

SECTOR IN-DEPTH

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German banks

Key Analytic Considerations in Our Rating Actions on German Banks

Summary

This report summarises the key analytical considerations that drove our review conclusions for 29 rated German banks,¹ following the implementation of our new bank rating methodology. The review resulted in rating actions as summarised in Exhibit 1 on page 2 and detailed in the accompanying press releases from 19 June 2015. Our analysis of the German banks focused on three central components of the bank rating methodology:

Baseline credit assessment (BCA). Our refined approach to assessing banks' intrinsic standalone credit strength under the new methodology includes (1) a Macro Profile² to better assess the effects that the geographic spread of a bank's businesses has on its credit fundamentals, and (2) more predictive financial factors focused on the key drivers of an institution's solvency and liquidity. The framework for arriving at a BCA also includes explicit qualitative adjustments to reflect bank-specific characteristics beyond its solvency and liquidity.

We upgraded the BCAs of seven German banks and downgraded the BCA of one bank, the remaining 21 banks' BCAs are unchanged. The upgrade of the BCAs was driven by improved asset quality and capitalisation, as well as stronger ring-fencing potential for financially sound subsidiaries within cross-border groups, allowing for higher notching compared to their financially weaker parent. The downgrade of the BCA reflects weakening financials. The average BCA for the German banks is ba1, reflecting their (1) average Macro Profile of "Strong +"; (2) an average combined Solvency score of ba1 and average combined Liquidity score of baa2, resulting in an average Financial Profile of baa3; and (3) Qualitative Adjustments for close to one third of the banks, mostly because of limited business diversification.

Advanced Loss Given Failure (LGF) analysis. Under the new methodology, we distinguish the relative loss severity of individual creditor classes for banks subject to operational resolution regimes, for which specific legislation provides a reasonable degree of clarity on how a bank's failure could affect depositors and other creditors through the write-down or conversion of capital instruments, or the bail-in of debt. Since German banks are subject to an operational resolution regime under the European Union's (EU) Bank Recovery and Resolution Directive (BRRD), we apply an Advanced LGF approach, under which ratings are a function of jurisdiction-specific creditor hierarchies, firm-wide loss rates and a given bank's liability structure. The impact of this LGF analysis on German banks' ratings ranges from zero to plus-three notches for senior unsecured bank debt and deposits, with an average of plus-two.

Government support. In line with the implementation of bank resolution legislation that aims to shift the costs of bank failure to shareholders and creditors, we have either eliminated or lowered our assumptions on the probability of government support for the banks based in the EU. The uplift for ratings on German banks' senior unsecured debt and deposits owing to government support is one notch on average.

Exhibit 1

Overview of Changes in German Banks' Ratings And Assessments

	apoBank		BayernLB		Berlin Hyp		BKM		BremerLB		Commerzbank	
Lead Operating Bank	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO
BCA	baa2	baa1	ba2	ba2	ba2	ba2	baa1	baa2	b1	b1	ba1	ba1
Adjusted BCA	a2	a2	baa3	baa3	baa3	baa2	baa1	baa2	ba2	ba2	ba1	ba1
CR Assessment LT	NA	Aa1(cr)	NA	A2(cr)	NA	A1(cr)	NA	A2(cr)	NA	Baa1(cr)	NA	A3(cr)
Deposits LT	A1	Aa2	A3	A3	A2	A2	Baa1	A3	Baa2	Baa2	Baa1	Baa1
Senior Unsecured / Issuer	A1	Aa3	A3	A3	A2	A2	-	-	Baa2	Baa2	Baa1	Baa1
Subordinated	A3	A3	Ba1	Ba1	(P)Ba1	(P)Baa3	-	-	(P)Ba3	(P)Ba3	Ba2	Ba2
	Debeka		DekaBank		Deutsche Hypo		DVB		DZ BANK		Helaba	
Lead Operating Bank	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO
BCA	baa1	baa1	baa2	baa2	b1	b1	ba3	ba3	baa2	baa2	baa3	baa3
Adjusted BCA	baa1	baa1	a3	a3	baa3	baa3	baa1	baa3	a3	a2	baa1	baa1
CR Assessment LT	NA	A1(cr)	NA	Aa2(cr)	NA	A2(cr)	NA	A2(cr)	NA	Aa1(cr)	NA	Aa3(cr)
Deposits LT	Baa1	Baa1	A1	Aa3	Baa1	A3	Baa1	A3	A1	Aa2	A2	A1
Senior Unsecured / Issuer	-	-	A1	Aa3	Baa1	A3	Baa1	A3	A1	Aa2	A2	A1
Subordinated	-	-	(P)Baa1	(P)Baa1	Ba1	Ba1	Baa2	Ba1	Baa1	A3	Baa2	Baa2
	HF		HSH		ING DiBa		IPEX-Bank		KSKK		LBB	
Lead Operating Bank	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO
BCA	caa2	ba1	caa2	b3	a3	a2	baa3	baa3	baa1	baa1	ba1	ba1
Adjusted BCA	ba2	ba1	b3	b1	a3	a2	aa3	baa3	a2	a2	baa2	baa1
CR Assessment LT	NA	A3(cr)	NA	Baa3(cr)	NA	Aa3(cr)	NA	A2(cr)	NA	Aa1(cr)	NA	Aa3(cr)
Deposits LT	Baa3	Baa1	Baa3	Baa3	A2	A2	Aa3	A2	Aa3	A1	A1	A1
Senior Unsecured / Issuer	Baa3	Baa1	Baa3	Baa3	-	-	-	-	Aa3	A1	A1	A1
Subordinated	B1	Ba2	Caa1	B1	-	-	-	-	-	-	Baa3	Baa2
	LBBW		Muenchener Hyp		NORD/LB		pbb		Postbank		SaarLB	
Lead Operating Bank	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO
BCA	baa3	baa3	ba2	ba2	ba2	ba2	b2	ba3	ba1	ba1	ba2	ba2
Adjusted BCA	baa1	baa1	baa1	baa1	baa3	baa3	b2	ba3	baa3	baa3	baa3	baa3
CR Assessment LT	NA	Aa3(cr)	NA	Aa3(cr)	NA	A2(cr)	NA	Baa3(cr)	NA	A2(cr)	NA	A2(cr)
Deposits LT	A2	A1	A2	A2	A3	A3	Baa2	Ba1	A3	A3	A3	A3
Senior Unsecured / Issuer	A2	A1	A2	A2	A3	A3	Baa2	Ba1	A3	A3	-	-
Subordinated	Baa2	Baa2	-	-	Ba1	Ba1	B3	B1	Ba1	Ba1	-	-
	S-Finanzgruppe		SKKB		UCB		VW Bank		WGZ Bank			
Lead Operating Bank	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO		
BCA	a2	a2	ba3	ba2	baa3	baa2	baa2	baa2	baa2	baa2		
Adjusted BCA	a2	a2	baa3	baa1	baa3	baa2	a2	a2	a3	a2		
CR Assessment LT	-	-	NA	Aa3(cr)	NA	A1(cr)	NA	Aa2(cr)	NA	Aa1(cr)		
Deposits LT	-	-	A1	A1	Baa1	A2	A2	Aa3	A1	Aa2		
Senior Unsecured / Issuer	Aa2	Aa2	A1	A1	Baa1	A3	A2	Aa3	A1	Aa2		
Subordinated	-	-	Ba1	Baa2	(P)Ba1	(P)Baa3	A3	A3	-	-		

Note: Cells in green refer to rating upgrades, cells in red to rating downgrades.

