



EXECUTIVE SUMMARY

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The FCF Bank Monitor is a standardized report on Credit Default Swap spreads, ratings and the fundamental performance of German and foreign banks. most active in the German and Austrian midcap market and is a reference for investors, corporates and professionals

More advanced, detailed and / or customized reports are available upon request

FCF Bank Monitor

is a comprehensive quarterly analysis of the historic and current spreads of Credit Default Swaps (CDS) and ratings ("Market View") and fundamental performance indicators ("Fundamental View") for banks most active in the German and Austrian corporate lending market. The analysis provides the short-term, medium-term and longterm market view on such banks' credit default risks and is an indicator for banks' (re-)financing costs in the capital markets. The rating and fundamental performance analysis provides an indication of the solidity and "pedigree" of the banks as lending partners

Selection of Financial Institutions

The selection of financial institutions is based on FCF's financing expertise in the German midcap market and includes the most relevant institutions with respect to deal volumes of up to EUR 500m

- Only institutions with actively traded CDS instruments are included, thus, several relevant regional banks are excluded (e.g. Sparkassen, BTV, Oberbank)
- Further, public institutions as kfw and the European Investment Bank (EIB) were not considered in the analyses

Customized Information

More advanced, detailed and / or customized reports can be ordered individually, offering subscribers the possibility to customize the following criteria (among others):

- Inclusion of international / US institutions
- Selection / deselection of specific institutions
- Specific solvency analysis (equity or debt analysis)
- Monthly updates

Recipients

The FCF Bank Monitor targets the following audience:

- Financial Institutions
- Investors
- Corporates with existing bank financings and with further financing needs

Availability

The FCF Bank Monitor is available on FCF's website at 'www.fcf.de'

Data

All input data is provided by S&P Capital IQ and is not independently verified by FCF. Ratio and multiple calculations are driven based on the input data available. For additional information and disclaimer, please refer to the last page

To recommend colleagues to be added to the mailing list, kindly send an email with the respective contact information

If you have questions, comments or ideas, please do not hesitate to contact us

Supporting information on CDS spreads can be found in the Appendix





FCF seeks to provide its clients with financing solutions

- (i) at the lowest cost,
- (ii) with the highest flexibility,
- (iii) in the shortest period of time,
- (iv) with the highest closing probability, and with
- (v) financing partners that integrate well into their strategy

Who We Are

Selected Transactions

- Specialized Investment Bank and Financing Specialist
- Advising public and private small- / midcap companies
- Advisor for structuring and placement of financing transactions:
 - All instruments: Unbiased approach to all available corporate financing instruments (no product selling approach), allowing for customized financing structures
- All investors: Close and trusted relationships with senior executives of virtually all relevant equity and debt investors
- Fast process: Process management skills and direct / personal access to institutional debt and equity investors enable fast transactions
- More than 100 transactions with a total placement volume in excess of EUR 4.0 billion since foundation in 2005
- More than 15 professionals headquartered in Munich

Capital Markets Capabilities and Services Private / Venture capital Private e

У	Private / Pre-IPO	Venture capitalGrowth capital	•	Private equity
Equity	Public	 Initial Public Offering (IPO) / Capital increase Dual-track (IPO and alternative transaction 	•	pursued in tandem) Private investment in Public Equity (PIPE) Block trade
	Short-term Debt	 Receivables / Factoring / Asset-backed securities Borrowing base / Inventory 	•	Working capital / Revolving credit facility Guarantees / Letter of credit
Debt	Long-term Debt	 Bank loan facility / Syndicated loans Sale-and-lease-back / Leasing Corporate bonds (public / private placement) High yield / PIK bond 		Subordinated loans
	Hybrid	 Mezzanine capital 	•	Convertible bonds

Equity Transaction	Acquisition Loan and Factoring Facility	Acquisition Loan Facility	European Investment Bank Debt Facility	Syndicated Loan	Syndicated Loan	Syndicated Loan	Syndicated Loan, Factoring, Real Estate Sale & Lease-Back [confidential]	Venture Financing Precisis ^{AG}	Syndicated Loan	Machinery Sale & Rent-Back and Debt Facilities	Capital Increase and EIB Debt Facility
Sale to Family Office	Bencis Capital Partners B.V.	Lloyd Fonds AG	numares AG	Schnellecke Logistics SE	KWD Automotive AG & Co. KG	Pharmaceutical Company	Food Company	Precisis AG	Ziegler Holzindustrie GmbH & Co. KG	KmB Technologie GmbH	Quantum Systems GmbH
> EUR 50m	> EUR 20m	[confidential]	EUR 20m	EUR 70m	EUR 70m	EUR 80m	EUR 85m	EUR 20m	EUR 230m	≥ EUR 15m	> EUR 10m
Signed July 2022	pending	April 2022	February 2022	December 2021	December 2021	November 2021	October 2021	September 2021	August 2021	August 2021	July / May 2021
Syndicated Loan	Factoring Facility	Factoring Facility	European Investment Bank Debt Facility	Real Estate Sale & Lease-Back	European Investment Bank Debt Facility	Family Office Advisory and Acquisition Financing Facilities	European Investment Bank Debt Facility	Capital Increase and Round Extension	Guarantee and Debt Facilities	Syndicated Loan, Factoring and Inventory Leasing	Capital Increase and Round Extension
A	woco	KmB	SNP	<i>⊘H∕∕∕</i>	Immunic THERAPEUT CS	[confidential]	robart Navigation Technology	And hydrogenious		Doppstadt	- synapticon
Asamer Baustoffe AG	WOCO Franz Josef Wolf Holding GmbH	KmB Technologie GmbH	SNP Schneider- Neureither & Partner SE	Hammerer Aluminium Industries Group	Immunic AG	Homegoods Company	ROBART GmbH	Hydrogenious LOHC Technologies GmbH	PCM Rail.One AG	Doppstadt Familienholding GmbH	Synapticon GmbH
EUR 80m	EUR 45m	[confidential]	EUR 30m	> EUR 20m	~ EUR 25m	~ EUR 80m	[confidential]	> EUR 18m	~ EUR 20m	EUR 80m	> EUR 10m
May 2021	March 2021	February 2021	December 2020	December 2020	October 2020	June 2020	February 2020	December / July 2019	November 2019	June 2019	June / January 2019









