BCA is constrained by the bank's focused business model as a commercial real estate (CRE) lender, exposing it to considerable concentration risk. The bank's BCA further reflects its very strong asset quality and satisfactory funding profile. DZ HYP's moderate standalone capitalisation in the context of real estate concentration risk is mitigated by a control and profit-and-loss transfer agreement with DZ BANK, as well as regulatory exemptions to comply with standalone minimum capital and liquidity requirements. These elements strongly underpin our view to align DZ HYP's Adjusted BCA with that of its parent DZ BANK.

Exhibit 1

Rating Scorecard - Key financial ratios



Source: Moody's Investors Service

Credit strengths

- » Very strong contractual support commitments from DZ BANK, including regulatory waivers for minimum capital and liquidity requirements
- » Very good asset quality and ample coverage which will mitigate structural challenges ahead for commercial real estate lending
- » Senior unsecured creditors will benefit from extremely low loss severity because we consider DZ HYP to be included in resolution perimeter of DZ BANK

Credit challenges

- » DZ HYP's concentration risk to commercial real estate constrains its financial profile, reflecting its exclusive business model as a covered bond bank
- » Very high market funding dependence, mitigated by established covered bond franchise and access to funding from Germany's cooperative sector
- » Moderate profitability is driven by tight lending margins, balanced by improved operating efficiency

Outlook

We expect DZ HYP's and the cooperative banking sector's financial profiles to remain stable over the 12-to-18-month outlook horizon. We also expect DZ BANK's liability structure to result in unchanged notching outcomes for the deposit and senior unsecured debt ratings of DZ HYP and of its parent.

Factors that could lead to an upgrade

- » An upgrade of DZ HYP's ratings could be triggered by an upgrade of DZ BANK's BCA, or by an improvement in the cooperative sector's financial strength. Additional rating uplift from our Advanced LGF analysis could occur for junior senior unsecured debt if DZ BANK significantly increases the volume of instruments designed to absorb losses in resolution relative to its tangible banking assets. With three notches of rating uplift above the Adjusted BCA, the bank's deposit and senior unsecured debt ratings already benefit from the highest possible LGF result.
- » DZ HYP's BCA could be upgraded as a result of a combined improvement in the bank's solvency and liquidity metrics. A stronger combined solvency score could result from a sustained improvement in DZ HYP's profitability, a risk reduction in DZ HYP's securities portfolio or higher capitalisation at the level of DZ BANK. An improvement in the Combined Liquidity score could result from reduced reliance on market funding or a marked increase in liquid resources.

Factors that could lead to a downgrade

- » A downgrade of DZ HYP's ratings could result from a joint weakening of the financial strength of G-Finanzgruppe and DZ BANK, or if DZ BANK issued less debt designed to absorb losses in bail-in compared with its tangible banking assets than we currently anticipate.
- » DZ HYP's BCA could be downgraded in case of a sustainably higher dependence on market funding, as a result of a significant weakening of DZ BANK's capitalisation, or if asset losses were to rise and weaken asset quality beyond the rating agency's current expectations.
- » Please refer to the latest [Credit Opinion for DZ BANK](#) for detailed factors that could lead to an upgrade or downgrade of the parent's BCA.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody's.com> for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2

DZ HYP AG (Unconsolidated Financials) [1]

	12-22 ²	12-21 ²	12-20 ²	12-19 ²	12-18 ²	CAGR/Avg. ³
Total Assets (EUR Billion)	77.4	80.3	80.5	79.5	75.4	0.6 ⁴
Total Assets (USD Billion)	82.6	91.0	98.5	89.2	86.2	(1.1) ⁴
Tangible Common Equity (EUR Billion)	2.1	2.1	1.9	1.9	1.8	4.9 ⁴
Tangible Common Equity (USD Billion)	2.3	2.4	2.4	2.1	2.0	3.1 ⁴
Problem Loans / Gross Loans (%)	0.2	0.2	0.2	0.2	0.2	0.2 ⁵
Tangible Common Equity / Risk Weighted Assets (%)	14.1	13.4	11.0	10.5	10.2	11.8 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	4.9	6.5	7.4	5.3	7.0	6.2 ⁵
Net Interest Margin (%)	0.8	0.8	0.7	0.7	0.9	0.8 ⁵
PPI / Average RWA (%)	2.4	2.2	1.8	1.4	1.4	1.8 ⁶
Net Income / Tangible Assets (%)	0.1	0.2	0.2	0.2	0.2	0.2 ⁵
Cost / Income Ratio (%)	44.0	42.9	46.9	51.8	60.7	49.3 ⁵
Market Funds / Tangible Banking Assets (%)	65.5	65.0	64.5	65.0	63.3	64.7 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	10.1	14.7	16.5	18.3	18.8	15.7 ⁵
Gross Loans / Due to Customers (%)	5685.8	4214.2	3410.9	2875.8	2589.5	3755.2 ⁵

[⁻] Further to the publication of our revised methodology in July 2021, only ratios from annual 2020 onwards included in this report reflect the change in analytical treatment of the "high-trigger" Additional Tier 1 instruments. [1] All figures and ratios are adjusted using Moody's standard adjustments. [2] Basel III - fully loaded or transitional phase-in; LOCAL GAAP. [3] May include rounding differences because of the scale of reported amounts. [4] Compound annual growth rate (%) based on the periods for the latest accounting regime. [5] Simple average of periods for the latest accounting regime. [6] Simple average of Basel III periods.