Source: Moody's Investors Service

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

Outlooks reflect proposed change in insolvency hierarchy. On 30 April, the German Ministry of Finance proposed an amendment to the German Banking Act that would change the hierarchy of claims in an insolvency. The proposal, which is designed to simplify bail-in procedures during the recovery or resolution of a distressed bank by establishing a clearer separation between a bank's senior unsecured bonds and other debt instruments, introduces de facto (full) depositor preference. We have incorporated the potential implications from this draft law into our rating outlooks. While 20 bank deposit ratings carry a positive outlook, 16 senior unsecured debt ratings carry a negative outlook (see Exhibit 2).

By introducing a de facto depositor preference, depositors would - in insolvency as well as in bail-in - benefit from the subordination of senior unsecured debt instruments, reducing further the loss-given-failure expectations for deposits. In contrast, the subordination of senior unsecured debt instruments would increase the loss-given-failure expectations for senior debt instruments, offering lower protection for senior bondholders.

Exhibit 2

Senior Unsecured Debt and Deposit Rating Outlooks

OUTLOOK	Deposit Ratings			Senior Unsecured Debt Ratings		
	Private bank sector	Co-operative bank sector	Savings bank sector	Private bank sector	Co-operative bank sector	Savings bank sector
POSITIVE	BKM	apoBank	BayernLB			
	Commerzbank	DZ Bank	Berlin Hyp			
	HF	DVB	BremerLB			
	pbb	Muenchener Hyp	DekaBank			
	UCB	WGZ	Helaba			
	VW Bank		LBB			
			LBBW			
			SaarLB			
			SKKB			
STABLE	ING-DiBa		NORD/LB	Commerzbank		BremerLB
	IPEX-Bank		Deutsche Hypo	HF		Helaba
			KSKK	pbb		Muenchener Hyp
			VW Bank		S-Finanzgruppe*	
NEGATIVE	Debeka		HSH	Postbank	apoBank	BayernLB
	Postbank			UCB	DZ BANK	Berlin Hyp
					DVB	DekaBank
					WGZ	Deutsche Hypo
						HSH
						KSKK
						LBB
						LBBW
						NORD/LB
						SKKB

Note: *Corporate family rating

Source: Moody's Investors Service

Baseline credit assessment

Our analysis of a bank begins with an assessment of its intrinsic credit strength, as represented by the BCA, which considers the bank's operating environment and its financial performance to capture its standalone probability of failure. In the new bank rating methodology, the BCA consists of three sub-components:

- » **Macro Profile** (on a scale of "Very Strong+" to "Very Weak-") integrates system-level factors such as economic and institutional strength, event risk, credit and funding conditions, and industry structure into the analysis
- » **Financial Profile** focuses on five solvency- and liquidity-related financial ratios that are predictive of bank credit strength.
- » **Qualitative Adjustments** reflect additional bank-specific factors that are less readily attributed to solvency or liquidity-related drivers but still contribute to the soundness of an institution.

Exhibit 3

Components of the BCA Analysis of German Banks

	Assigned BCA		Weighted Macro Profile		SOLVENCY FACTORS						LIQUIDITY FACTORS				QUALITATIVE ADJUSTMENTS		
					Asset Risk		Capital		Profitability		Funding Structure		Liquid Resources				
					Problem Loans %	Gross Loans	Assigned Score	TCE % RWA	Assigned Score	Net Income % Tangible Assets	Assigned Score	Market Funds % Tangible Assets	Assigned Score	Banking Assets	Liquid Assets % Tangible Assets	Assigned Score	Opacity and Complexity
Institutions in the private banks sector (commercial sector)																	
ING DiBa	a2	Very Strong -	1.1%	a2	18.3%	aa3	0.4%	baa3	9.0%	aa2	32.2%	a2	0	0	0		
Debeka	baa1	Very Strong -	0.5%	a1	12.0%	a2	0.0%	caa1	11.0%	aa3	11.5%	baa3	0	-1	0		
BKM	baa2	Strong +	2.1%	a3	11.6%	baa1	0.1%	caa1	20.1%	a3	24.8%	baa1	0	-1	0		
VW Bank	baa2	Strong +	3.8%	a3	13.0%	a3	0.7%	baa2	28.0%	baa1	8.5%	b1	0	-1	0		
UCB	baa2	Strong +	6.0%	ba3	23.3%	aa1	0.4%	ba3	43.7%	ba2	51.9%	a1	0	0	0		
IPEX-Bank	baa3	Strong	6.9%	b1	15.3%	baa3	0.3%	ba3	78.5%	a3	8.2%	a1	0	0	0		
Commerzbank	ba1	Strong +	6.1%	baa3	10.7%	baa1	0.1%	b1	32.6%	ba1	24.1%	baa1	0	0	0		
HF	ba1	Strong +	HIH	baa3	HIH	baa1	HIH	b1	HIH	ba1	HIH	baa1	0	0	0		
Postbank	ba1	Strong +	2.9%	baa2	9.9%	b3	0.2%	b1	13.5%	a2	35.0%	baa1	0	0	0		
pbb	ba3	Strong +	1.6%	ba1	12.7%	ba1	0.0%	b1	47.0%	ba3	16.9%	baa2	0	-1	0		
Institutions in the co-operative banks sector																	
apoBank	baa1	Very Strong -	2.2%	baa2	22.1%	aa2	0.4%	b1	30%	a1	16%	baa3	0	0	0		
DZ BANK	baa2	Strong +	4.0%	baa3	11.4%	baa3	0.4%	ba1	58%	baa1	55%	baa1	0	0	0		
WGZ	baa2	Very Strong -	0.9%	baa1	16.5%	a3	0.2%	b1	66%	baa3	32%	baa2	0	0	0		
Muenchener Hyp	ba2	Very Strong -	1.3%	baa1	12.9%	ba1	0.0%	b2	56%	ba1	20%	b1	0	-1	0		
DVB	ba3	Strong +	6.7%	ba3	20.8%	b1	0.3%	ba3	61%	ba2	7%	ba2	0	0	0		
Institutions in the savings banks sector (public sector)																	
S-Finanzgruppe	a2	Very Strong -	N/A	a3	15.4%	aa3	0.1%	ba2	33%	a1	17%	a2	0	0	0		
KSKK	baa1	Very Strong -	4.3%	baa1	11.9%	a1	0.3%	ba2	18%	a1	14%	baa3	0	0	0		
DekaBank	baa2	Strong +	2.4%	baa2	14.7%	baa2	0.4%	ba2	69%	ba3	44%	a3	0	0	0		
Helaba	baa3	Strong +	2.8%	baa3	12.9%	baa2	0.2%	ba3	59%	ba2	39%	a3	0	0	0		
LBBW	baa3	Very Strong -	3.2%	baa3	15.3%	a1	0.2%	b1	60%	b1	44%	a1	0	0	0		
LBB	ba1	Very Strong -	5.5%	ba1	16.0%	baa2	0.1%	b1	41%	baa3	57%	baa2	0	0	0		
BayernLB	ba2	Very Strong -	2.7%	ba2	14.6%	ba1	-0.6%	b3	53%	ba1	30%	baa2	0	0	0		
Berlin Hyp	ba2	Very Strong -	3.0%	baa3	12.5%	ba1	0.2%	b1	54%	ba2	30%	baa3	0	-1	0		
NORD/LB	ba2	Strong +	6.9%	ba3	9.8%	ba3	0.1%	b3	56%	ba3	40%	baa2	0	0	0		
SaarLB	ba2	Very Strong -	3.4%	ba1	9.2%	ba2	0.3%	ba3	62%	b1	40%	baa1	0	0	0		
SKKB	ba2	Very Strong -	4.8%	ba1	7.7%	b2	0.1%	b2	19%	a2	22%	baa1	0	0	0		
BremerLB	b1	Strong +	10.6%	b3	10.0%	b2	0.1%	b3	58%	ba1	26%	baa2	0	0	0		
Deutsche Hypo	b1	Strong +	2.5%	ba1	10.7%	ba3	0.1%	b3	59%	ba3	32%	b1	0	-1	0		
HSH	b3	Strong	22.8%	ba3	9.5%	b1	-0.1%	caa1	46%	b1	27%	ba1	-1	-1	0		

Note: The above data incorporates Moody's standard adjustments.

