

# RatingsDirect<sup>®</sup>

# Deutsche Pfandbriefbank AG

#### **Primary Credit Analyst:**

Harm Semder, Frankfurt + 49 693 399 9158; harm.semder@spglobal.com

#### **Secondary Contact:**

Benjamin Heinrich, CFA, FRM, Frankfurt + 49 693 399 9167; benjamin.heinrich@spglobal.com

#### Table Of Contents

Ratings Score Snapshot

Credit Highlights

Outlook

**Key Metrics** 

Anchor: 'bbb+', Based On Blended Economic Risk For Main Geographies Of Operations, Including Germany And German Banking Industry Risk

Business Position: Business Model Concentrated On CRE

Capital And Earnings: Strong RAC Buffers Mitigate Concentration Risks In The Credit Portfolio.

Risk Position: Downside Risk From High Concentrations In Cyclical Sectors

Funding And Liquidity: Strong Reliance On Wholesale Funding But Stability From Covered Bonds Dominance

Support: Ratings Uplift Due To Strong Buffers Of Subordinated Capital For Bail-In Resolution

Environmental, Social, And Governance

# Table Of Contents (cont.)

Group Structure, Rated Subsidiaries, And Hybrids

Resolution Counterparty Ratings (RCRs)

**Key Statistics** 

Related Criteria

Related Research

# Deutsche Pfandbriefbank AG

# **Ratings Score Snapshot**

**Global Scale Ratings** 

**Issuer Credit Rating** 

BBB+/Stable/A-2

**Resolution Counterparty Rating** 

A-/--/A-2

SACP: bk	ob ———	<b></b>	Support: +1 —	<b></b>	Additional factors: 0
Anchor	bbb+		ALAC support	+1	Issuer credit rating
Business position	Constrained	-2	ALA O Support	.,	
Capital and earnings	Strong	+1	GRE support	0	BBB+/Stable/A-2
Risk position	Moderate	-1			Resolution counterparty rating
Funding	Adequate		Group support	0	Resolution counterparty rating
Liquidity	Adequate	0			A-/A-2
CRA adjustm	ent	+1	Sovereign support	0	A-1A-2

ALAC--Additional loss-absorbing capacity. CRA--Comparable ratings analysis. GRE--Government-related entity. ICR--Issuer credit rating. SACP--Stand-alone credit profile.

# **Credit Highlights**

Overview	
Key strengths	Key risks
Large buffers of additional loss absorbing capacity (ALAC) protect senior creditors in the event of a resolution.	Monoline business with concentration in CRE financing.
Strong risk-adjusted capital (RAC) buffers and relatively low average loan-to-value (LTV) ratio mitigate concentration risks in the credit portfolio.	Pressure on new business and revenue generation from rising rates and a highly competitive environment for prime or near-prime real estate assets.
Solid business franchise in commercial real estate (CRE), supported by geographical diversification.	Wholesale funding profile somewhat mitigated by high share of refinancing in much more stable covered bonds.

S&P Global Ratings expects that, if it failed, German midsize commercial real estate lender Deutsche Pfandbriefbank AG (pbb) would be subject to a resolution action that ensures full and timely payment to all senior preferred creditors. We think this scenario is more likely than liquidation and therefore include one notch for ALAC uplift above the 'bbb' stand-alone credit profile (SACP). In our view, the authorities' first choice would be to try and sell the entire business, with a second option to recapitalize the bank through a bail-in. We expect that pbb will maintain a sizable buffer of ALAC to S&P Global Ratings' risk-weighted assets (RWA) of 8%-10% by year-end 2024, compared with 11% on Dec. 31, 2021. In turn, we grant pbb only one ALAC notch, instead of the two notches typical for banks with ALAC ratios

comfortably above 6%. This considers pbb's nuanced case in terms of resolution measures to ensure continuity of its operations, and comes in light of its overall creditworthiness relative to higher-rated banks (see "Deutsche Pfandbriefbank 'BBB+/A-2' Ratings Affirmed On Confidence In Resolution Strategy, Capital Buffer; Outlook Stable, published Nov. 29, 2022, on RatingsDirect).

We continue to expect strong RAC buffers and manageable asset quality deterioration will support pbb's stand-alone creditworthiness during difficult times. We forecast pbb will maintain a strong RAC ratio of 12%-13% until 2024, after 12.6% at year-end 2021. This should help mitigate the concentration risks of an increasingly difficult CRE market amid secondary effects from the Russia-Ukraine war. Pretax returns on average common equity decreased to 6.3% on Sept. 30, 2022, from 7.5% at year-end 2021, according to the company. This is mainly because its wholesale business model structurally benefits less in the near term from the material interest rate increases in 2022 than larger, more diversified retail-deposit-driven universal banks. However, we note positively that new loan loss provisions to average customer loans improved to 13 basis points (bps) on Sept. 30, 2022, from 20 bps in 2021 and a 31-bps pandemic peak, substantiating our view of asset quality resilience based on pbb's sound risk management and solid, highly collateralized, and prudent underwriting. Moreover, we highlight that pbb has no direct exposure to Russia or Ukraine.