Sources: Moody's Investors Service and company filings

Profile

DZ HYP is the largest CRE lender in [Germany](#) (Aaa stable), with total reported assets of €77.2 billion at the end of 2022 (2021: €81.6 billion), of which €68.1 billion or 88% relate to loans. Around 97% relates to domestic customers. As a dedicated covered bond bank, DZ HYP's funded around 59% of its assets through covered bonds at the end of 2022, including €33.4 billion nominal volume of mortgage covered bonds and €9.3 billion for public-sector covered bonds.

DZ HYP operates headquarters in Hamburg and Muenster, the main locations of its predecessor entities DG HYP and WL Bank, who were combined in 2018 after the merger of their parent institutions, DZ BANK and WGZ BANK in 2016. DZ HYP maintains regional offices and real estate centers in 9 additional large cities in Germany, but has no international presence.

DZ BANK owns 96.4% of the bank's shares, with the remainder held by primary banks of the cooperative banking sector and by a foundation of the former minority owners of WL Bank.

Weighted Macro Profile of Strong +

As a result of the bank's strong lending focus on the domestic market, DZ HYP's weighted Macro Profile is the same as [Germany's Strong + Macro Profile](#).

Detailed credit considerations

DZ HYP's very good asset quality and ample coverage will mitigate structural challenges ahead for commercial real estate lending

DZ HYP's assigned Asset Risk score is ba1, nine notches below the aa1 initial score. Our sizeable negative adjustment reflects the very high concentration risks from the covered bond bank's cyclical CRE activities. Our assessment further reflects the entity's still large, although declining, exposures to southern European countries of [Italy](#) (Baa3 negative), [Portugal](#) (Baa2 stable), and [Spain](#) (Baa1 stable).

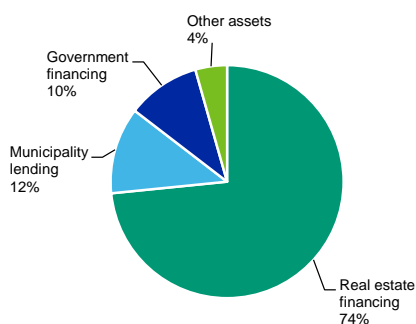
The sharp increase in interest rates creates challenges to CRE property market values and makes refinancing more difficult, eroding asset quality. We expect a moderate weakening in the asset quality of DZ HYP's lending portfolio. However, we believe that the covered bond bank's almost exclusive domestic focus with a high share of lower-risk sectors, i.e. residential and multifamily housing, will shield the entity from a material deterioration of its asset risks. In [our base case for European CRE valuations](#), we expect a decline of 5-15% from their 2022 levels in the next 12-18 months, with varying ranges, depending on location and property type. The office

market is most at risk of declining tenant demand, while retail shopping centers and hotels are challenged by rising prices and operating costs.

In 2022, DZ HYP's new lending volume showed a moderate decline of around 13% to €10.4 billion, compared with 12% annual growth, or €12.1 billion, in 2021. The rising interest rates triggered a strong decline in demand for new loans from private clients, down around 40% to €1.6 billion last year, while the demand from corporate clients fell only moderately by around 8% to €8.1 billion. New loans to public sector customers were €751 million, broadly in line with the average for the years 2017-21.

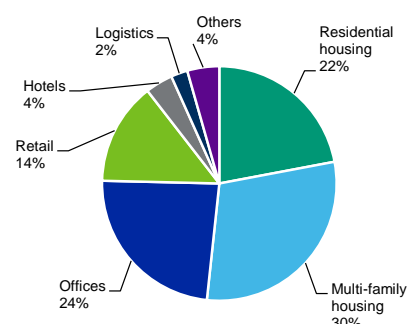
Around three-quarters of DZ HYP's assets arise from real estate financing, complemented by municipality and government financing (Exhibit 3). The entity's €56.7 billion real estate financing at the end of 2022 (2021: €55.5 billion) largely reflected lower-risk sectors like residential and multifamily housing, equivalent to 22% and 30% of the total (Exhibit 4). We believe that DZ HYP's loans to retail and hotel properties, 14% and 4% of the total, are most vulnerable from the structural challenges ahead, and thus face the highest risk of weakening asset quality.

Exhibit 3
DZ HYP's assets largely reflect real estate financing and public sector exposure ...
 Data as of December 2022



Source: Company reports and Moody's Investors Service

Exhibit 4
... and more than half of its real estate financing exposure relates to lower-risk residential or multi-family housing
 Data as of December 2022