The FCF Bank Monitor highlights the key developments of German and foreign banks most active in the German and Austrian mid-cap financing market

The FCF Bank Monitor outlines several key factors that should be considered when selecting banks during a (re)financing of existing financial liabilities

Key Findings (Q2 2022)

Macro findings

- In Q2 2022, CDS spreads of all banks continued to increase as high inflation, tightening monetary policies and global economic uncertainty driven by energy prices after the Russian invasion together with sanctions and supply cuts to/from EU countries raised the probability of a global recession
 - Even though current CDS spreads of c. 90bps are twice as high as in 2021 (all-time low levels), the situation can be considered as a "back-to-normal" to levels experienced between 2012 and 2016
- The FCF ranking of German and foreign banks operating in the German and Austrian midcap segments, based on CDS spreads across 1-, 5- and 10-year terms, major credit ratings and key fundamental performance criteria gives an indication on the banks expected future stability and crisis resistance:
 - ING (score: 97.6) heads the league table followed by DZ Bank (score: 95.0) and BayernLB (score: 92.3)
 - Deutsche Bank (score: 26.2) completes the league table ranking behind UniCredit (score: 30.4) and Commerzbank (score: 37.1)
- The variation in CDS spreads and ratings highlights the importance of considering the perceived solvency of the bank prior to selecting an institution as a lending bank or transaction counterparty:
 - Across 1-year CDS spreads, the lowest CDS spread lies at 22.0 bps (ING) whilst the highest spread lies at 84.4 bps (Deutsche Bank), 3.8x higher
 - Across 5-year CDS spreads, the lowest CDS spread lies at 50.0 bps (DZ Bank) whilst the highest spread lies at 155.5 bps (RBI), 3.1x higher
 - Across 10-year CDS spreads, the lowest CDS spread lies at 63.9 bps (DZ Bank) whilst the highest spread lies at 193.5 bps (RBI), 3.0x higher
 - Across S&P ratings, the highest rating is AA- (BayernLB, LBBW) whilst the lowest rating is BBB (HCOB, UniCredit), implying a spread of 5 notches
- The relationship between backward- and forward-looking indicators has strengthened over the last quarter, and correlation & explanatory power increased to R² of 57%. RBI is the largest outlier in Q2/22, implying a higher probability of a future rating downgrade

Individual bank findings

- Austrian RBI and Italian UniCredit showed a significantly higher increase in CDS spreads in 2022 than their foreign peers. This is likely driven by a higher exposure to adverse effects from Russia-Ukraine conflict as well as underlying home country risk for UniCredit in the light of increasing interest rates
- The most active banks in the German/Austrian midcap corporate lending market up to EUR 500m deal volumes have been Commerzbank and UniCredit



Ranking Q2 2022 - Combined View (Market & Fundamental)

FCF allocated scores of 1 (low) to 22 (high) to the 22 banks, based on the **Market View** (CDS spread & volatility, public credit rating) and the **Fundamental View** (profitability, equity ratio, non-performing loans share)

The combination of both single scores result in a **Combined View**, giving an indi-cation on the banks' expected future stability, crisis resistance and overall wholesale funding costs – across maturities, rating agencies and fundamental criteria

ING (score 97.6) heads the league table, whereas Deutsche Bank ranks 22nd (26.2)

Rank	Trend	Bank	Country	CDS 1Y	CDS 5Y	Market View CDS 10Y	Rating	Market View		Fund	amental Vie	w		Fundamental	Combined	Delta vs Market
Q2 2022 v	rs. Q1 2022			Score	Score	Score	Score	Score	RoE	RoA	Tier 1 Cap	% NPL Cost	Eff.	View Score	Total Score	VSIVIAIKei
1		ING 🍌		22	21	22	12	55.0	17	16	15	12	11	42.6	97.6	2
2	>	DZ BANK		20	21	21	12	53.0	11	11	17	18	13	42.0	95.0	2
3	\	Bayern LB		20	18	16	21	56.3	5	5	18	20	12	36.0	92.3	-1
4	>	LB≣BW		14	21	21	21	57.7	4	4	14	22	9	31.8	89.5	-3
5	>			21	18	19	12	50.3	15	9	1	15	14	32.4	82.7	0
6	>	📣 Santander	æ	17	16	13	12	42.0	21	17	7	1	21	40.2	82.2	1
6	\	Crédit 🖧 Mutuel		13	14	14	12	39.0	14	14	21	4	19	43.2	82.2	2
8	\			8	11	11	12	31.3	19	18	12	9	16	44.4	75.7	5
9		使 Bank of china	*)	14	7	4	12	28.7	18	19	3	16	22	46.8	75.5	5
10		🖉 BNP PARIBAS		16	17	18	12	45.3	13	10	4	6	6	23.4	68.7	-4
11	\$	J.P.Morgan	94	5	6	8	4	16.3	22	22	6	21	15	51.6	67.9	7
12	1	ABN·AMRO		12	15	14	8	34.7	10	12	18	8	4	31.2	65.9	-2
13	\$	Helaba 🛓		14	13	12	8	33.3	7	8	9	19	8	30.6	63.9	-2
14	1	G Hamburg Commercial Bank		6	4	4	1	9.7	12	21	22	10	20	51.0	60.7	6
15	\			14	11	12	8	32.0	16	13	9	2	7	28.2	60.2	-3
16	>			13	13	15	12	39.0	8	7	4	11	5	21.0	60.0	-8
17	\	НЅВС		10	8	6	4	19.7	9	15	16	13	10	37.8	57.5	-1
18		Raiffeisen Bank International		5	2	2	4	9.3	20	20	2	7	18	40.2	49.5	3
19	>	NORD/LB		4	10	13	8	25.7	1	1	13	17	1	19.8	45.5	-4
20	\	COMMERZBANK 스		6	7	8	3	16.7	3	3	11	14	3	20.4	37.1	-3
21	~	UniCredit		2	2	2	1	4.0	2	2	20	3	17	26.4	30.4	1
22	\	Deutsche Bank 🚺		2	4	4	4	10.0	6	6	8	5	2	16.2	26.2	-3