Single but meaningful defaults may still occur given pbb's relatively large-ticket CRE financings with sizeable existing office, retail, and hotel exposure. In our view, mid-term effects could arise from the office, retail, and hotel segments comprising about 65% of pbb's real estate finance portfolio. This is because some properties could become obsolete in their current shape, making any repositioning challenging despite the initial equity that could be potentially fully lost by investors otherwise. We project our nonperforming loans (NPLs) ratio for pbb will increase above 2% of total loans in 2022. We also expect some pressure on office properties, predominantly in secondary locations, with a likely increase in average vacancy rates weighing on market valuations. This comes on top of reduced debt-servicing capacity for some clients due to quickly rising interest rates.

#### Outlook

The stable outlook reflects our expectation that pbb will maintain solid going- and gone-concern capital buffers and resilient asset quality in the next two years, thereby weathering difficult markets. This is indicated, for example, by our forecast for pbb continuing to hold its RAC ratio well above our 10% threshold and its ALAC ratio above 6% of its S&P Global Ratings' RWAs. The outlook remains underpinned by ongoing sound underwriting standards but also our assumption of a meaningful portion of the exposure remaining within Germany.

#### Downside scenario

We could lower the ratings if we have to materially revise down our capital projection for pbb or anticipate far weaker loan portfolio quality. For example, high impairments indicating weaker-than-anticipated asset quality resilience compared with peers, or aggressive business growth, might bring the RAC ratio below the 10% threshold.

#### Upside scenario

We could upgrade pbb if it maintains its ALAC ratio well above 6% and we have greater certainty that resolution strategies for the bank, in case of failure, would support full and timely payment to senior preferred creditors under all foreseeable circumstances. This would lead us to add a second ALAC notch to the long-term issuer credit rating. An upward revision of the 'bbb' SACP (and so also the issuer credit rating) is unlikely in the current difficult operating environment. Over time, we could see improved intrinsic credit strength from a much-stronger RAC ratio projection of sustainably above 15%, and materially better profitability compared with higher-rated peers.

# **Key Metrics**

Deutsche Pfandbriefbank AGKey Ratios And Forecasts											
	Fiscal year ended Dec. 31										
(%)	2020a	2021a	2022f	2023f	2024f						
Growth in operating revenue	4.5	11.7	0.0-(17.9)	0.0-6.5	0.0-1.7						
Growth in customer loans	(2.2)	(1.3)	(0.5)-(0.6)	0.4-0.5	1.3-1.6						
Net interest income/average earning assets (NIM)	0.9	1.0	0.9-1.0	0.9-1.0	1.0-1.1						
Cost to income ratio	47.1	45.3	50.2-52.8	47.9-50.3	48.6-51.1						
Return on average common equity	3.9	7.5	4.9-5.4	5.2-5.7	5.3-5.9						
New loan loss provisions/average customer loans	0.3	0.2	0.1-0.1	0.1-0.2	0.1-0.1						
Gross nonperforming assets/customer loans	1.2	1.5	1.8-2.0	2.0-2.2	2.1-2.3						
Risk-adjusted capital ratio	11.8	12.6	12.4-13.0	12.5-13.2	12.7-13.4						
ALAC buffer	15.7	11.0	8.2-11.2	7.5-10.5	7.1-9.1						

All figures are S&P Global Ratings-adjusted. a--Actual. f--Forecast. ALAC--Additional loss-absorbing capacity.

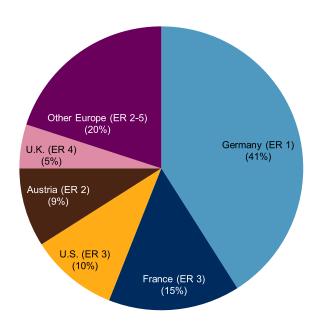
# Anchor: 'bbb+', Based On Blended Economic Risk For Main Geographies Of Operations, Including Germany And German Banking Industry Risk

Reflecting pbb's geographical diversification in its loan book, with about 55% of core lending activities in countries with a weaker economic assessment than Germany, our weighted-average economic risk score is somewhat below '2' (see chart 1). This is higher than the economic risk score of '1' for solely domestically focused German banks, but not to the extent that it could negatively affect the 'bbb+' anchor. The industry risk score of '4' is based solely on pbb's home market, Germany.