Source: Company reports and Moody's Investors Service

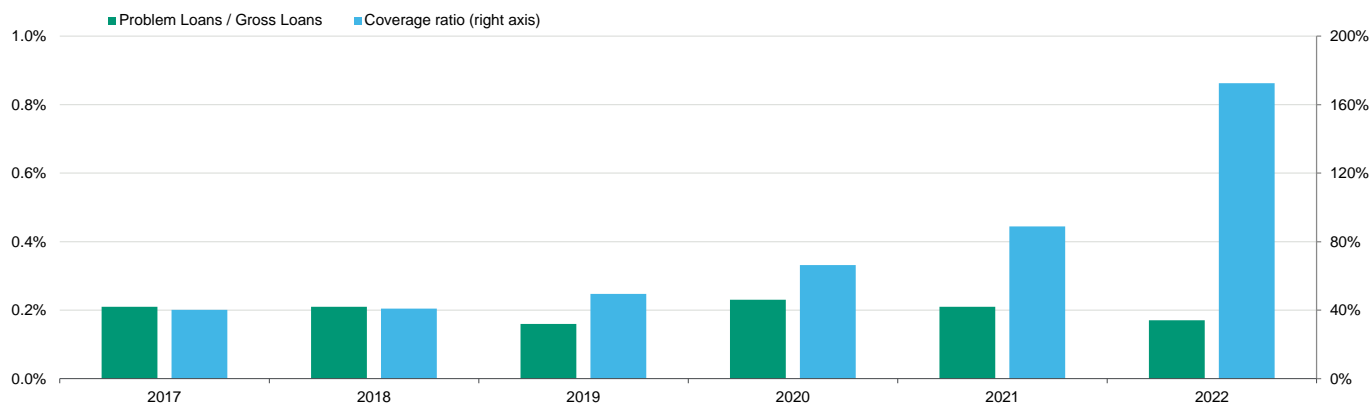
We consider DZ HYP's very good asset quality and ample coverage important mitigants for its asset risks. Despite the challenges from the pandemic and energy crisis, the covered bond bank's non-performing loan (NPL) ratio remained stable at very low levels of 0.2% of gross loans since end-2019 to 2022. This reflects broadly unchanged problem loans of €114 million at the end of 2022, compared with €101 million in 2019, while gross loans increased by around 7% to €68.5 billion over the same period (Exhibit 5).

In addition to first-lien collateral from CRE lending, DZ HYP has ample on-balance sheet loan-loss-reserves, accounting for 173% of problem loans at the end of 2022 (2021: 89%). We believe these provisions will shield the entity from unexpected losses, in case of need.

Exhibit 5

Following the benign credit cycle over the last decade, DZ HYP's problem loan ratio remained very low, with little change during the pandemic and energy crisis

Data in percent



Note: The coverage ratio compares on-balance sheet loan loss reserves (excluding §340f reserves) to problem loans.

Sources: Company reports and Moody's Investors Service

In addition to CRE lending risks, DZ HYP holds financial securities from sovereigns and sub-sovereigns in [Italy](#) (Baa3 negative), [Portugal](#) (Baa2 stable) and [Spain](#) (Baa1 stable) with long durations. These countries have been particularly affected by the economic consequences from the pandemic and now face challenges from rising interest rates, reflecting their high public sector debt.

Including an opportunistic reduction of Italian and Portuguese bonds in 2022, DZ HYP's total exposure to these South European countries declined to €1.6 billion from €3.5 billion at the end of 2021. These securities accounted for the bulk of its total hidden burden (*Stille Lasten*) from credit spread developments of around €164 million at the end of 2022, an improvement from €347 million in 2021. We expect that DZ HYP will continue to reduce these non-strategic exposure as a result of maturities and disposals.

DZ HYP's solid capitalization reflects rising standalone capital and close integration into DZ BANK

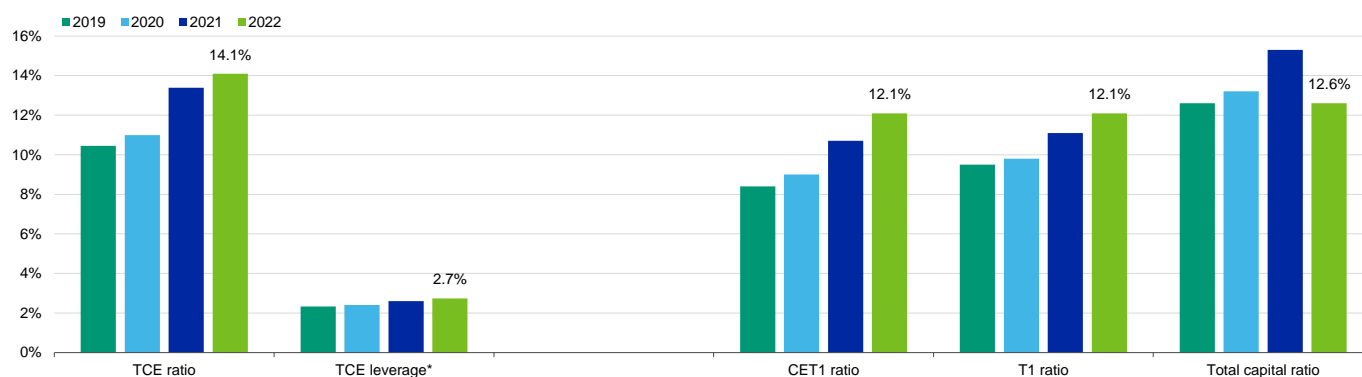
DZ HYP's assigned Capital score of a3 is aligned with the Capital score of DZ BANK. Our assessment reflects that DZ HYP is exempt to comply with standalone regulatory capital requirements (so-called "waiver"), based on provisions of the EU's Capital Requirements Regulation which considers the existence of control- and profit-and-loss transfer agreements with its parent bank. These agreements are in place since 2012 and strongly support the alignment of DZ HYP's Adjusted BCA with that of DZ BANK.⁴

Under the control- and profit-and-loss transfer agreement, DZ HYP's annual profit after changes in reserves, and based on local GAAP rules, is transferred to DZ BANK. However, before the transfer, DZ HYP can increase reserve accounts to strengthen its standalone capital. These include, for example, fully-taxed additions in accordance with i) Article 340g of the German Banking Act (KWG, so-called funds for general banking risks); or ii) Article 340f. The latter are not Common Equity Tier 1 (CET1) eligible but included in our Tangible Common Equity (TCE) ratio of DZ HYP, which was 14.1% at the end of 2022, up from 13.4% in 2021 and reflecting €171 million of these reserves, equivalent to around 8% of the entity's total TCE of €2.1 billion in 2022.