Source: Moody's Investors Service

Exhibit 3 provides an overview of our BCA analysis of the German banks on each of the above factors. The BCAs range from a2 to b3, with an average of ba1. Eight German banks had a BCA change as a result of the rating review (see Highlight Box). The average BCA of banks in the private bank sector and the co-operative bank sector is baa3 while the average BCA of banks in the savings bank

sector (or public sector banks) is ba1. The BCAs of the German banks reflect their (1) generally sound asset quality, despite some sector concentration risk; (2) solid and improving capitalisation with still elevated nominal leverage; (3) weak profitability; (4) generally sound funding and liquidity profiles, and (5) business diversification constraints.

Focus on BCA changes for German banks

The upgrade of apoBank's BCA to baa1 reflects (1) a further improvement in its very strong capitalisation, which outweighs concerns relating to its concentrated exposure to the health sector and its attendant regulatory risks; and (2) the bank's progress in offsetting continued pressure on its net interest margin through additional fee income.

The downgrade of BKM's BCA by one notch to baa2 reflects (1) the bank's weak 2014 financial results and (2) the depressed earnings outlook in the current low interest rate environment.

The upgrade of HF's BCA to ba1 reflects our decision to align HF's ratings with those of Commerzbank, as HF is a highly integrated and harmonised (HIH) subsidiary. HF is the wind-down entity for Commerzbank's remaining legacy portfolios in international commercial real estate and public finance. Being highly integrated into Commerzbank's operations, HF benefits from a regulatory waiver for its reporting on solvency.

The upgrade of HSH's BCA to b3 centers on a €10 billion risk shield provided by the bank's public sector owners, which offsets concerns about the group's high asset and capital risks. HSH also benefits from an adequate funding profile and liquidity position. However, the bank's BCA remains constrained by its limited access to capital, weak and unpredictable earnings and the resulting poor capital retention capacity. An additional drag on the BCA is the bank's continued focus on cyclical, asset-based financing activities, as well as the opacity of the bank's future profitability and capitalisation afforded by the complex structure of support from its majority owners.

We upgraded ING-DiBa's BCA to a2 because the bank may be less affected by the somewhat weaker credit strength of its Dutch parent bank than before the introduction of Europe's BRRD, which may allow for a ring-fencing of strong and viable subsidiaries in case of a resolution prompted by distress at the parent level. The a2 BCA is underpinned by low asset risk, strong capitalisation, stable profits and a solid funding structure.

The upgrade of pbb's BCA to ba3 reflects the bank's progress in gradually reducing legacy assets and improving its underlying profitability, as well as sound asset quality and a satisfactory liquidity position. At the same time, the cyclical nature of its commercial real estate finance activities and the resulting risks to capital, as well as pbb's considerable balance sheet leverage weigh on the BCA.

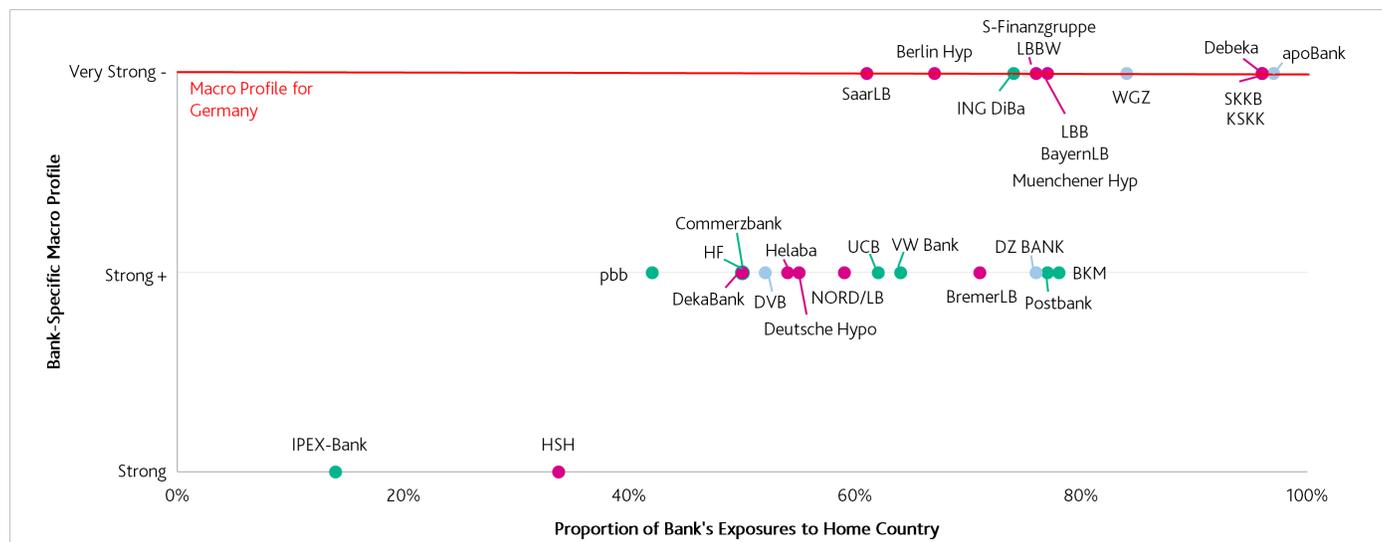
We upgraded SKKB's BCA to ba2 on the back of the bank's gradually improving asset quality, its progress in retaining earnings and bolstering its still-weak common equity base, as well as its sound funding structure and liquidity position.

Finally, we upgraded UCB's BCA to baa2 to reflect our assessment that it may be less affected by the somewhat weaker credit strength of its Italian parent bank than before the introduction of the BRRD, which may allow for a ring-fencing of strong and viable subsidiaries in case of a resolution prompted by distress at the parent level. UCB's baa2 BCA is supported by very strong capitalisation, which duly mitigates elevated asset risk, an adequate funding structure and sound liquidity.

Macro Profile

About two thirds of German banks' exposures are in their home market, even though several institutions have meaningful non-domestic exposures. The Macro Profile captures the macroeconomic and system-level variables to which these banks are exposed across the various jurisdictions in which they operate. Because Germany's "Very Strong-" Macro Profile is one of the highest ranked globally, non-domestic exposures usually weigh on the bank-specific Macro Profile. For banks with less than 40% of exposure to their home country Germany, the result is usually a Macro Profile of "Strong", while the average home country exposure of banks that achieve a Macro Profile of "Very Strong-" is above 75% (see Exhibit 4).