Source: S&P Capital IQ as of June 30th, 2022

Notes: Please see Appendix for a detailed overview of the market & fundamental data.

Market view score & fundamental view score are scaled down to achieve a 50/50 weight for the total score



The Dutch ING bank consistently heads the league table over the last four quarters

Credit Agricole and Helaba show the most positive development over the last four quarters, gaining five places each from rank 10 and 18 in Q3/21 to rank 5 and 13 in Q2/22, respectively

RBI experienced the largest drop by 7 places over the past quarters from rank 11 to 18, mainly driven by its exposure to Russia & Ukraine

	Q3 2021		Q4 2021		Q1 2022	Q2 2022
1.	ING 🂫	1. ►	ING	·····1:··•		
2.	♦> Bayern LB	2.		2.	Bayern LB	2. DZ BANK
3.		3.	DZ BANK	3.	Crédit 👶 Mutuel	3. 🔷 Bayern LB
4.	Crédit 🖧 Mutuel	4.	♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦ ♦	···· 4.	DZ BANK	4. LB≣BW
5.	🕹 Santander	5.	LB Ξ BW	5.		5. CRÉDIT AGRICOLE
6.	DZ BANK	6.	🕹 Santander	6.		6. 💧 Santander
7.	LB = BW	7.	Crédit 🖧 Mutuel	7.	LB = BW	7. Crédit 🖧 Mutuel
8.	DNP PARIBAS	8.		8.	📣 Santander	8. ERSTE
9.	ABN·AMRO	9.	🖉 BNP PARIBAS	9.	●	9. ④ # 圆 銀 行 BANK OF CHINA
10.		10.		10.	J.P.Morgan	10. 🚺 bnp paribas
11.	Raiffeisen Bank	11.	④ ¥圓錄行 BANK OF CHINA	11.	BNP PARIBAS	11. J.P.Morgan
12.	J.P.Morgan	12.	Raiffeisen Bank	12. 🦼	Helaba 🛓 🔶 🛼	12. 🔻 ABN·AMRO
13.	🕒 ¥ 🖲 千月 BANK OF CHINA	13.	J.P.Morgan	1,3:***		13. Helaba 🛓
14.		14.	нѕвс		ABN·AMRO	14. O Hamburg Commercial Bank
15.	НЅВС	15.		15.	HSBC	15. SOCIETE GENERALE
16.		16.		16.	Commercial Bank	16. VINATIXIS
17.	Commercial Consectat	17.	Commarcial Bank	17.		17. 🚺 HSBC
18.	Helaba 🛓 🕨	18. ►	Helaba 🛓 🔎	18.	Raiffeisen Bank	18. Raiffeisen Bank
19.		19.	NORD/LB	19.	COMMERZBANK 스	19. NORD/LB
20.	Deutsche Bank	20.		20.	NORD/LB	20. COMMERZBANK 🕗
21.	NORD/LB	21.	💋 UniCredit	21.	Deutsche Bank	21. ØUniCredit
22.	Ø UniCredit	22.	Deutsche Bank 🖊	22.	Ø UniCredit	22. Deutsche Bank 🖊



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5-Year CDS Spreads **Overview & Historical Analysis**

)	Since 2012, CDS
	spreads have
	continuously trended
	downwards

- 2 In Q2/22, CDS spreads of foreign & domestic banks are almost aligned. However, foreign banks overtook German banks and are trading c. 9bps higher on average
- Since 2021, almost all banks showed a worsening in CDS spreads, in particular driven by the Russian invasion into Ukraine and following global sanctions, increasing inflation and high economic uncertainty