Despite the waiver, DZ HYP reports standalone regulatory capital ratios to foster transparency. DZ HYP's improved CET1 ratio of 12.1% at the end of 2022, compared with 8.4% in 2019, mainly reflects the annual additions to funds for general banking risks. This helped to increase CET1 capital to €1.8 billion from €1.5 billion, while risks-weighted assets declined by around 15% to €15.0 billion from €17.8 billion over the same period.

Exhibit 6

Additions to capital reserves triggered improving standalone capital ratios for DZ HYP, while its leverage ratio remains very low Data in percent of risk-weighted assets, except leverage ratio*



Note: * The leverage ratio compares Tangible Common Equity (TCE) to tangible banking assets. CET1 = Common Equity Tier 1.

Source: Company reports and Moody's Investors Service

At the end of 2022, DZ HYP redeemed €635 million of silent participation capital, which triggered the decrease of its Total Capital ratio to 12.6% from 15.3% in 2021. The absence of coupon payments will also somewhat strengthen the covered bond bank's earnings capacity.

DZ HYP's moderat profitability is driven by tight lending margins, balanced by improved operating efficiency

DZ HYP's assigned score for Profitability is ba3, three notches above its initial b3 score. The positive adjustment reflects our expectation that the bank will be able to achieve a return on assets (ROA)³ of 20-30 basis points. We expect that continued revenue growth as the bank benefits from the normalized interest rate environment and tight operating efficiency will balance by rising credit provisions, reflecting weak economic conditions in Germany and the structural challenges ahead for CRE.

Since the merger, DZ HYP achieved an average ROA of around 20 bps, ranging between 17-25 bps for the period 2018-21.⁴ Solid annual new business lending of around €12 billion, supported by low interest rates, low credit costs, equivalent to on average 2 bps of gross loans over that period, and the implementation of measures to improve its operating efficiency were key drivers.

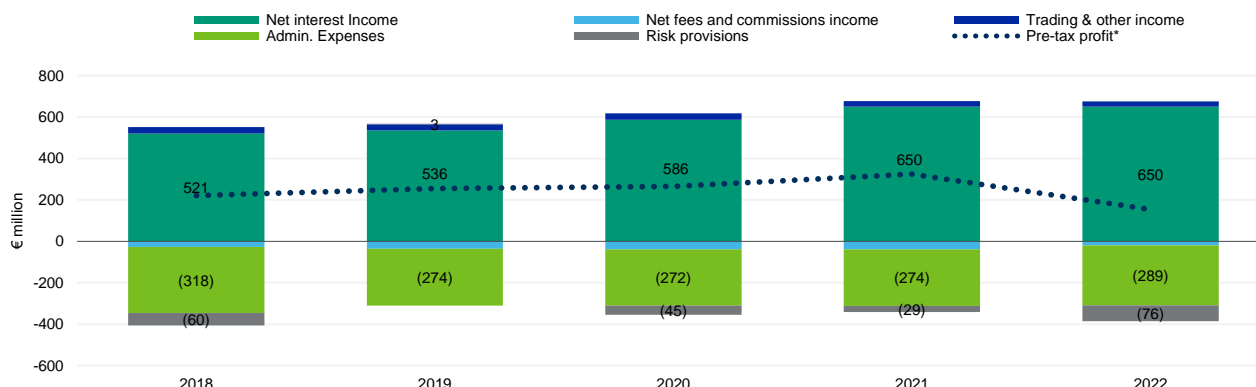
In 2022, DZ HYP reported lower net income (before the profit transfer) of €50 million, compared with €67 million in 2021. A sizeable increase of loan loss provisions to €86 million (2021: €35 million) and the impairment of financial securities of €134 million (2021: €5 million), triggered by the opportunistic risk reduction of Italian and Portuguese government bonds, were mitigated by lower contributions to funds for general banking risks of €31 million (2021: €147 million) and lower tax expenses of €92 million (2021: €125 million).

In 2022, DZ HYP's operating performance was stable, as indicated by almost unchanged pre-provision income of €387 million (2021: €379 million). This reflects slightly higher net interest income of €669 million⁵, up from €665 million a year earlier, and 9.7% higher operating expenses of €276 million (2021: €251 million), mainly because of higher pension scheme expenses.

Exhibit 7

Rising credit costs and an extraordinary impairment on financial securities triggered a decline in DZ HYP's pretax profit in 2022

Data in € million



Note: *Our adjusted pretax profit figure adds back provisions for general banking risks and excludes interest expenses for silent participation capital.

Sources: Company reports and Moody's Investors Service

Very high market funding dependence, mitigated by established covered bond franchise and access to funding from Germany's cooperative sector

DZ HYP' assigned Market Funding score is ba1, six notches above the caa1 initial score. Our large positive adjustment captures the covered bond bank's access to funding sources of the cooperative sector in Germany, which we consider less confidence-sensitive, and matched duration of its assets and liabilities, which reduces its refinance risks, as a result of its well-established proprietary covered bond franchise.