Exhibit 4
Half of German Banks' Macro Profiles Are Lower than the Country's Macro Profile Given Their Substantial Amount of Global Exposures
 Proportion of Exposures in Home Country vs. Bank-Specific Macro Profile

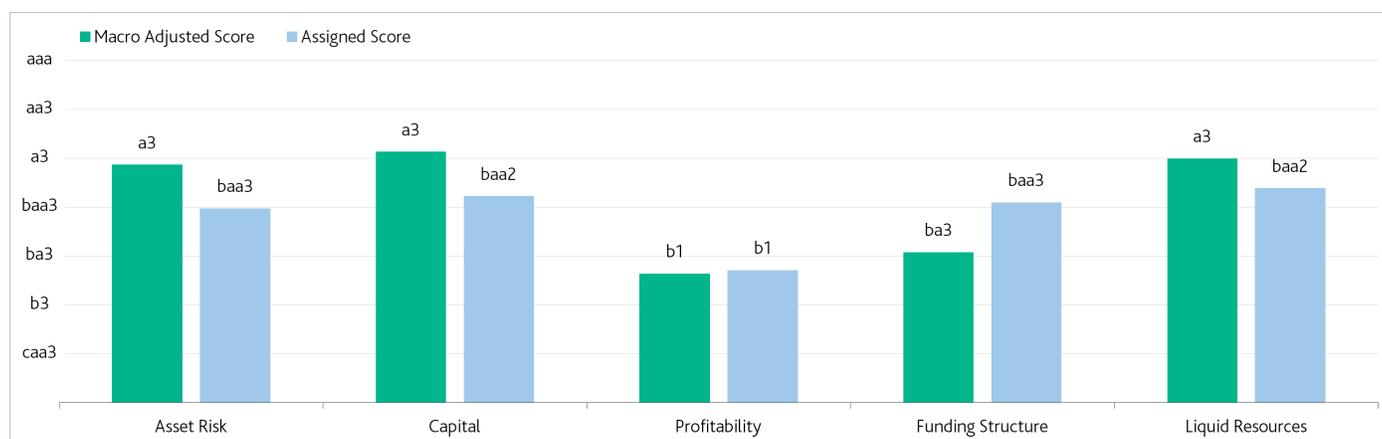


Source: Moody's Investors Service

Financial Profile

Exhibit 5 shows the average macro adjusted and assigned scores for the German banks on the Financial Profile sub-factors. Each of the sub-factors, which utilise historical financial ratios as a starting point, receive scores that are calibrated relative to the bank-specific Macro Profile (i.e., macro-adjusted score), after which we adjust each sub-factor score to reflect our forward-looking expectations, resulting in the assigned scores. Below we discuss the analytic considerations driving each of the assigned scores.

Exhibit 5
Financial Profile - Average Factor Scores for German Banks



Source: Moody's Investors Service

The **Asset Risk** score for the BCA solvency analysis focuses on problem loans as a percentage of gross loans. The average assigned asset risk score for the German banks is baa3, three notches below the macro-adjusted score of a3. Adjustments reflect largely concentration risks, particularly sector concentrations, such as commercial real estate finance, but also signal name and geographical

concentrations, followed by market risk and non-lending credit risk. Sector concentration is a common adjustment for banks in the savings bank sector.

The **Capital** position of German banks as a whole is captured in the average assigned capital factor score of baa2, two notches below the macro-adjusted outcome of a3. This is particularly driven by a high, albeit improving, nominal leverage. High leverage prompted a negative adjustment for the majority of co-operative banks, for about half of public sector institutions and for about one third of private bank sector institutions.

German banks' **Profitability** remains weak, given the sector's high fragmentation. Coupled with corporate and retail banking clients that are highly risk-averse - preferring low-revenue products and a reluctance to pay for services among retail customers in particular - this weak profitability hampers creating economies of scale and improving efficiency. The result is an average assigned profitability factor score of b1, the same as the macro-adjusted score.

The **Funding Structures** of most German banks rated by us lean heavily on wholesale funding, which we consider more confidence-sensitive and volatile than deposit funding. Although most of them have improved their funding structures thanks to increased regulation of liquidity and leverage, strong deposit inflows and tepid loan growth combined with longer maturity profiles, their average ratio of market funds to tangible banking assets remains high, at around 44%. This drives the average macro-adjusted score of ba3. The assigned funding structure score of baa3 takes into account that a portion of market funds stems from excess deposit funding of primary banks being treasured at the sectors' central banks (this applies to the co-operative bank sector and savings bank sector). It also considers that wholesale funding volumes include pass-through loans from development banks, thereby overstating the reliance on confidence sensitive market funding sources.

German banks hold sizeable buffers of **Liquid Resources** (cash and liquid asset reserves), which are available to offset a potential loss of less stable short-term funding. The ratio of average liquid assets to tangible banking assets of 29% for the group, as well as our adjustment because of asset encumbrance (e.g., related to issuance of public sector covered bonds), results in an average assigned liquid resources factor score of baa2.

Qualitative Adjustments

Three qualitative factors beyond those considered in the Financial Profile contribute to the soundness of a financial institution and can influence our BCA analysis: (1) Business Diversification, (2) Opacity and Complexity, and (3) Corporate Behavior.

We have applied a one-notch downward adjustment for Business Diversification to eight banks. We consider these to be mostly monoline institutions but also include banks that have a higher correlation between similar business lines, such as asset-based finance activities. The following banks are subject to a downward Business Diversification adjustment: Berlin Hyp, BKM, Debeba, Deutsche Hypo, HSH, Muenchener Hyp, pbb, and VW Bank. At the same time, we have applied an additional one-notch downward adjustment for Opacity and Complexity in the case of HSH, because of the opacity of the bank's future profitability and capitalisation afforded by the complex structure of support from its majority owners.

Support and structural analysis

The support and structural analysis, which follows the BCA, consists of three separate stages in the following sequence: (1) Affiliate Support, (2) Loss-Given-Failure and (3) Government Support.

Affiliate Support

Usually, we start with Affiliate Support, or the support that a bank could receive from a parent or cooperative group, to arrive at an adjusted BCA. In this case, 20 German banks' ratings benefit from affiliate support.

All five rated co-operative sector banks are members of the co-operative bank sector cross-guarantee scheme and highly likely to receive affiliate support if needed, based on their proven cross-sector support mechanism. This support materially reduces the probability of default as the support mechanism aims to stabilise its members by avoiding any form of loss-participation by creditors,

or bail-in. We reassessed the sector's financial capacity to provide support to its members, based on the co-operative group's combined financial strength. Given the material improvement in capital levels in recent years, we deem the support capacity to be stronger now, resulting in an additional rating uplift from cross-sector support. Affiliate support provides two to four notches of uplift.

The 13 rated savings banks and Landesbanken that are members of S-Finanzgruppe benefit from cross-sector support for the public sector banks. Cross-sector support materially reduces the probability of default as it is designed to stabilise a distressed member bank, and not just compensate for losses in resolution. We continue to consider the readiness of the sector to support its member banks to be high to very high. Affiliate support provides two to four notches of uplift.

Based on a profit and loss transfer agreement of VW Bank with its parent Volkswagen Financial Services AG (VWFS; Aa3 stable)³ as well as its important strategic role in VW AG Group, we consider VW Bank to be 'affiliate backed' by its owners, resulting in a three-notch uplift and aligning its adjusted BCA with the A2 long-term issuer rating of Volkswagen Aktiengesellschaft (VW AG; A2 stable)⁴ (VW AG Group).

Postbank benefits from one notch of parental support uplift, reflecting an existing profit and loss transfer agreement between Postbank and Deutsche Bank (A3 positive/A3 negative, baa3).⁵ We have scaled back our support assumptions following Deutsche Bank's announcement that it intends to sell its majority stake in Postbank. We may revisit our affiliate support assumption once Deutsche Bank moves closer to a successful sale of Postbank, as indicated by our negative outlook for Postbank's debt and deposit ratings.