$\cap 2/22$

received a rating downgrade by one notch

		0		10-Y	ear Price Deve	lopment (in b	ps)				2	3-Ye	ar Changes	(in %) ³	Volatility	Long	Term Ra	atings
German Institutions	31/12/2012	31/12/2013	31/12/2014	31/12/2015	31/12/2016	31/12/2017	31/12/2018	31/12/2019	31/12/2020	31/12/2021	30/06/2022	Δ 19-22	Δ 20-22	Δ 21-22	90 Days	S&P	Moody's	s Fitc
Bayern LB	94.6	101.0	77.2	75.8	68.6	32.9	38.3	35.3	64.4	37.4	65.7	86.2%	2.0%	75.8%	2.4%	-	Aa3	A
Commerzbank	154.6	110.7	83.6	90.6	117.3	54.5	124.7	35.2	38.7	44.4	103.1	192.6%	166.3%	132.1%	1.6%	BBB+	A2	-
Deutsche Bank	95.2	84.3	79.7	96.5	162.3	72.4	204.6	60.9	54.5	45.8	127.6	109.5%	134.2%	178.5%	1.7%	A-	A2	A
DZ Bank	92.4	82.4	75.9	78.1	78.6	70.2	66.1	62.0	62.5	33.6	50.0	-19.3%	-19.9%	48.8%	0.0%	A+	Aa2	A
Hamburg Commercial	170.1	189.3	193.8	187.0	172.1	147.6	149.0	109.0	75.2	66.1	103.3	-5.2%	37.3%	56.5%	1.7%	BBB	Baa1	-
Helaba	103.9	67.2	58.3	58.2	52.3	46.2	46.9	42.3	56.0	39.7	84.3	99.2%	50.5%	112.3%	3.4%	А	Aa3	AA
LBBW	96.6	80.8	61.4	64.8	50.0	36.6	38.8	48.0	46.9	33.1	53.7	11.8%	14.4%	62.1%	1.1%	-	Aa3	A
Nord LB	na	na	104.6	114.1	115.8	72.8	93.5	67.2	95.1	69.2	82.8	23.3%	-12.9%	19.8%	2.9%	-	A3	A
Min	92.4	67.2	58.3	58.2	50.0	32.9	38.3	35.2	38.7	33.1	50.0	-19.3%	-19.9%	19.8%	0.0%			
Max	170.1	189.3	193.8	187.0	172.1	147.6	204.6	109.0	95.1	69.2	127.6	192.6%	166.3%	178.5%	3.4%			
Median	96.6	84.3	78.4	84.3	97.2	62.4	79.8	54.5	59.2	42.1	83.6	54.8%	25.9%	69.0%	1.7%			
Mean	115.3	102.2	91.8	95.7	102.1	66.6	95.3	57.5	61.7	46.2	83.8	62.3%	46.5%	85.7%	1.8%			

		0			10-Year Pr	ice Developm	ent (in bps)				2	3-Yea	ar Changes	(in %) 3	Volatility	Long	J-Term Ra	atings
Foreign Institutions	31/12/2012	31/12/2013	31/12/2014	31/12/2015	31/12/2016	31/12/2017	31/12/2018	31/12/2019	31/12/2020	31/12/2021	30/06/2022	Δ 19-22	Δ 20-22	∆ 21-22	90 Days		Moody's	
ABN Amro	na	90.2	62.1	66.2	65.4	45.0	64.0	19.6	21.2	39.4	77.7	295.7%	267.4%	97.3%	2.1%	А	A1	A+
Bank of China	108.5	113.6	120.1	130.4	142.4	66.1	81.8	35.5	34.3	56.6	92.6	160.6%	170.2%	63.6%	2.8%	A+	Aa3	А
BNP Paribas	137.0	83.3	69.6	70.8	85.6	22.5	73.0	25.4	32.0	33.7	74.9	195.3%	134.2%	122.4%	2.2%	A+	Aa3	AA-
Credit Agricole	157.7	104.1	70.3	70.6	73.7	19.8	65.0	23.1	27.7	30.9	68.0	194.8%	145.9%	120.2%	2.3%	A+	Aa3	AA-
Crédit Mutuel	150.1	109.1	64.8	41.9	24.0	26.5	40.6	37.2	44.2	39.6	96.7	160.3%	119.1%	144.0%	4.4%	A+	Aa3	AA-
Erste Group Bank	149.4	116.8	159.3	123.2	127.7	47.3	52.8	47.5	42.6	39.6	84.7	78.1%	98.7%	113.7%	2.4%	A+	A2	А
HSBC	93.5	65.4	52.1	83.1	81.2	35.3	91.3	50.2	44.1	45.6	99.5	98.2%	125.6%	117.9%	2.6%	A-	A3	A+
ING Bank	109.2	81.2	54.8	52.4	64.4	16.9	39.1	19.6	21.4	23.8	53.8	174.5%	152.0%	126.1%	2.1%	A+	A1	AA
JP Morgan	89.3	67.0	62.9	72.7	63.8	37.4	69.0	33.0	46.7	48.1	102.0	209.2%	118.5%	112.3%	2.4%	A-	A2	AA
Natixis	173.8	100.9	58.3	68.5	80.2	30.2	62.0	50.6	34.1	35.8	79.5	57.2%	132.9%	122.0%	2.2%	A+	A1	A+
RBI	159.5	126.4	239.6	211.5	142.4	62.8	80.8	75.5	47.0	38.7	155.5	106.1%	230.6%	301.7%	13.5%	A-	A2	
Santander	270.6	123.2	79.6	139.7	119.3	31.8	74.9	27.9	35.3	37.8	77.3	176.7%	119.2%	104.8%	2.1%	A+	A2	A-
Societe Generale	168.5	102.1	93.7	69.7	84.6	23.4	74.0	26.7	32.8	37.0	84.6	216.4%	158.2%	128.7%	2.3%	А	A1	Α
UniCredit	299.5	146.6	128.0	132.7	173.8	61.4	177.4	76.3	71.2	67.8	153.0	100.4%	114.7%	125.6%	1.9%	BBB	Baa1	BBB
Min	89.3	65.4	52.1	41.9	24.0	16.9	39.1	19.6	21.2	23.8	53.8	57.2%	98.7%	63.6%	1.9%			_
Max	299.5	146.6	239.6	211.5	173.8	66.1	177.4	76.3	71.2	67.8	155.5	295.7%	267.4%	301.7%	13.5%			
Median	150.1	103.1	69.9	71.7	82.9	33.6	71.0	34.3	34.8	39.1	84.6	167.6%	133.6%	121.1%	2.3%			
Mean	159.0	102.1	93.9	95.2	94.9	37.6	74.7	39.2	38.2	41.0	92.8	158.8%	149.1%	128.6%	3.2%			