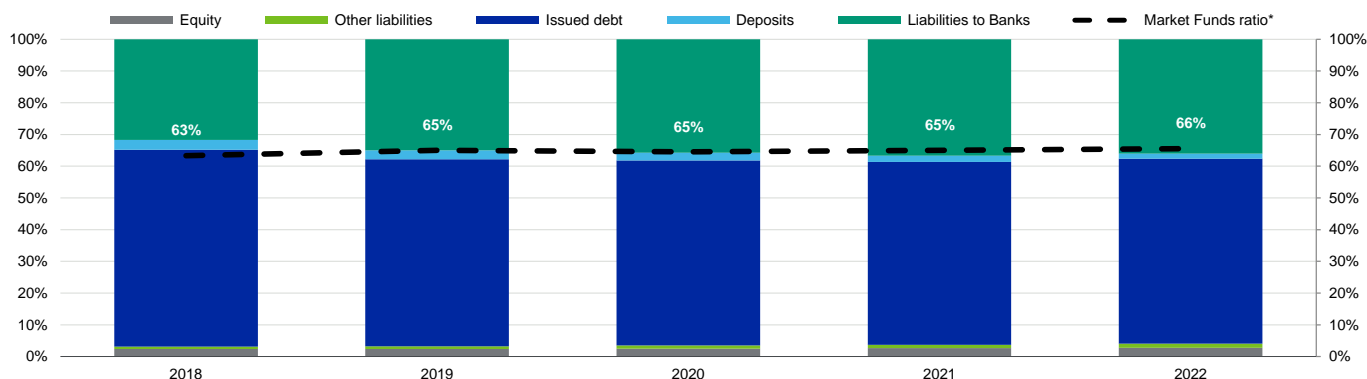
DZ HYP's very high market funding dependence reflects its business model as an exclusive covered bond bank (*Pfandbriefbank*), which sources its funding primarily from covered bonds and senior unsecured debt. DZ HYP's funding access is only to a limited degree sensitive to changes in market confidence, reflecting that it sources a very high share of its unsecured funding needs directly from DZ BANK and therefore indirectly from within the cooperative banking sector, which exhibits sizeable excess deposits provided by its country-wide retail and SME customer base.

DZ HYP's Market Funds ratio was around 65% at the end of 2022, a level that is broadly unchanged since 2018, indicating that the entity is able to fund loan growth during challenging times. Our ratio captures €30 billion liabilities to banks⁵, equivalent to 39% of assets, and securitized liabilities (59% of assets²), mostly consisting of covered bonds of around €46 billion.

Exhibit 8

DZ HYP's very high market funding reliance reflects liabilities to banks issued debt, mostly via covered bonds

Liabilities in percent of tangible banking assets



Note: *The Market Funds ratio compares market funds to tangible banking assets.

Source: Moody's Investors Service

Strong access to unsecured funding through Germany's cooperative banking sector is an important supplement to DZ HYP's well-established covered bond franchise. At the end of 2022, DZ HYP's nominal volume of issued mortgage covered bonds was €33.4 billion and €9.3 billion for public sector covered bonds. The moderate new issuance of unsecured funding of €3.7 billion in 2022 (2021: €3.7 billion) was mostly placed to member banks of Germany's cooperative sector, maintaining the overall amount of unsecured liabilities at around €20.7 billion as of year-end 2022.

Moderate liquidity balanced by access to intragroup reserves and regulatory waiver

DZ HYP's assigned Liquidity score is ba1, in line with the initial score. Our assessment reflects that DZ HYP's loans to banks are mostly owed by members of G-Finanzgruppe, and thus cannot be liquidated at shore notice, and asset encumbrance of some financial securities.

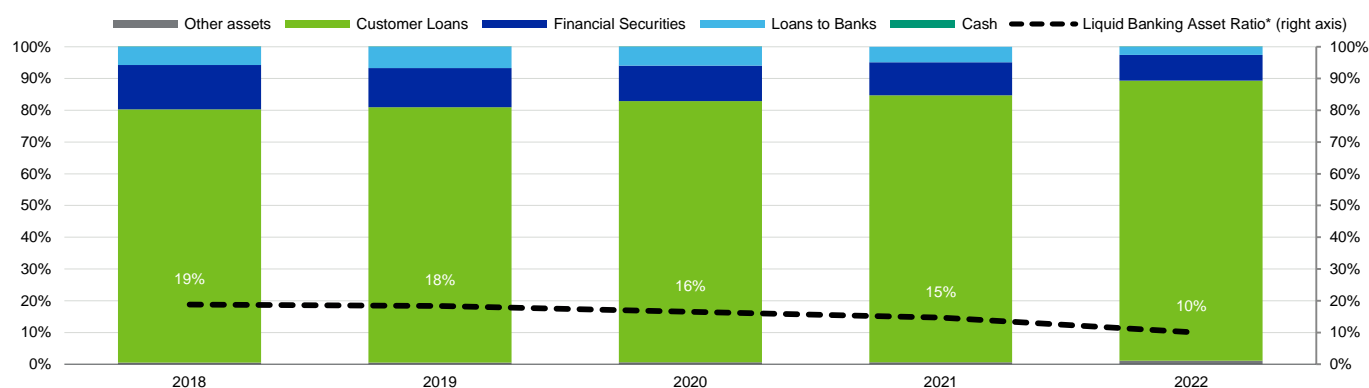
DZ HYP's liquidity needs mainly arise because of covered bond maturities that need to be pre-funded through liquid assets within the cover pools six months ahead.⁸ Since 31 December 2021, DZ HYP is exempt from the compliance of standalone regulatory liquidity requirements in accordance with Article 8 of the CRR).