Our assessment of economic risk considers the strengths of Germany's highly diverse and competitive economy, with a demonstrated ability to absorb economic and financial shocks. We also consider as positive the government's track record of support to the domestic economy. However, we revised our view of the economic trend for Germany to negative because we see higher risks to the economic risk profile of the German banking sector due to the secondary effects of the Russia-Ukraine conflict as well as continued disruptions in the global supply chain (see "Geopolitical Risks Add Headwinds For German Banks, Despite Robust Capitalization," published July 19, 2022). Overall, we remain confident that German households, corporates, and public finances will remain sufficiently cushioned against the negative direct and indirect effects from the Russia-Ukraine war. If we revise down our economic risk assessment for Germany to '2' from '1', this would not automatically result in a change to the 'bbb+' anchor for banks mainly operating in Germany, including pbb.

Our assessment of industry risk considers the banking sector's longer-term profitability challenges due to poor cost efficiency, persistent risks from technology disruption, and a still not overall supportive interest rate and inflationary environment. We believe that German banks operate in a highly competitive and structurally overbanked market with relatively low gross margins through the cycle compared to many other banking sectors.

Chart 1 We Expect 40%-50% Of pbb's Lending To Remain In Germany pbb's loan portfolio by country as of Sept. 30, 2022

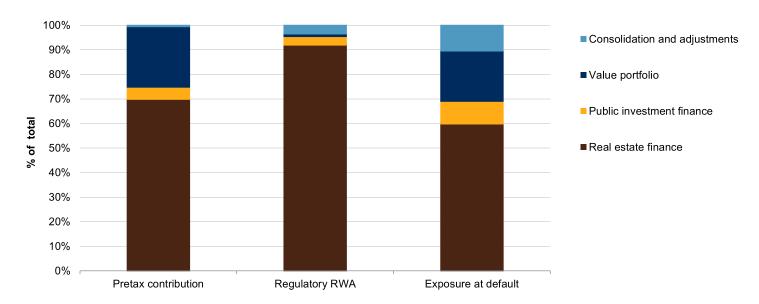


ER--Economic Risk. Source: S&P Global Ratings. Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

#### **Business Position: Business Model Concentrated On CRE**

We anticipate pbb's concentrated wholesale-oriented business profile will remain its main rating weakness. The bank's portfolio is internationally diversified, but largely opportunistic, and not clearly linked to a particular client franchise or competitive advantage. CRE finance is a core earnings contributor but cyclical, accounting for about 66% of financing volume at Sept. 30, 2022. It mainly includes financing real estate transactions for office, residential, logistics properties, retail including shopping centers, and hotels. The bank's public investment finance (11%) business covers public-sector investment, predominantly in infrastructure projects, which adds some risk diversification but only contributes marginally in terms of profitability. The nonstrategic portfolio accounts for 23% of financing volume, mainly covering too-low-yielding budget financing such as investments in government bonds and remains in a passive run-off mode having comprised 49% of volume at year-end 2013. We anticipate pbb will see increasing headwinds in new business generation due to weak customer sentiment in a rising rate environment, while it has announced plans not to further expand its low-yielding public investment finance operations (see chart 2.)

Chart 2 Real Estate Finance Generates Most Earnings And Regulatory RWAs Despite A **More Diversified Exposure Split** Data as of Sept. 30, 2022

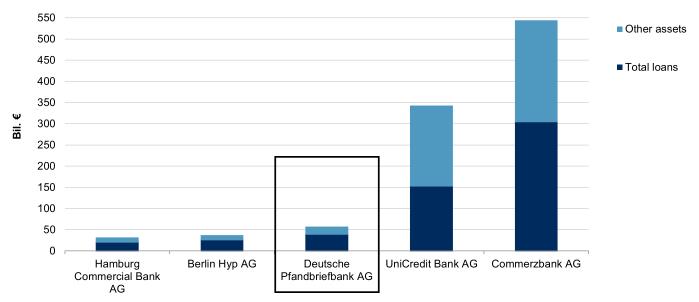


RWA--Risk-weighted assets. Source: S&P Global Ratings.

Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

pbb's narrow mix of business lines and revenue is mediocre versus that of many peers. Most peers, such as Commerzbank AG, or Erste Group Bank AG, have a more broader business model with a better diversified and less cyclical business mix and a material higher retail share, which we generally consider positive for earnings stability (see chart 3).

Chart 3 pbb Remains A Midsize Bank Among Its Peers As of Sept. 30, 2022

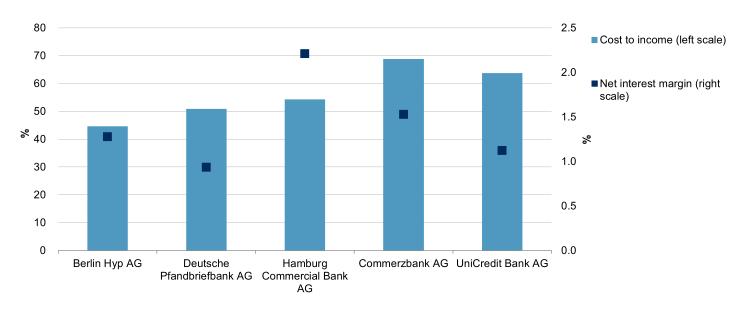


Source: S&P Global Ratings, based on company disclosures.

Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

Similarly, we expect pbb's risk-adjusted profitability to remain mediocre as indicated by a reported about 6% average return on equity over the past five years, barely earning its cost of capital compared to higher-rated peers. Due to its wholesale lending and funding model we forecast that pbb's net interest income will benefit less and later from this year's material increases in market interest rates when compared to retail and deposit-driven banks. It also reflects that pbb's high one-time early repayment fees fade amid increasing interest rates, and that temporary benefits from the European Central Bank (ECB)'s attractive targeted long-term refinancing operations (TLTRO) funding are expiring. pbb's cost control and efficient business model are positive, in our view, indicated by a 51% cost-to-income ratio by Sept. 30, 2022 (see chart 4).

Chart 4 High Operating Efficiency Despite One Of The Lowest Net Interest Margins Among Peers Cost to income and net interest margin as of Sept. 30, 2022



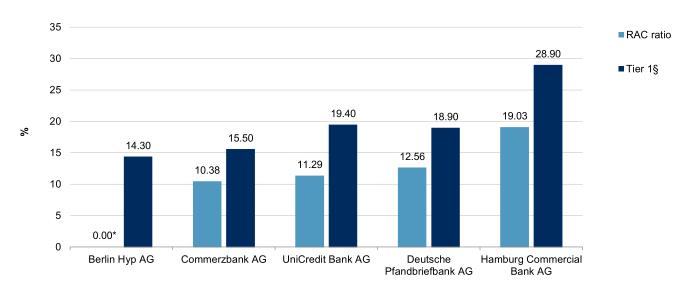
Note: Net interest income to average earning assets. Source: S&P Global Ratings. Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

### Capital And Earnings: Strong RAC Buffers Mitigate Concentration Risks In The Credit Portfolio.

We expect that pbb's capitalization will remain its key rating strength. This is indicated by our forecast that the bank's RAC ratio will remain about stable at 12%-13% over the next two years, compared with 12.6% at year-end 2021. We anticipate cost of risk increases of toward 15 bps annually in the next 12-24 months combined with muted--if any--loan growth due to difficult markets. Similarly, we project increased recognition of NPLs and higher regulatory charges on market and counterparty risks, driving our RWA metric. In our opinion, the further wind-down of the nonstrategic portfolio will not compensate for those effects since we consider this business less risky and capital consuming. We expect that the bank will payout 50%-75% of net income after coupon payments on additional Tier 1 (AT1) issuances over the next two years. pbb's regulatory Tier-1 capital ratio was comfortable at 18.1% on Sept. 30, 2022, down from 18.9% at year-end 2021.

The quality of pbb's capital and earnings, as well as its earnings capacity, remain relative weaknesses, in our view. Like many largely wholesale-funded peers, the bank's funding costs are materially sensitive to market perception, which, amid high concentration risks in cyclical sectors, weighs on our assessment of pbb's earnings.

Chart 5 We Expect pbb's Capitalization To Remain On The Higher End Versus That Of Most Peers S&P Global Ratings' RAC versus Tier 1 ratios at Dec. 31, 2021



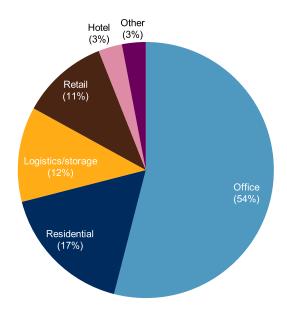
RAC--Risk-adjusted capital. \*S&P Global Ratings does not calculate a RAC Ratio for Berlin Hyp AG separately. Source: S&P Global Ratings.

Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

# Risk Position: Downside Risk From High Concentrations In Cyclical Sectors

pbb's business model will remain structurally exposed to high sector and single-name concentrations in its credit portfolio. Moreover, the historically high cyclicality of CRE markets and concentrations in the real estate lending portfolio represent material tail risk to the bank's capital and earnings buffer. Similarly, downside risk from the global geopolitical situation, and particularly secondary effects from the Russia-Ukraine war, are unfolding in Europe, where 90% of pbb's loan portfolio is located. Heightened short- and medium-term risks include pbb's exposure to hotels and retail, especially shopping malls (see chart 6).