			0			10-Year Pr	ice Developm	ent (in bps)				2	3-Yea	ar Changes ((in %) 3	Volatility	Long-Term Ratings
	All Institutions	31/12/2012	31/12/2013	31/12/2014	31/12/2015	31/12/2016	31/12/2017	31/12/2018	31/12/2019	31/12/2020	31/12/2021	30/06/2022	Δ 19-22	Δ 20-22	Δ 21-22	90 Days	S&P Moody's Fitch
' .	Min	89.3	65.4	52.1	41.9	24.0	16.9	38.3	19.6	21.2	23.8	50.0	-19.3%	-19.9%	19.8%	0.0%	
	Max	299.5	189.3	239.6	211.5	173.8	147.6	204.6	109.0	95.1	69.2	155.5	295.7%	267.4%	301.7%	13.5%	
	Median	143.2	101.0	76.6	77.0	82.9	41.2	71.0	39.7	44.1	39.5	84.4	107.8%	122.4%	115.8%	2.2%	
	Mean	143.7	102.2	93.2	95.4	97.5	48.2	82.2	45.8	46.7	42.9	89.6	123.7%	111.8%	113.0%	2.7%	

,	in Q2/22,
	Commerzbank

					3-Yea	ar Changes (in %)	Volatility	Long	Term Ra	atings							
5-Year Govt. Interest Rates	31/12/2012	31/12/2013	31/12/2014	31/12/2015	31/12/2016	31/12/2017	31/12/2018	31/12/2019	31/12/2020	31/12/2021	30/06/2022	Δ 19-22	Δ 20-22	Δ 21-22	90 Days	S&P	Moody's	Fitch
EU Central Government Bond	58.3	107.1	7.1	1.7	-47.3	-16.6	-26.3	-44.6	-72.4	-47.9	110.6	347.7%	252.7%	331.0%	8.1%	AAA	Aaa	AAA
United Kingdom Government Debt	84.9	204.2	113.1	125.6	48.0	72.0	90.7	60.6	-11.2	73.1	191.4	215.8%	1,808.9%	161.8%	3.7%	AA	Aa3	AA-

Notes: All calculations based on mid prices

* A change in Long-Term Ratings is indicated with color (upgrade / neutral / downgrade)

5-Year CDS Spreads Pricing, Rating, Volatility & Development

- Based on the latest 5-year CDS spreads, the most solvent banks are DZ Bank, LBBW and ING Bank with CDS spreads below 60 bps
- The ratio between the least and most solvent bank narrowed from 3.6x to 3.1x (155.5 bps / 50.0 bps), a result from different exposure to global sanctions and perceived mediumterm solvency
- Almost all banks experienced significantly higher CDS spreads than 12 months ago, especially Austrian RBI

CDS Mid-Price as of 30/06/2022 (in bps)



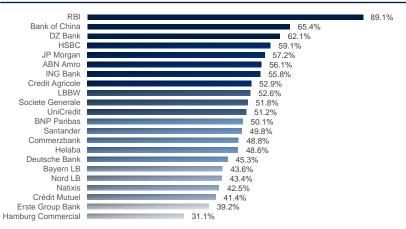
Long-Term Rating* as of 30/06/2022



12 Month Change in CDS Mid-Price (in bps)



3 Month (90 days) Volatility as of 30/06/2022



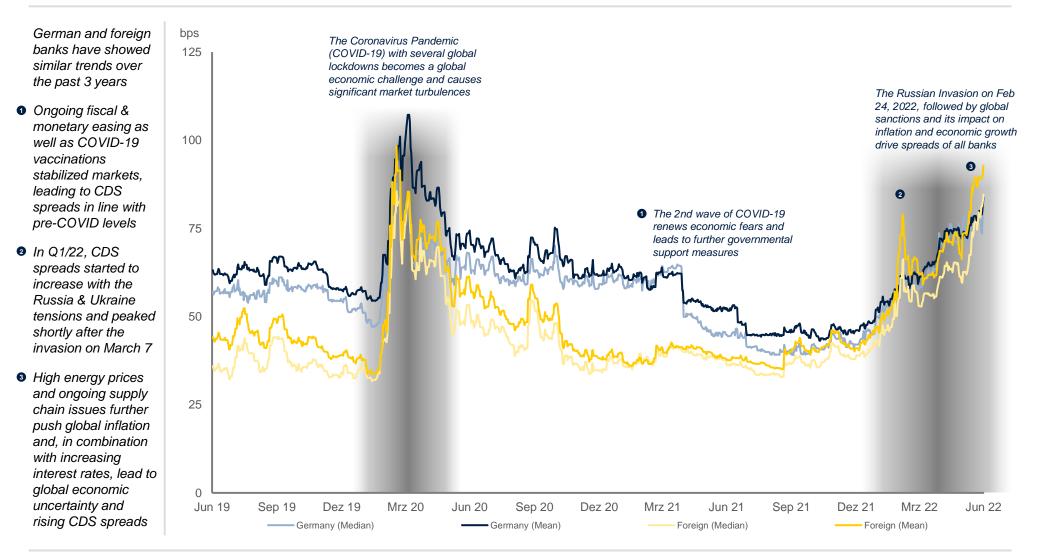
Source: S&P Capital IQ as of June 30th, 2022

Note: All calculations based on mid prices, * S&P Rating notches (institutions without S&P Rating converted using best available Moody's or Fitch rating)