The new regulatory waiver reflects the covered bond bank's close integration into DZ BANK and is also expressed by its Liquid Banking Assets ratio, which declined to around 10% at the end of 2022, compared with 19% in 2018. DZ HYP's liquid assets included €2.0 billion of loans to banks and €6.3 billion of high-quality financial securities at the end of 2022.

Exhibit 9

DZ HYP operates with an adequate buffer of liquid resources

Assets as percent of tangible banking assets



Source: Moody's Investors Service

We consider receivables from members of G-Finanzgruppe members less liquid, not least because of the large funding contribution of the sector to DZ HYP, and also because of some encumbrance of these liquid assets due to DZ HYP's covered bond programs. Our view also reflects the DZ HYP has additional liquidity leeway under these programs reflecting sizeable overcollateralization.

DZ HYP's concentration risk to commercial real estate constrains its financial profile, reflecting its exclusive business model as a covered bond bank

We deduct a notch from DZ HYP's Financial Profile score, which results in an assigned BCA of ba1. This adjustment reflects DZ HYP's low revenue and income diversification outside the commercial mortgage-lending business.

Business diversification is an important gauge of a bank's sensitivity to stress in a single business line. It is related to earnings stability in the sense that earnings diversification across distinct and relatively uncorrelated lines of business increases the reliability of a bank's earnings streams and its potential to absorb shocks affecting a business line.

Being a CRE lending specialist with some additional exposure to residential mortgage lending and public-sector finance, DZ HYP is exposed to a rather volatile banking business through the business cycle. We consider CRE lending highly cyclical and, therefore, a higher-risk sector exposure. The bank's position as a specialist CRE lender benefits its sector-specific risk management know-how, but at the same time, it naturally limits the potential for (earnings) diversification within the bank. Because CRE exposures can cause high

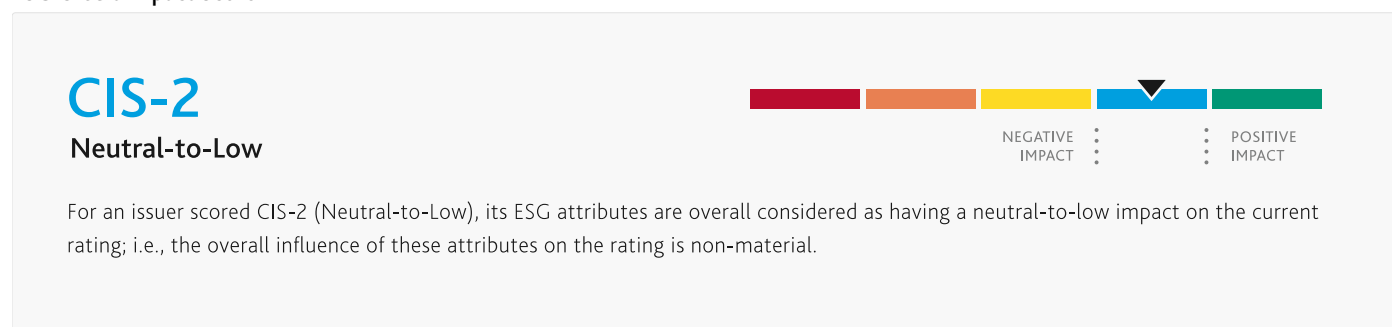
losses in times of financial market stress, DZ HYP's high reliance on CRE-related earnings streams exposes it to unexpected shocks that are likely to hurt its income statement in an adverse scenario. As a result, we classify DZ HYP as a monoline bank according to our approach for business diversification.

ESG considerations

DZ HYP AG's ESG Credit Impact Score is CIS-2

Exhibit 10

ESG Credit Impact Score

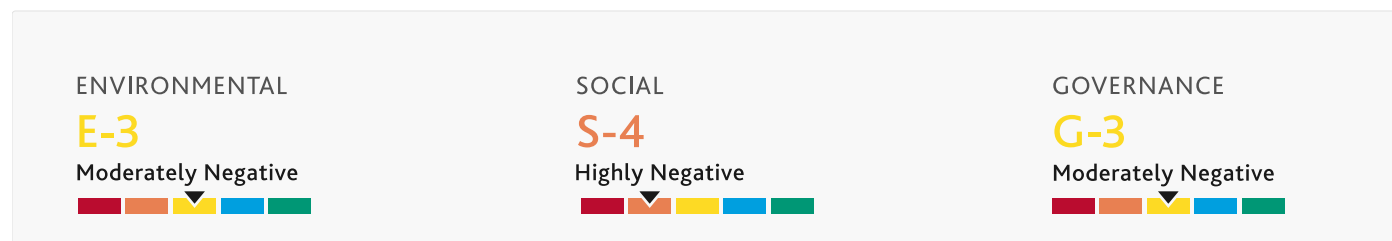


Source: Moody's Investors Service

DZ HYP's CIS-2 indicates that ESG considerations do not have a material impact on the current rating. This reflects the mitigating rating impact of affiliate support from DZ BANK and Genossenschaftliche FinanzGruppe over DZ HYP's ESG risk profile. The bank's moderate corporate governance risks mainly reflect its moderate profitability in the context of its highly cyclical business model as a dedicated commercial real estate lender. Environmental and social factors have a limited credit impact on the rating to date.