Loss-Given-Failure

We then look at liability loss rates by instrument type to determine the risks to which creditors are exposed in the event of a bank's failure. Under our Advanced LGF analysis, we rate loss-absorbing debt and capital at the instrument level, allowing for creditor loss discrimination across the liability structure hierarchy and taking into account factors such as firm-wide loss rate, volume of securities subordinated to a given debt class and the overall volume of that instrument class. This analysis is particularly relevant for German banks, which are subject to the BRRD, a resolution framework where capital instruments can be written down at the point of non-viability and debt can be bailed in after a bank is placed into resolution. German banks will be required to hold loss-absorbing resolution capital known as Minimum Requirement for Own Funds and Eligible Liabilities (MREL) for EU banks. Our Advanced LGF analysis accounts for both a given firm's capital structure and the order in which losses would be absorbed by holders of equity and resolution capital.

Creditor hierarchy

Our Advanced LGF analysis currently employs a creditor hierarchy, based on the specifics of the resolution framework under which a bank operates, focusing on (1) the power to write down or convert into equity capital instruments at the bank's point of non-viability, (2) depositor preference, and (3) variations in the primary relationship and obligations of holding companies towards their bank operating companies. In particular, we consider the positioning of deposits relative to other senior unsecured obligations and the positioning of holding company obligations relative to those of the operating bank. Exhibit 6 shows the creditor hierarchies for the EU, in which German banks primarily operate, with the US and Switzerland creditor hierarchies included for comparison.⁶

Exhibit 6

LGF Creditor Hierarchies

United States	EU*		Switzerland
	DE JURE	DE FACTO	
DEPOSITS	PREFERRED DEPOSITS	PREFERRED DEPOSITS	PRIVILEGED DEPOSITS
OPERATIONAL LIABILITIES	OPERATIONAL LIABILITIES	OPERATIONAL LIABILITIES	JUNIOR DEPOSITS
SENIOR LONG-TERM DEBT (bank)	JUNIOR DEPOSITS	JUNIOR DEPOSITS	OPERATIONAL LIABILITIES
DATED SUBORDINATED DEBT (bank)	SENIOR LONG-TERM DEBT (bank)	SENIOR LONG-TERM DEBT (bank)	SENIOR LONG-TERM DEBT (bank)
JUNIOR SUBORDINATED (bank)	SENIOR LONG-TERM DEBT (holding company)	SENIOR LONG-TERM DEBT (holding company)	SENIOR LONG-TERM DEBT (holding co)
PREFERENCE SHARES (bank)	DATED SUB. DEBT (bank)	DATED SUB. DEBT (bank)	DATED SUB. DEBT (BANK)
SENIOR LONG-TERM DEBT (holding company)	DATED SUB. DEBT (holding co)	DATED SUB. DEBT (holding co)	DATED SUB. DEBT (holding co)
DATED SUBORDINATED DEBT (holding company)	JUNIOR SUB. (bank)	JUNIOR SUB. (bank)	JUNIOR SUB. (bank)
JUNIOR SUBORDINATED (holding company)	JUNIOR SUB. (holding co)	JUNIOR SUB. (holding co)	JUNIOR SUB. (holding co)
PREFERENCE SHARES (holding company)	PREFERENCE SHARES (bank)	PREFERENCE SHARES (bank)	PREFERENCE SHARES (bank)
	PREFERENCE SHARES (holding co)	PREFERENCE SHARES (holding co)	PREFERENCE SHARES (holding co)

Note: * EU includes the European Union as well as Norway and Liechtenstein. Although the BRRD does not apply to Norway and Liechtenstein, our expectation is that their local resolution frameworks will, in practice, lead to similar probabilities of support provision as for EU banks. In the EU, "ineligible" (i.e., non-preferred) deposits rank pari passu with senior unsecured debt under a liquidation (de jure), but we believe they may benefit from discretionary preference in a resolution. We generally assign a 25% probability to this latter de facto scenario.

Source: Moody's Investors Service

Potential changes to creditor hierarchy in Germany

On 30 April, the German Ministry of Finance published a draft law (Abwicklungsmechanismengesetz, AbwMechG) to amend the German Banking Act (Kreditwesengesetz, or KWG), specifically the hierarchy of bank creditors in insolvency. The proposal, which is designed to simplify bail-in procedures during the recovery or resolution of a distressed bank by establishing a clearer separation between a bank's senior unsecured bonds and other debt instruments, introduces de facto (full) depositor preference.

Among the proposed changes is an amendment of Article 46f that governs the seniority of debt in an insolvency. The draft law proposes to introduce a legal distinction within the class of senior unsecured debt. All debt in this class has thus far ranked equally – pari passu – from a legal standpoint. The proposal would create a separate layer of senior unsecured debt containing 'tradable' capital market securities with the premise that these instruments should absorb losses ahead of other senior unsecured debt whether in insolvency or in bail-in. While some uncertainty remains around the definition of 'tradable', we expect that the majority of senior unsecured debt will meet that requirement. If enacted, the proposed changes would result in a de-facto depositor preference, which would be credit positive for deposits and credit negative for senior unsecured instruments.

We have incorporated the potential implications from this draft law into our rating outlooks. While 20 bank deposit ratings carry a positive outlook, 16 senior unsecured debt ratings carry a negative outlook. By introducing a de facto depositor preference the volume of subordination to deposits would increase by the volume of senior unsecured debt, thereby reducing the expected loss for depositors,

a credit positive. For senior unsecured debt a de facto depositor preference would reduce the volume of instruments ranking pari-passu, thereby increasing the expected loss for senior debt, a credit negative. On average, this reduces the pari-passu ranking volume for senior unsecured instruments by five percentage points while it increase the subordination volume for deposits by 15 percentage points.

Firm-wide loss rate

The assumed overall firm-wide loss rate in resolution has a major bearing on the loss-given-failure for the German banks' rated instruments. In our Advanced LGF analysis, we look at asset volatility (using the Macro Profile and historical loss rates) and resolution approach to determine the loss-rate allocation. Banks with stronger Macro Profiles will tend to have lower recovery value volatility and lower losses on assets in the event of failure. For EU banks with "Weak" to "Very Weak" Macro Profiles, we typically apply a loss rate of 13% of tangible banking assets. For EU banks with "Moderate" to "Very Strong-" bank-specific Macro Profiles – and given that all German institutions have a bank-specific Macro-Profile between "Strong" and "Very Strong" – we apply an 8% loss rate.

Perimeter

In applying Advanced LGF analysis, we establish the appropriate firm balance sheet for what we judge to be the firm's "resolution perimeter." Typically, we expect resolutions to be conducted along national boundaries, since a regulator's authority usually does not extend beyond its borders. In the case of a multi-national banking group, we might divide the consolidated whole into sub-groups according to jurisdiction. We consolidate debt and deposit data within these sub-groups and assume that equivalent creditors at different entities are treated equally.