Chart 6 Almost 14% Of PBB's CRE Loan Book Remains Exposed To Retail And Hotels PBB's real estate finance lending by property type as of Sept. 30, 2022



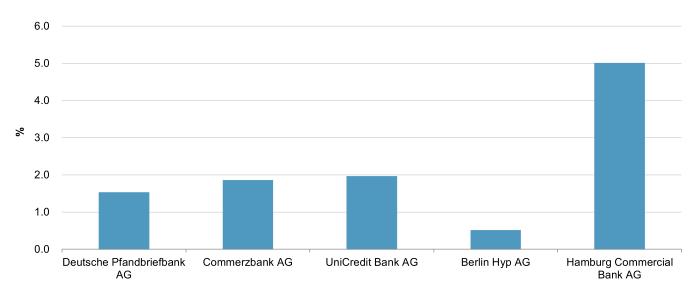
Source: S&P Global Ratings.

Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

Our assessment also reflects that some of pbb's peers, such as Cooperative Banking Sector Germany, have a high share of generally less risky retail mortgages, or diversification with other business that contribute to spread of risk. We also see further potential for tail risks due to low risk weights for pbb's still-sizeable public finance book and similarly a credit spread risk in the future.

We view positively pbb's asset quality metrics, having demonstrated fair resilience against difficult markets through the pandemic and since the Russia-Ukraine war started. This is indicated, for example, by 13 bps of new loan loss provisions by Sept 30, 2022, down from a 31 bps COVID-19 peak in 2020, or the manageable 1.5% nonperforming assets to customer loans, up from 1.2% in 2020 (see chart 7). We believe pbb benefits from its focus on business eligible to back covered bond issuance in selected European markets and the U.S. We also anticipate pbb's ongoing sound risk management and underwriting standards, such as high collateralization with a 51% average LTV ratio, sound interest service coverage and buffers, and property type sub-diversification. This should provide a sufficient buffer against pressure on debt-servicing capacity for its CRE customers from rising rates.

Chart 7 pbb Has A relatively Low NPL Ratio, Partially Diluted By Low-Risk, Non-CRE, Nonstrategic Portfolios Nonperforming assets\* (%) as of Sept. 30, 2022



<sup>\*</sup>Adjusted nonperforming assets/customer loans plus other real estate owned. Source: S&P Global Ratings. Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

### Funding And Liquidity: Strong Reliance On Wholesale Funding But Stability From Covered Bonds Dominance

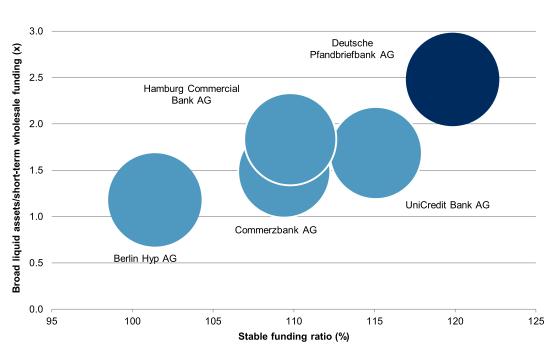
We anticipate pbb's funding and liquidity profile remains sound and a neutral rating factor. We expect that pbb will continue to balance heightened investor confidence risks, in terms of cost and access, from its heavy wholesale funding structure. We consider the bank's good track record from sound funding and liquidity management including underlying solid metrics, its well-established broad wholesale funding franchise, and focus on covered bonds (Pfandbriefe) markets that have demonstrated remarkable stability through market crises. The bank remains one of the largest covered bond issuers in Germany, with public-sector covered bonds forming about 16% of the funding base and mortgage covered bonds 29% on Sept. 30, 2022. The rest of the funding mainly includes customer deposits and long-term debt. pbb markedly increased its direct (term) retail deposits to 6.9% (€3.6 billion) by Sept. 30, 2022, which is currently cheaper than wholesale refinancing costs but adds limited stability, due its lack of a broad retail franchise.

pbb has a comfortable 120% stable funding ratio, indicating appropriate matching of assets and liabilities, and 2.5x liquidity ratio, indicating coverage of short-term wholesale funding by broad liquid assets (see chart 8). These ratios underline pbb's healthy balance sheet structure and we also highlight our view of its adequate liquidity stress testing capabilities. We believe the bank could operate for more than six months without access to market funding in an

adverse scenario.

pbb's funding replacement for the ECB's TLTRO III program is a profitability but not refinancing issue. The bank took opportunistic advantage of TLTRO, taking on up to €8.4 billion of funding to earn out favorable pricing conditions until mid-year 2022, but we consider replacing this not an issue.

Chart 8 We Expect pbb's Key Liquidity And Funding Metrics To Remain Sound In Line With Those Of Its Main Peers Funding and liquidity profile as of Dec. 31, 2021



Source: S&P Global Ratings.

Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

# Support: Ratings Uplift Due To Strong Buffers Of Subordinated Capital For **Bail-In Resolution**

We do not consider any government support in our ratings on pbb. Since 2015, we have regarded the prospect of extraordinary government support for any commercial German bank as uncertain in view of the well-advanced and effective resolution regime, which operates within the EU institutional and legislative frameworks. Accordingly, we also do not give pbb uplift for potential extraordinary government support despite our belief that the bank is moderately systemically important to Germany when considering, for example, its relevance for the German covered bond market.