5-Year CDS Spreads

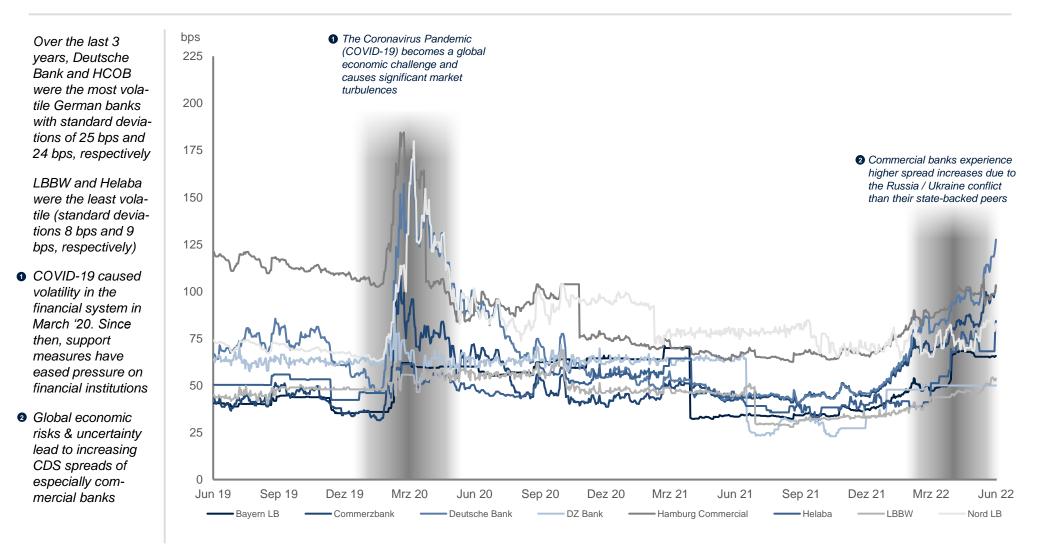
36 Month Spread Development of German vs. Foreign Institutions





5-Year CDS Spreads

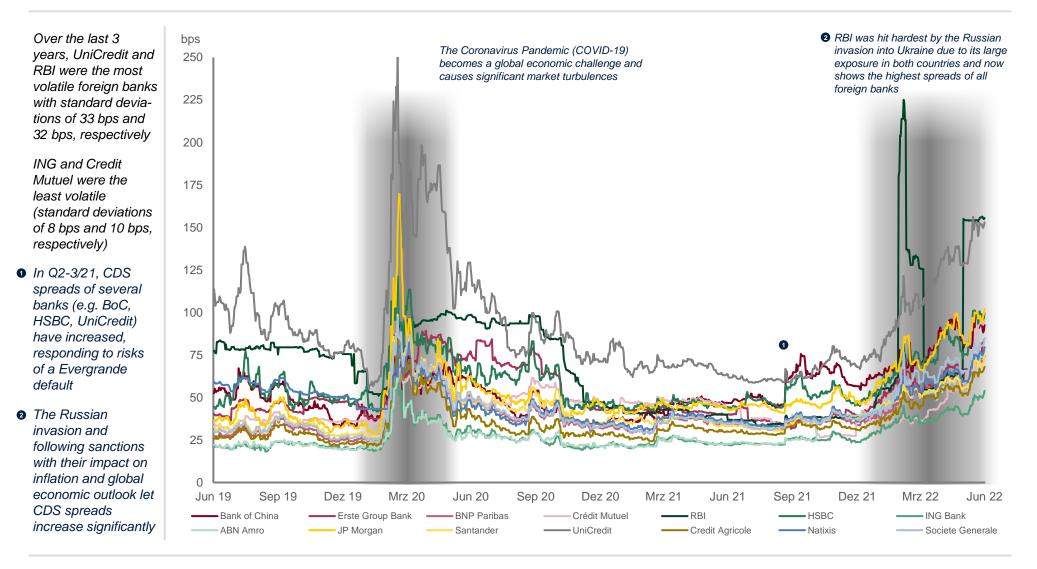
36 Month Spread Development of German Institutions



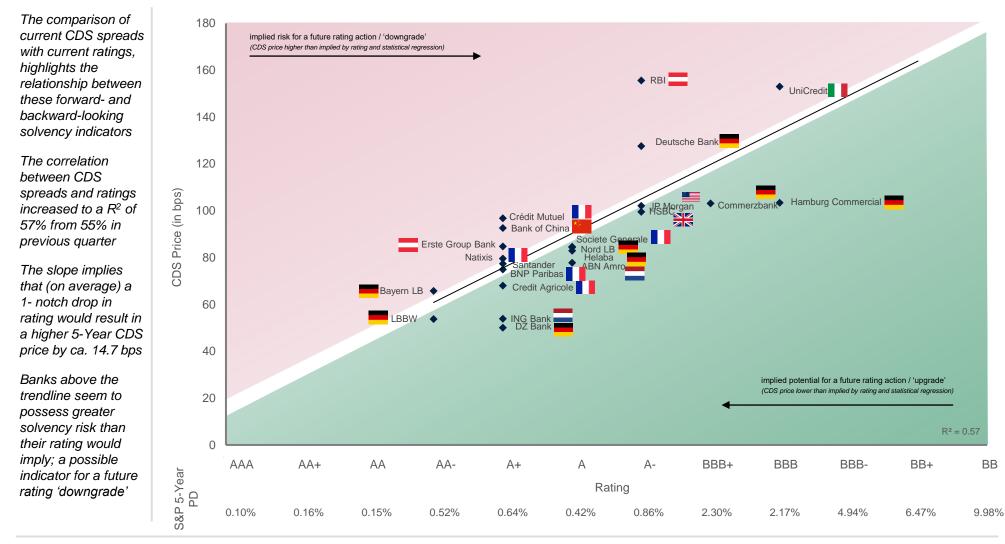


5-Year CDS Spreads

36 Month Spread Development of Foreign Institutions



F C F Spreads HE FINANCING SPECIALIST 5-Year CDS Spreads CDS vs. Rating for 5 Year Spreads