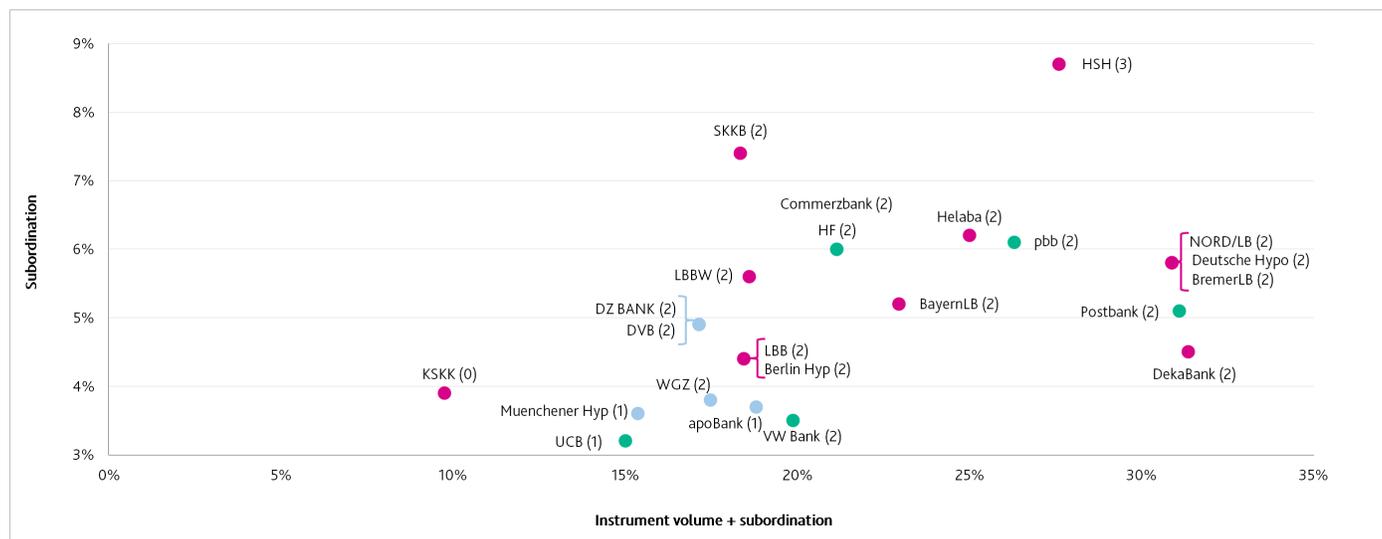
For each German banking group, we apply Advanced LGF analysis to the aggregated balance sheet for the home country, foreign branches and foreign debt-issuing vehicles. We typically exclude foreign subsidiaries from the parent's resolution perimeter. For the following subsidiaries, we apply the LGF analysis of its parent (stated in parentheses): Berlin Hyp (Erwerbgsellschaft der S-Finanzgruppe; unrated), BremerLB (NORD/LB), Deutsche Hypo (NORD/LB), DVB (DZ BANK), HF (Commerzbank), LBB (Erwerbgsellschaft der S-Finanzgruppe), VW Bank (Volkswagen Financial Services) and Postbank (Deutsche Bank).

Liability structure

The liability structure of each bank today reflects historical funding arrangements but will increasingly reflect how a given bank chooses to meet its resolution requirements. A liability structure's idiosyncratic characteristics affect LGF notching and a given bank's ratings compared with other German banks. For example, notching and associated credit risk could vary for the same debt class across different banks and systems to reflect differences in the creditor hierarchy, debt class volume and the amount of instruments subordinated to that debt class.

Since German banks have not established any holding company structure, they benefit from high volumes of senior bank debt but little subordination below it. This operating structure limits LGF uplift to two notches for the senior unsecured bank debt and deposits of most German banks.

Exhibit 7
LGF Uplift for German Banks' Long-Term Senior Unsecured Debt Ratings

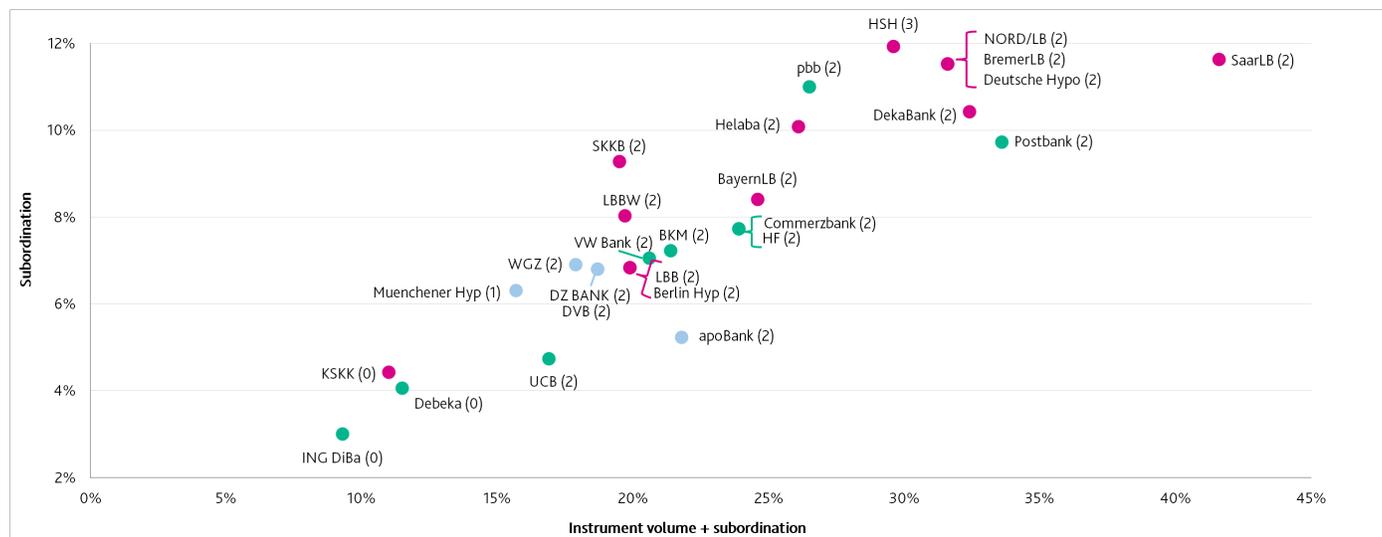


Note: In brackets, we show the notches of LGF uplift for each banks' long-term senior unsecured debt ratings. We excluded IPEX-Bank, ING Diba, BKM, Debeka and SaarLB as these banks do not have long-term senior unsecured debt ratings. Subordination and instrument volume data shown is the weighted average of de jure and de facto scenarios; this is shown for indicative purpose only.

Source: Moody's Investors Service

European banks that are funded primarily with bank-level debt and that lack holding company structures will likely meet their MREL requirements (particularly requirements in excess of Basel 3 capital requirements) through the issuance of senior subordinated or contractually subordinated senior debt as well as Tier 2 debt, whose loss-given-failure rates will be higher and whose ratings will be lower than for senior unsecured bank debt.

Exhibit 8
LGF Uplift for German Banks' Deposit Ratings



Note: In brackets, we show the notches of LGF uplift for each banks' long-term deposit ratings. Subordination and instrument volume data shown is the weighted average of de jure and de facto scenarios; this is shown for indicative purpose only. We excluded S-Finanzgruppe as it does not have a long-term deposit rating but a corporate family group rating. We also excluded IPEX-Bank as this bank is an outlier with very high instrument volume (resulting in three notches LGF uplift for deposits and senior unsecured debt) and therefore affects the readability of the other banks in the chart.

Source: Moody's Investors Service

In the EU, junior deposits rank pari passu with senior unsecured debt in a liquidation, but we believe they may benefit from discretionary preference in a resolution. We assign a 25% probability to this latter de facto scenario. This also reflects the probability of a distressed exchange which is more likely to be imposed upon bondholders than depositors. Deposit ratings of German banks benefit on average from two notches of LGF uplift.