The one notch of ALAC uplift reflects our expectation that, if it failed, pbb, would be subject to a resolution action that ensures full and timely payment to all senior preferred creditors. We think this scenario is most likely rather than liquidation and assume that the authorities' first choice would be to try and sell the entire business, with recapitalizing the bank through a bail-in the second option. We expect that pbb will maintain a sizable buffer of ALAC to S&P Global Ratings' RWA of 8%-10% by year-end 2024, compared with 11% on Dec. 31, 2021. This is supported by pbb's intention to maintain a bail-in buffer of at least 8% of total liabilities and own funds, in line with its binding regulatory minimum requirement for own funds and eligible liabilities (MREL). It must meet its MREL using only subordinated instruments, which is not the case across the whole European banking sector.

We see some potential to include a second ALAC notch in the issuer credit rating, but not in the near term. We grant pbb only one ALAC notch, instead of the two notches typical for banks with ALAC ratios comfortably above 6%. Although we are now more confident that a sale of business transaction (that is, a share transfer) could, in principle, lead to the continued full and timely payment of senior preferred liabilities, we consider pbb a nuanced case in terms of resolution measures to ensure continuity of its operations, and in light of its overall creditworthiness relative to higher-rated banks. Notably, we take into account the Single Resolution Board (SRB)'s more volatile opinions toward pbb's resolution plan in the past, and that its ultimate decision at the point of nonviability may prove to be borderline about the orderly resolution or liquidation of the bank, pbb's business is concentrated in CRE financing and the predominance of wholesale funding means that it has a small presence in the deposit market that regulators find sensitive from a financial stability standpoint. We also note that even without the use of resolution tools, the German Pfandbrief Act provides strong protection to covered bond investors, comprising 50%-60% of pbb's funding base. The highly cyclical nature of the CRE asset class and associated high regulatory capital requirements may additionally hamper the SRB's ability to quickly sell pbb on acceptable terms.

# **Environmental, Social, And Governance**

#### **ESG Credit Indicators**



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 Indicators: Definition And Applications, published Oct. 13, 2021.

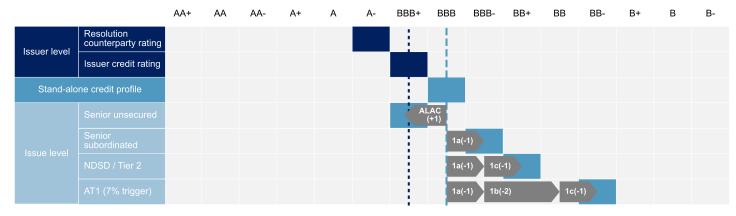
Overall, we believe that ESG factors for pbb are broadly in line with its industry and domestic peers. We note that the bank has developed green concepts for its own funding instruments and a green lending framework in relation to properties with high environmental standards. We believe that the environmental specifications of buildings have become increasingly important to investors or property tenants. Therefore, reflecting these factors should help to defend rent levels and the market value of properties in the longer term.

# Group Structure, Rated Subsidiaries, And Hybrids

We notch down our ratings on regulatory capital instruments and senior nonpreferred debt from pbb's 'bbb' SACP (see chart 9).

Chart 9

#### Deutsche Pfandbriefbank AG: Notching



#### Key to notching

---- Stand-alone credit profile

Issuer credit rating

ALAC Additional loss-absorbing capacity buffer

1a Contractual subordination

1b Discretionary or mandatory nonpayment clause and whether the regulator classifies it as regulatory capital

1c Mandatory contingent capital clause or equivalent

Note: The number-letter labels in the table above are in reference to the notching steps we apply to hybrid capital instruments, as detailed in table 2 of our "Hybrid Capital: Methodology And Assumptions" criteria, published on March 2, 2022.

AT1--Additional Tier 1. NDSD--Non-deferrable subordinated debt.

Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

# Resolution Counterparty Ratings (RCRs)

The 'A-/A-2' long- and short-term RCRs on pbb consider our forward-looking opinion that certain senior liabilities are explicitly protected from default through an effective bail-in resolution process for the issuing financial institution.

# **Key Statistics**

Table 1

Deutsche Pfandbriefbank AGKey Figures										
		Year-ended Dec. 31								
(Mil. €)	YTD Sept2022	2021	2020	2019	2018	2017				
Adjusted assets	55,828.0	58,360.0	58,841.0	56,783.0	57,732.0	57,958.0				

Table 1

Deutsche Pfandbriefbank AGKey Figures (cont.)											
		Year-ended Dec. 31									
(Mil. €)	YTD Sept2022	2021	2020	2019	2018	2017					
Customer loans (gross)	38,981.0	39,710.0	40,219.0	41,128.0	41,236.0	40,980.0					
Adjusted common equity	3,103.0	2,910.0	2,863.0	2,834.8	2,706.9	2,646.1					
Operating revenues	400.0	591.0	529.0	506.0	471.0	462.0					
Noninterest expenses	203.0	268.0	249.0	244.0	221.0	274.0					
Core earnings	135.0	228.0	117.0	176.5	198.5	163.2					

YTD--Year till date.