Exhibit 11

ESG Issuer Profile Scores



Source: Moody's Investors Service

Environmental

DZ HYP faces moderate exposure to environmental risks primarily because of its portfolio exposure to carbon transition risk as a large commercial real estate lender. In line with its peers, DZ HYP is facing mounting business risks and stakeholder pressure to meet broader carbon transition goals. In response, DZ HYP is engaging in transforming its lending book towards less carbon-intensive assets and is part of cooperative group-wide initiatives to further develop its comprehensive risk management and climate risk reporting frameworks.

Social

DZ HYP faces high industrywide social risks from customer relations, related to regulatory risk and litigation exposure, and is required to meet high compliance standards. These risks are mitigated by developed policies and procedures. High cyber and personal data risks are mitigated by technology solutions and organizational measures to prevent data breaches.

Governance

DZ HYP's governance risks are moderate, reflecting the bank's low profitability, which provides only a limited buffer against adverse developments and limits the bank's capital generation capacity. Because DZ HYP is effectively controlled by DZ Bank through its 96%

shareholding, we have aligned the subsidiary's board structure, policies and procedures score with that of its parent, given the bank's strategic importance and public affiliation with the cooperative group, the parent's oversight of its subsidiary board and the regulated nature of both entities.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moody's.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Support and structural considerations

Affiliate support

DZ HYP's a3 Adjusted BCA benefits from our assessment that the bank is affiliate backed by DZ BANK, as well as the strong fundamentals of and our assessment of a very high probability of support from the German cooperative banking association, G-Finanzgruppe, which provides support to all members through its institutional protection scheme.

As a member of the cooperative group of banks, DZ HYP is highly likely to receive affiliate support in case of need. This support significantly reduces the probability of default because the cooperative group's cross-sector support mechanism aims to stabilise its members by avoiding any form of loss participation by creditors or bail-ins. Our affiliate support assumptions result in four notches of rating uplift from the ba1 BCA, benefitting the bank's issuer and deposit ratings, and CRRs.

Loss Given Failure (LGF) analysis

DZ HYP is subject to the EU Bank Recovery and Resolution Directive, which we consider an operational resolution regime. Therefore, we apply our Advanced LGF analysis, under which we consider the risks faced by the different debt and deposit classes across the liability structure should the bank enter resolution. DZ HYP is a domestic subsidiary of DZ BANK, and we include it in the parent's resolution perimeter for the purpose of our Advanced LGF analysis, which is based on the liability structure at the DZ BANK level.

In line with our standard assumptions, we further assume a residual tangible common equity of 3%, post-failure losses of 8% of tangible banking assets, a 25% runoff in junior wholesale deposits and a 5% runoff in preferred deposits. Because we use private data provided by DZ BANK to determine current amounts of senior unsecured and junior senior debt, as well as our future new issuance expectations, we do not disclose the underlying volumes of the liability tranches included in our Advanced LGF analysis for the group.

For DZ HYP's deposits and senior unsecured debt ratings, our LGF analysis indicates an extremely low loss given failure, leading to a three-notch uplift from its a3 Adjusted BCA.

For DZ HYP's junior senior unsecured debt, rated A3, our LGF analysis indicates a moderate loss given failure, leading to no uplift from its a3 Adjusted BCA.

Government support considerations

We assume one notch of rating uplift in our senior unsecured debt and deposit ratings for members of the cooperative banking group, reflecting our assumptions of a moderate support probability.

Our government support assumptions, which are included in DZ HYP's ratings, reflect the size and high systemic relevance at the domestic level of the group of cooperative banks. Such support would probably not be provided to the bank directly but rather to G-Finanzgruppe, in the unlikely event that the group either cannot provide the required support or cannot provide it quickly enough, based on the sector's combined financial strength.

Counterparty Risk Ratings (CRRs)

DZ HYP's CRRs are Aa2/P-1

The CRRs are four notches above DZ HYP's a3 Adjusted BCA, based on the extremely low loss given failure from the high volume of instruments at the DZ BANK level that are subordinated to CRR liabilities, reflected in three notches of uplift; and one notch of rating uplift, based on government support, in line with our support assumptions on deposits and senior unsecured debt.

Counterparty Risk (CR) Assessment

DZ HYP's CR Assessment is Aa2(cr)/P-1(cr)

DZ HYP's Aa2(cr) CR Assessment is four notches above the a3 Adjusted BCA, three notches of which are based on the buffer against default provided to the senior obligations represented by the CR Assessment by more subordinated instruments, primarily senior

unsecured debt. Because the CR Assessment captures the probability of default on certain senior operational obligations, rather than expected loss, we focus purely on subordination and take no account of the volume of the instrument class.

Methodology and scorecard

Methodology

The principal methodology used in rating DZ HYP was the [Banks Methodology](#), published in July 2021.

About Moody's Bank Scorecard

Our Banks scorecard is designed to capture, express and explain in summary form our Rating Committee's judgement. When read in conjunction with our research, a fulsome presentation of our judgement is expressed. As a result, the output of our scorecard may materially differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong divergence). The scorecard output and the individual scores are discussed in rating committees and may be adjusted up or down to reflect conditions specific to each rated entity.