Source: S&P Capital IQ as of June 30th, 2022

Note: All calculations based on mid prices; rating according to S&P Rating notches, if available. Institutions without S&P Rating converted using best available Moody's or Fitch rating; S&P 5-Year PD represents the 5-year probability of default for each respective rating notch

LEAGUE TABLES FY 2021

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League Tables H1/2022*

Corporate IG Loans in Germany & Austria by Lender

	The League Tables	Co	orporate Loans (s	EUR 10	0m)			Со	porate Loans (E	EUR 100	m – 2	2 50 m)		Cor	porate Loans (E	EUR 250n	n – 5	600m)	
	show the TOP 20 banks by lending volumes for	Ra	nk Lender	Deal Value (EURm)	# Deals	Ø Ticket size	[%] Share	Ranl	< Lender	Deal Value (EURm)	# Deals	Ø Ticket size	% Share	Ranl	c Lender	Deal Value (EURm)	# Deals	Ø Ticket size	% Share
	corporate IG loans in	3 1	Commerzbank	260.3	13	20.0	27.4%	3 1	Commerzbank	365.4	10	36.5	16.2%	3 1	UniCredit	738.8	8	92.4	14.3%
	Germany & Austria*	2	2 LBBW	103.2	8	12.9	10.9%	2	LBBW	288.7	5	57.7	12.8%	2	Commerzbank	521.5	9	57.9	10.1%
	The total market	3	B DZ BANK	72.0	5	14.4	7.6%	3	DZ BANK	247.9	7	35.4	11.0%	3	Deutsche Bank	384.9	8	48.1	7.5%
	(deal volume ≤EUR	4	HSBC	61.3	5	12.3	6.5%	4	Deutsche Bank	239.2	7	34.2	10.6%	4	LBBW	380.9	7	54.4	7.4%
	500m) comprises 45	5	5 UniCredit	56.5	5	11.3	6.0%	5	UniCredit	197.5	5	39.5	8.8%	5	DZ BANK	372.4	8	46.5	7.2%
	deals with a total	6	6 CM-CIC	45.0	1	45.0	4.7%	6	NordLB	177.4	4	44.4	7.9%	6	NordLB	174.5	4	43.6	3.4%
	volume of EUR 7bn	7	V Natixis	45.0	1	45.0	4.7%	7	HSBC	150.0	4	37.5	6.7%	7	KfW	155.0	2	77.5	3.0%
•	The meiority of deale	8	B Deutsche Bank	43.7	5	8.7	4.6%	8	EIB	66.3	1	66.3	2.9%	8	Erste Group Bank	138.3	2	69.1	2.7%
U	The majority of deals in H1/2022 had deal	g	Bank Tirol/Vorarlb.	40.7	3	13.6	4.3%	9	KfW	66.3	1	66.3	2.9%	9	Helaba	137.2	3	45.7	2.7%
	volumes below EUR	1	0 OLB	22.8	2	11.4	2.4%	10	Santander	61.7	2	30.8	2.7%	10	Rabobank	135.6	3	45.2	2.6%
	100m	1	1 NordLB	20.1	2	10.1	2.1%	11	BNP Paribas	58.3	2	29.2	2.6%	11	Citi	126.0	2	63.0	2.4%
		1:	2 Spark. KoelnBonn	20.0	1	20.0	2.1%	12	SEB	45.0	1	45.0	2.0%	12	НСОВ	115.0	1	115.0	2.2%
2	The TOP 20 banks	1:	3 Spark. Freiburg	17.5	1	17.5	1.8%	13	Sumitomo Mitsui	45.0	1	45.0	2.0%	13	Kommkred. Aust.	115.0	1	115.0	2.2%
	cover between 80-	1.	4 Spark. Bremen	16.0	1	16.0	1.7%	14	Kreisspark. Heilbr.	31.5	1	31.5	1.4%	14	BNP Paribas	114.9	3	38.3	2.2%
	99% of the deal	1	5 RBI	15.0	1	15.0	1.6%	15	Kreisspark. Waib.	31.5	1	31.5	1.4%	15	Santander	106.0	2	53.0	2.1%
	volumes in each segment	1	6 IKB	14.2	1	14.2	1.5%	16	Erste Group Bank	31.3	1	31.3	1.4%	16	Credit Agricole	86.0	1	86.0	1.7%
	seyment	1	7 Kreisspar.Essl./N.	14.2	1	14.2	1.5%	17	Helaba	31.3	1	31.3	1.4%	17	JPMorgan	86.0	1	86.0	1.7%
3	UniCredit dominates	18	8 Santander	14.2	1	14.2	1.5%	18	BayernLB	25.0	1	25.0	1.1%	18	SG CIB	86.0	1	86.0	1.7%
	the large deal	1	9 RLB OO	11.3	1	11.3	1.2%	19	CM-CIC	25.0	1	25.0	1.1%	19	ING	78.9	2	39.4	1.5%
	segment, while	2	0 Credit Suisse	8.3	1	8.3	0.9%	20	Credit Agricole	25.0	1	25.0	1.1%	20	HSBC	76.0	2	38.0	1.5%
	Commerzbank is	Sul	btotal	918.0	17		96.7%	21	RBI	25.0	1	25.0	1.1%	Subt	otal	4,128.8	15		80.0%
	leading by volume over all three segments				0		2	Subt	otal	2,234.3	13		99.0% 2						2





FCF allocated scores of 1 (low) to 22 (high) to all banks to determine the market's view on each bank, based on:

- *i.* 1-Year CDS spread and volatility¹;
- ii. 5-Year CDS spread and volatility¹;
- iii. 10-Year CDS spread and volatility¹;
- iv. Public ratings (Fitch, Moody´s, S&P)