Table 2

Deutsche Pfandbriefbank AGBusiness Position								
	Year-ended Dec. 31							
(Mil. €)	YTD Sept2022	2021	2020	2019	2018	2017		
Total revenues from business line (currency in millions)	400.0	591.0	529.0	509.0	471.0	495.0		
Return on average common equity (%)	5.8	7.5	3.9	6.1	6.2	6.4		

YTD--Year till date.

Table 3

Deutsche Pfandbriefbank AGCapital And Earnings								
	Year-ended Dec. 31							
(%)	YTD Sept2022	2021	2020	2019	2018	2017		
Tier 1 capital ratio	18.1	18.9	17.8	16.9	20.5	17.6		
S&P Global Ratings' RAC ratio before diversification	N/A	12.6	11.8	12.3	11.3	10.1		
S&P Global Ratings' RAC ratio after diversification	N/A	11.3	10.7	10.7	10.1	8.8		
Adjusted common equity/total adjusted capital	91.2	90.7	90.6	90.5	90.1	100.0		
Net interest income/operating revenues	89.5	83.6	90.5	90.5	95.5	94.2		
Fee income/operating revenues	1.0	1.4	1.1	1.2	1.3	1.7		
Market-sensitive income/operating revenues	9.5	15.4	4.2	7.7	4.2	(2.2)		
Cost to income ratio	50.8	45.3	47.1	48.2	46.9	59.3		
Preprovision operating income/average assets	0.5	0.6	0.5	0.5	0.4	0.3		
Core earnings/average managed assets	0.3	0.4	0.2	0.3	0.3	0.3		

 $\ensuremath{\text{N/A--Not}}$  applicable. RAC--Risk-adjusted capital. YTD--Year till date.

Table 4

Deutsche Pfandbriefbank AGRisk-Adjusted Capital Framework Data										
(Mil. €)	Exposure*	Basel III RWA	Average Basel III RW(%)	S&P Global Ratings RWA	Average S&P Global Ratings RW (%)					
Credit risk										
Government and central banks	25926.6	698.7	2.7	1465.3	5.7					
Of which regional governments and local authorities	6428.7	533.1	8.3	442.5	6.9					
Institutions and CCPs	1558.4	275.6	17.7	406.2	26.1					

Table 4

Deutsche Pfandbriefbank AGRisk	-		• • • • • • • • • • • • • • • • • • • •		
Corporate	29478.4	13906.5	47.2	21434.7	72.
Retail	0.1	0.0	57.4	0.0	27.0
Of which mortgage	0.1	0.0	57.4	0.0	27.0
Securitization	0.0	0.0	0.0	0.0	0.0
Other assets	725.0	409.2	56.4	1165.9	160.8
Total credit risk	57688.5	15290.1	26.5	24472.1	42.
Credit valuation adjustment					
Total credit valuation adjustment		205.5		0.0	-
Market risk					
Equity in the banking book	3.1	38.4	1245.2	0.2	7.8
Trading book market risk		59.0		88.4	-
Total market risk		97.3		88.7	-
Operational risk					
Total operational risk		921.9		972.0	-
	Exposure	Basel III RWA	Average Basel II RW (%)	S&P Global Ratings RWA	% of S&P Globa Ratings RW
Diversification adjustments					
RWA before diversification		16792.0		25532.8	100.0
Total diversification/concentration adjustments				2917.5	11.
RWA after diversification		16792.0		28450.3	111.
		Tier 1 capital	Tier 1 ratio (%)	Total adjusted capital	S&P Globa Ratings RAC ratio
Capital ratio					
Capital ratio before adjustments		3,173	18.9	3208.0	12.0
Capital ratio after adjustments (5)		3,173	18.9	3208.0	11.

 $<sup>\</sup>star$ Exposure at default. Securitization exposure includes the securitization tranches deducted from capital in the regulatory framework. Exposure and S&P Global Ratings' risk-weighted assets for equity in the banking book include minority equity holdings in financial institutions.

Adjustments to tier 1 ratio are additional regulatory requirements (e.g. transitional floor or pillar 2 add-ons). RWA--Risk-weighted assets.

RW--Risk weight. CCP--Central counterparty. RAC--Risk-adjusted capital. €--Euro. Sources: Company data as of Dec 31, 2021, S&P Global Ratings.