Rating methodology and scorecard factors

Exhibit 12

DZ HYP AG

Macro Factors							
Weighted Macro Profile		Strong +	100%				
Factor	Historic Ratio	Initial Score	Expected Trend	Assigned Score	Key driver #1	Key driver #2	
Solvency							
Asset Risk							
Problem Loans / Gross Loans	0.2%	aa1	↔	ba1	Sector concentration	Expected trend	
Capital							
Tangible Common Equity / Risk Weighted Assets (Basel III - fully loaded)	14.1%	a1	↔	a3	Nominal leverage	Expected trend	
Profitability							
Net Income / Tangible Assets	0.1%	b3	↔	ba3	Return on assets	Expected trend	
Combined Solvency Score		a2		baa3			
Liquidity							
Funding Structure							
Market Funds / Tangible Banking Assets	65.5%	caa1	↔	ba1	Term structure	Extent of market funding reliance	
Liquid Resources							
Liquid Banking Assets / Tangible Banking Assets	10.1%	ba1	↔	ba1	Asset encumbrance	Stock of liquid assets	
Combined Liquidity Score		b1		ba1			
Financial Profile				baa3			
Qualitative Adjustments				Adjustment			
Business Diversification				-1			
Opacity and Complexity				0			
Corporate Behavior				0			
Total Qualitative Adjustments				-1			
Sovereign or Affiliate constraint				Baa2			
BCA Scorecard-indicated Outcome - Range				baa3 - ba2			
Assigned BCA				ba1			
Affiliate Support notching				4			
Adjusted BCA				a3			

Balance Sheet is not applicable.

Debt Class	De Jure waterfall		De Facto waterfall		Notching		LGF	Assigned LGF	Additional Notching	Preliminary Rating Assessment
	Instrument volume + subordination	Sub-ordination	Instrument volume + subordination	Sub-ordination	De Jure	De Facto				
Counterparty Risk Rating	-	-	-	-	-	-	-	3	0	aa3
Counterparty Risk Assessment	-	-	-	-	-	-	-	3	0	aa3 (cr)
Deposits	-	-	-	-	-	-	-	3	0	aa3
Senior unsecured bank debt	-	-	-	-	-	-	-	3	0	aa3
Junior senior unsecured bank debt	-	-	-	-	-	-	-	0	0	a3

Instrument Class	Loss Given Failure notching	Additional notching	Preliminary Rating Assessment	Government Support notching	Local Currency Rating	Foreign Currency Rating
Counterparty Risk Rating	3	0	aa3	1	Aa2	Aa2
Counterparty Risk Assessment	3	0	aa3 (cr)	1	Aa2(cr)	
Deposits	3	0	aa3	1	Aa2	Aa2
Senior unsecured bank debt	3	0	aa3	1	Aa2	(P)Aa2

Junior senior unsecured bank debt 0 0 a3 0 A3 (P)A3

[1] Where dashes are shown for a particular factor (or sub-factor), the score is based on non-public information.

Source: Moody's Investors Service

Ratings

Exhibit 13

Category	Moody's Rating
DZ HYP AG	
Outlook	Stable
Counterparty Risk Rating	Aa2/P-1
Bank Deposits	Aa2/P-1
Baseline Credit Assessment	ba1
Adjusted Baseline Credit Assessment	a3
Counterparty Risk Assessment	Aa2(cr)/P-1(cr)
Issuer Rating	Aa2
Senior Unsecured -Dom Curr	Aa2
Junior Senior Unsecured -Dom Curr	A3
Junior Senior Unsecured MTN	(P)A3
ST Issuer Rating	P-1
PARENT: DZ BANK AG	
Outlook	Stable
Counterparty Risk Rating	Aa2/P-1
Bank Deposits	Aa2/P-1
Baseline Credit Assessment	baa2
Adjusted Baseline Credit Assessment	a3
Counterparty Risk Assessment	Aa2(cr)/P-1(cr)
Issuer Rating	Aa2
Senior Unsecured	Aa2
Junior Senior Unsecured	A3
Junior Senior Unsecured MTN -Dom Curr	(P)A3
Subordinate	Baa1
Commercial Paper	P-1
Other Short Term -Dom Curr	(P)P-1

Source: Moody's Investors Service

Endnotes

- The ratings shown are DZ BANK's deposit ratings, senior unsecured debt ratings and outlook, and BCA.
- Based on Article 303 of the German Stock Corporation Act (Aktiengesetz), unsecured creditors of DZ HYP can demand security from the owner for their existing claims, i.e. DZ BANK, in case the profit-and-loss transfer agreement is canceled.
- The ROA ratio compares net income to assets.
- Because of the profit and loss transfer agreement with DZ BANK, DZ HYP's reported net income in accordance with local GAAP accounting (HGB) is always zero. For our analysis, we consider the bank's net income before the earnings transfer due to this agreement and the allocation to funds for general banking risks, in accordance with §340g HGB.
- DZ HYP's net interest income benefitted from a €7.2 million contribution reflecting its drawings under the ECB's long-term refinancing operations, TLTRO III, compared with €26 million in 2021.
- At the end of 2022, DZ HYP had fully repaid its €3 billion participation in the ECB's TLTRO program.
- This ratio considers reported securitized liabilities and issued covered bonds which are reported as liabilities to customers.
- For a discussion of this requirement, please refer to [Germany: Legal framework for covered bonds](#), published in July 2021.

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