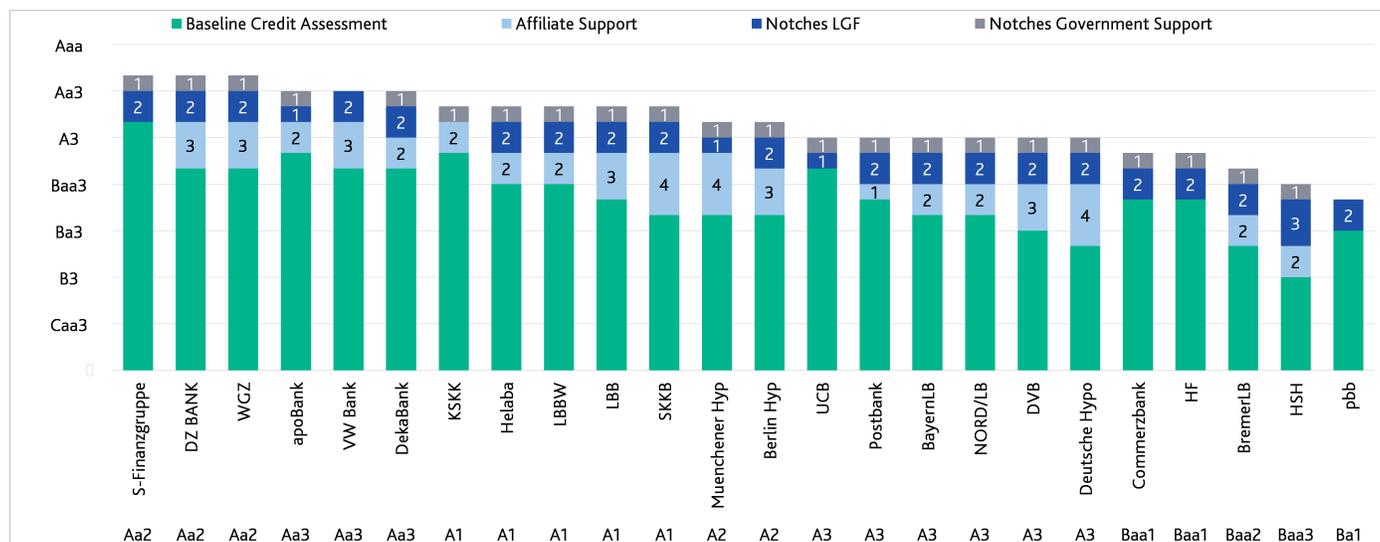
Government Support

The EU's BRRD is likely to be used to deal with failing banks and reflects a reduced willingness of EU governments to bail out banks, as it severely restricts the conditions under which authorities can use public money to fund a bank's recapitalisation⁷. We expect that most failing banks in the EU will be resolved without governments providing financial support.

In light of the implementation of national and regional legislation that aims to shift the costs of resolution to shareholders and creditors, we have eliminated or lowered our assumption for the probability of government support for German banks, with on average one notch of government support uplift remaining for senior unsecured bank debt and the same for deposits. Exhibits 9 and 10 break out the German banks' long-term senior unsecured debt and deposit ratings, respectively, by BCA and notching for Affiliate Support, Loss-Given-Failure and Government Support. For 24 of the 29 banks we continue to incorporate one notch uplift for the long-term deposit and senior unsecured debt ratings.

Exhibit 9

German Banks' Long-Term Senior Unsecured Bank Debt Ratings and Their Components



Note: We excluded IPEX-Bank, ING Diba, BKM, Debeka and SaarLB as these banks do not have long-term senior unsecured debt ratings. S-Finanzgruppe's rating is a corporate family rating.

Source: Moody's Investors Service

Given their size on a consolidated basis, we consider the banking groups of the savings bank sector, S-Finanzgruppe, and the co-operative bank sector, Bundesverband der Deutschen Volksbanken und Raiffeisenbanken (BVR, unrated), as systemically relevant. We therefore attribute a "moderate" probability of German government support for all members of these sectors, in line with support assumptions for other systemically relevant banking groups in Europe. This results in one notch of government support uplift in the senior debt and deposits ratings of those Landesbanken, savings banks and co-operative banks that are incorporated in Germany.

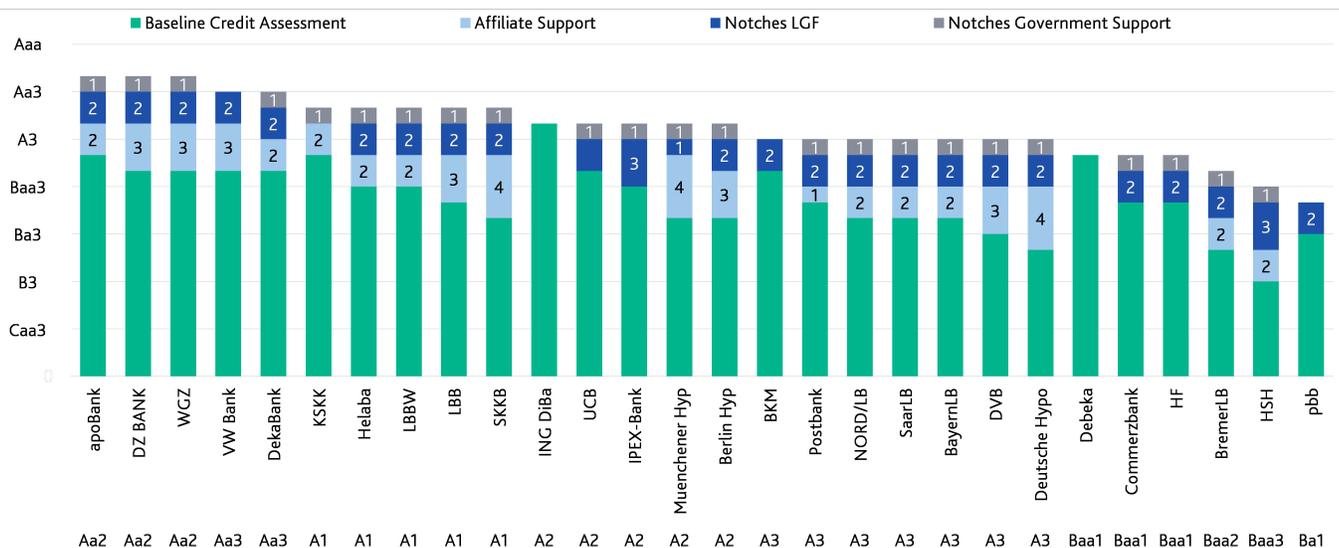
We also deem three private banks, Commerzbank, Deutsche Bank and UCB, to be of systemic importance and attribute a "moderate" probability of German government support for deposits and senior unsecured debt, resulting in a one-notch uplift for these instruments. Because of its embeddedness in Deutsche Bank, we expect a moderate probability of government support also for Postbank's deposits and senior unsecured instruments, resulting in a one-notch uplift. We may re-assess Postbank's ability to benefit

from government support once Deutsche Bank moves closer to a successful sale of Postbank. Ratings of HF are aligned with those of its parent Commerzbank, as HF is a highly integrated and harmonised (HIH) subsidiary.

Because of its importance for and close integration into the business strategy of KfW (Aaa stable/Aaa stable)⁸ as a government-guaranteed financial institution, IPEX-Bank also benefits from one notch of government support.

For the five rated banks that don't meet our requirements to be considered of systemic importance we attribute a "low" probability of German government support resulting in no uplift; these are BKM, Debeka, ING DiBa, pbb, and VW Bank.

Exhibit 10
German Banks' Long-Term Deposit Ratings and Their Components



Note: We excluded S-Finanzgruppe as it does not have a long-term deposit rating but rather a corporate family group rating.

Source: Moody's Investors Service

Counterparty Risk Assessment

The existing resolution framework in the EU does not specifically exempt from the scope of bail-in derivatives, counterparty obligations or contractual commitments arising from a bank performing its operating functions. Nevertheless, we believe that, in most instances, resolution authorities would exclude these counterparty obligations to limit market disruptions and contagion risk and preserve the continuity of the bank's key operations and payment flows. This view is reflected in the new CR Assessment that we have introduced as part of the new bank rating methodology.