Table 5

Deutsche Pfandbriefbank AGRisk Position						
	Year-ended Dec. 31					
(%)	YTD Sept2022	2021	2020	2019	2018	2017
Growth in customer loans	(2.4)	(1.3)	(2.2)	(0.3)	0.6	(2.3)
Total diversification adjustment/S&P Global Ratings' RWA before diversification	N/A	11.4	11.0	14.5	12.5	14.3
Total managed assets/adjusted common equity (x)	18.0	20.1	20.6	20.0	21.3	21.9
New loan loss provisions/average customer loans	0.1	0.2	0.3	0.1	0.0	0.0
Net charge-offs/average customer loans	N.M.	0.0	(0.0)	(0.0)	(0.0)	0.2
Gross nonperforming assets/customer loans + other real estate owned	1.5	1.5	1.2	1.2	8.0	0.6

Table 5

Deutsche Pfandbriefbank AGRisk Position (cont.)						
	Year-ended Dec. 31					
(%)	YTD Sept2022	2021	2020	2019	2018	2017
Loan loss reserves/gross nonperforming assets	60.9	58.6	51.5	24.3	30.7	28.6

 $N.M.\hbox{--Not meaningful. N/A--Not applicable. RWA--Risk-weighted assets.}$ 

Table 6

	Year-ended Dec. 31							
(%)	YTD Sept2022	2021	2020	2019	2018	2017		
Core deposits/funding base	12.9	11.9	12.9	13.9	15.2	16.3		
Customer loans (net)/customer deposits	592.0	629.1	590.1	591.5	532.1	494.4		
Long-term funding ratio	73.9	88.9	90.9	86.6	85.1	89.7		
Stable funding ratio	92.1	119.8	119.9	105.7	104.7	103.4		
Short-term wholesale funding/funding base	27.9	11.8	9.6	14.3	15.8	10.8		
Broad liquid assets/short-term wholesale funding (x)	0.9	2.5	2.8	1.5	1.4	1.5		
Net broad liquid assets/short-term customer deposits	(47.2)	232.1	255.8	106.5	80.1	72.1		
Short-term wholesale funding/total wholesale funding	31.8	13.3	11.0	16.5	18.5	12.9		
Narrow liquid assets/3-month wholesale funding (x)	4.4	4.6	7.2	3.0	4.0	2.3		

YTD--Year till date.

Deutsche Pfandbriefbank AGRating Component Scores		
Issuer Credit Rating	BBB+/Stable/A-2	
SACP	bbb	
Anchor	bbb+	
Economic risk	1	
Industry risk	4	
Business position	Constrained	
Capital and earnings	Strong	
Risk position	Moderate	
Funding	Adequate	
Liquidity	Adequate	
Comparable ratings analysis	+1	
Support	+1	
ALAC support	+1	
GRE support	0	
Group support	0	
Sovereign support	0	
Additional factors	0	

 $ALAC\text{--}Additional \ loss-absorbing \ capacity. \ GRE\text{--}Government-related \ entity. \ SACP\text{--}Stand-alone \ credit \ profile.$ 

#### **Related Criteria**

- General Criteria: Hybrid Capital: Methodology And Assumptions, March 2, 2022
- Criteria | Financial Institutions | General: Financial Institutions Rating Methodology, Dec. 9, 2021
- · Criteria | Financial Institutions | Banks: Banking Industry Country Risk Assessment Methodology And Assumptions, Dec. 9, 2021
- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021
- General Criteria: Group Rating Methodology, July 1, 2019
- Criteria | Financial Institutions | General: Risk-Adjusted Capital Framework Methodology, July 20, 2017
- · General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011

#### Related Research

- Deutsche Pfandbriefbank 'BBB+/A-2' Ratings Affirmed On Confidence In Resolution Strategy, Capital Buffer; Outlook Stable, Nov. 29, 2022
- Geopolitical Risks Add Headwinds For German Banks, Despite Robust Capitalization, July 19, 2022

Ratings Detail (As Of December 16, 2022)*		
Deutsche Pfandbriefbank AG		
Issuer Credit Rating	BBB+/Stable/A-2	
Resolution Counterparty Rating	A-//A-2	
Commercial Paper		
Local Currency	A-2	
Junior Subordinated	BB-	
Senior Subordinated	BBB-	
Senior Unsecured	BBB+	
Subordinated	BB+	
Issuer Credit Ratings History		
18-Mar-2022	BBB+/Stable/A-2	
24-Jun-2021	BBB+/Negative/A-2	
15-Dec-2020	A-/Negative/A-2	
15-Sep-2020	A-/Watch Neg/A-2	
Sovereign Rating		
Germany	AAA/Stable/A-1+	

<sup>\*</sup>Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings' credit ratings on the global scale are comparable across countries. S&P Global Ratings' credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.

Copyright © 2022 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.