For German banks, we expect that the operating obligations to which the CR Assessment applies will benefit from the loss absorption buffers that capital and debt instruments provide. As a result, we position the operational liabilities, to which the CR Assessment speaks, above senior debt and junior deposits in the LGF creditor hierarchy. Therefore, the CR Assessment benefits from the subordination of both senior debt and junior deposits, resulting in an average of three notches of LGF uplift for German banks' CR assessments.

The CR Assessments also benefit from government support in line with our support assumptions on deposits and senior unsecured debt. The assessments reflect our view that any support provided by governmental authorities to a bank that benefits senior unsecured debt or deposits is very likely to aid operating activities and obligations reflected by the CR Assessment as well. This is consistent with our belief that governments are likely to maintain such operations as a going concern in order to reduce contagion and preserve a bank's critical functions. As a result, 23 banks' CR Assessments have one notch of government support uplift, while five have no uplift (see Exhibit 11).

Exhibit 11

Counterparty Risk Assessments for German Banks

	Adjusted BCA	LGF Notching	Government Support Notching	Long-Term CR Assessment	Short-Term CR Assessment
Institutions in the private bank sector (commercial sector)					
VW Bank	a2	3	0	Aa2(cr)	P-1(cr)
ING DiBa	a2	2	0	Aa3(cr)	P-1(cr)
Debeka	baa1	3	0	A1(cr)	P-1(cr)
UCB	baa2	3	1	A1(cr)	P-1(cr)
BKM	baa2	3	0	A2(cr)	P-1(cr)
IPEX-Bank	baa3	3	1	A2(cr)	P-1(cr)
Postbank	baa3	3	1	A2(cr)	P-1(cr)
Commerzbank	ba1	3	1	A3(cr)	P-2(cr)
HF	ba1	3	1	A3(cr)	P-2(cr)
pbb	ba3	3	0	Baa3(cr)	P-3(cr)
Institutions in the co-operative bank sector					
apoBank	a2	3	1	Aa1(cr)	P-1(cr)
DZ BANK	a2	3	1	Aa1(cr)	P-1(cr)
WGZ	a2	3	1	Aa1(cr)	P-1(cr)
Muenchener Hyp	baa1	3	1	Aa3(cr)	P-1(cr)
DVB	baa3	3	1	A2(cr)	P-1(cr)
Institutions in the savings bank sector (public sector)					
KSKK	a2	3	1	Aa1(cr)	P-1(cr)
DekaBank	a3	3	1	Aa2(cr)	P-1(cr)
Helaba	baa1	3	1	Aa3(cr)	P-1(cr)
LBBW	baa1	3	1	Aa3(cr)	P-1(cr)
LBB	baa1	3	1	Aa3(cr)	P-1(cr)
SKKB	baa1	3	1	Aa3(cr)	P-1(cr)
Berlin Hyp	baa2	3	1	A1(cr)	P-1(cr)
BayernLB	baa3	3	1	A2(cr)	P-1(cr)
Deutsche Hypo	baa3	3	1	A2(cr)	P-1(cr)
NORD/LB	baa3	3	1	A2(cr)	P-1(cr)
SaarLB	baa3	3	1	A2(cr)	P-1(cr)
BremerLB	ba2	3	1	Baa1(cr)	P-2(cr)
HSN	b1	3	1	Baa3(cr)	P-3(cr)

Note: We have not assigned a CR Assessment to S-Finanzgruppe as it is not an operating bank and has no critical operating functions that could create operating obligations.

Source: Moody's Investors Service

Moody's Related Research

Rating Methodology

- » [Banks, March 2015 \(179038\)](#)
- » [Bank Rating Methodology: Responses to Frequently Asked Questions - Update, May 2015 \(1002868\)](#)

Rating Actions

- » [Moody's reviews global bank ratings, March 2015 \(321005\)](#)

Banking System Outlooks

- » [Germany, November 2014 \(177587\)](#)

Special Comments

- » [Global Investment Banks: Key Analytic Considerations in Our Rating Actions on Global Investment Banks, May 2015, \(1004940\)](#)
- » [How Resolution Frameworks Drive Our Creditor Hierarchies, April 2015 \(1003760\)](#)
- » [Germany considers changes to insolvency hierarchy of bank creditors, April 2015 \(1004088\)](#)
- » [Bank Resolution Regimes - An Overview of Progress Made to Date \(Presentation\), March 2015 \(179964\)](#)
- » [European Bank Ratings To Reflect Reduced Probability of Government Support, March 2015 \(1002793\)](#)
- » [European Proposal on Minimum Own Funds and Eligible Liabilities Is Credit Positive for Senior Bank Creditors, December 2014 \(177860\)](#)
- » [FSB Proposal Sets High Loss-Absorbing Capacity Bar For G-SIBs, November 2014 \(1000838\)](#)
- » [Reassessing Systemic Support for EU Banks, May 2014 \(170460\)](#)

Endnotes

- 1 This report includes rated German banks for which we assign a baseline credit assessment, with the exception of Deutsche Bank; this issuer is included in our report on global investment banks, [Key Analytical Considerations in Our Rating Actions on Global Investment Banks](#), 28 May 2015. For a full list of banks and instruments affected by the rating actions, please refer to the press releases from 19 June and 28 May 2015. The banks included in this report are (abbreviation in parenthesis): Deutsche Apotheker- und Ärztebank eG (apoBank), Bayerische Landesbank (BayernLB), Berlin Hyp AG (Berlin Hyp), Bausparkasse Mainz AG (BKM), Bremer Landesbank Kreditanstalt Oldenburg GZ (BremerLB), Commerzbank AG (Commerzbank), Debeka Bausparkasse AG (Debeka), DekaBank Deutsche Girozentrale (DekaBank), Deutsche Hypothekenbank AG (Deutsche Hypo), DVB Bank S.E. (DVB), DZ BANK AG (DZ BANK), Landesbank Hessen-Thüringen GZ (Helaba), Hypothekenbank Frankfurt AG (HF), HSH Nordbank AG (HSH), ING DiBa AG (ING DiBa), KfW IPEX-Bank GmbH (IPEX-Bank), Kreissparkasse Koeln (KSkk), Landesbank Berlin AG (LBB), Landesbank Baden-Württemberg (LBBW), Muenchener Hypothekenbank eG (Muenchener Hyp), Norddeutsche Landesbank GZ (NORD/LB), Deutsche Pfandbriefbank AG (pbb), Deutsche Postbank AG (Postbank), Landesbank Saar (SaarLB), Sparkassen-Finanzgruppe (S-Finanzgruppe), Sparkasse KoelnBonn (SKKB), UniCredit Bank AG (UCB), Volkswagen Bank GmbH (VW Bank), WGZ BANK AG (WGZ)
- 2 Please see [Moody's Macro Profiles: A Compendium](#), 18 March 2015.
- 3 The rating shown is VWFS's senior unsecured rating and outlook.
- 4 The rating shown is VW AG's senior unsecured debt rating and outlook.
- 5 The ratings shown are Deutsche Bank's deposit rating and senior unsecured debt rating and outlook, and its baseline credit assessment.
- 6 Please see [How Resolution Frameworks Drive Our Creditor Hierarchies](#), 16 April 2015.
- 7 Please see [European Bank Ratings to Reflect Reduced Probability of Government Support](#), 17 March 2015.
- 8 The ratings shown are KfW's deposit rating and senior unsecured debt rating and outlook .

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