The combined Weighted CDS and Rating Score result in an overall rank in the League Table, providing an indication on the banks' expected future stability and crisis resistance across maturities

The market views LBBW (57.7) on the top of the league table, whereas UniCredit ranks last (4.0)

Rank	Trend 2 vs. Q1 2022	Bank	Country	Last Price	CDS Rank Score	1Y 90-Day Ø Price	Rank Score	Last Price	CDS Rank Score	5Y 90-Day Ø Price	Rank Score	Last Price	CDS Rank Score	90-Day Ø Price	Rank Score	CDS Weighted CDS Score	Ratin Last Rating	g Rank Score	Total Overall Rank
1		LB≣BW	-	29.0	18	33.7	9	53.7	21	41.7	21	70.4	20	55.2	21	36.7	4	21	57.7
2		A Bayern LB		25.8	19	22.6	20	65.7	19	53.0	16	95.8	16	70.4	16	35.3	4	21	56.3
3	\	ING ಖ		22.0	22	15.9	22	53.8	20	37.6	22	67.1	21	50.9	22	43.0	5	12	55.0
4	1	DZ BANK		23.8	21	23.8	19	50.0	22	47.0	19	63.9	22	61.1	20	41.0	5	12	53.0
5				24.5	20	18.4	21	68.0	18	47.5	18	84.0	19	63.8	19	38.3	5	12	50.3
6		BNP PARIBAS		34.9	15	26.2	16	74.9	17	52.3	17	92.1	18	69.8	17	33.3	5	12	45.3
7		📣 Santander	æ	34.6	16	24.3	18	77.3	16	53.3	15	98.9	13	75.4	12	30.0	5	12	42.0
8	\$	Crédit 🖧 Mutuel		43.0	9	24.4	17	96.7	8	46.2	20	120.4	9	66.9	18	27.0	5	12	39.0
8				37.6	12	28.3	13	79.5	14	55.5	12	96.9	15	73.4	15	27.0	5	12	39.0
10	>	ABN•AMR0		38.0	11	29.0	12	77.7	15	53.4	14	97.7	14	74.0	14	26.7	6	8	34.7
11	\	Helaba 🛓	-	34.9	14	27.4	14	84.3	12	53.8	13	111.7	10	75.1	13	25.3	6	8	33.3
12	\	SOCIETE GENERALE		37.6	13	26.5	15	84.6	11	59.4	10	101.3	12	75.9	11	24.0	6	8	32.0
13				43.5	8	36.0	8	84.7	10	59.0	11	110.2	11	80.7	10	19.3	5	12	31.3
14		● 学图能行 BANK OF CHINA	*)	33.2	17	29.0	11	92.6	9	75.8	5	138.3	4	115.4	4	16.7	5	12	28.7
15	/	NORD/LB		58.0	4	52.3	3	82.8	13	73.7	7	95.3	17	87.0	9	17.7	6	8	25.7
16	\	Нѕвс		42.3	10	29.9	10	99.5	7	72.3	8	131.2	6	105.1	6	15.7	7	4	19.7
17	\	COMMERZBANK 스		55.6	6	42.2	6	103.1	5	71.0	9	127.2	7	95.8	8	13.7	8	3	16.7
18		J.P.Morgan		55.7	5	46.8	5	102.0	6	74.9	6	125.6	8	100.5	7	12.3	7	4	16.3
19		Deutsche Bank 🖊		84.4	1	58.9	2	127.6	3	80.2	4	147.4	3	105.8	5	6.0	7	4	10.0
20	~	Gommercial Bonk		55.0	7	51.1	4	103.3	4	86.9	3	136.4	5	119.7	3	8.7	9	1	9.7
21	\	Raiffeisen Bank		68.9	3	42.1	7	155.5	1	91.4	2	193.5	1	123.5	2	5.3	7	4	9.3
22	-	💋 UniCredit		80.8	2	67.5	1	153.0	2	110.2	1	181.1	2	142.6	1	3.0	9	1	4.0



The Dutch ING, consistently heading the league table over the last quarters, dropped to rank 3, likely driven by a certain exposure to Russia/Ukraine and energy/project finance assets

The German DZ Bank shows the most positive development over the last four quarters, gaining six places from rank 10 in Q3/21 to rank 4 in Q2/22

RBI experienced the largest drop by 8 places over the past quarters from rank 13 to rank 21, in particular driven by the Russian invasion during the last quarter

	Q3 2021		Q4 2021		Q1 2022		Q2 2022
1.		1. 🕨	ING	1.	ING	1.	LB Ξ BW
2.		2.	♦> Bayern LB	2.	♦> Bayern LB	2.	♦> Bayern LB
3.	♦> Bayern LB	3.		3.	LB≡BW	3.	(ING 🂫 💦
4.	BNP PARIBAS	4.	LB Ξ BW	4.	Crédit 🖧 Mutuel	4.	🗖 DZ BANK
5.	ABN·AMRO	5.	BNP PARIBAS	5.			
6.	LB≡BW	6. 🔫	DZ BANK	6.	BNP PARIBAS	6.	BNP PARIBAS
7.		······		7.	DZ BANK 🕨	7.	📣 Santander
8.	🕹 Santander	8.	🕹 Santander	8.	📣 Santander	8.	Crédit 🕹 Mutuel
9.	SOCIETE GENERALE	9.	SOCIETE GENERALE	9.		9.	
10.	DZ BANK •	10.	Crédit 🖧 Mutuel	10.	Helaba 🛓 😑	10.	ABN·AMRO
11.	Crédit 🖧 Mutuel	11.	ABN·AMRO	11.	SOCIETE GENERALE	11.	Helaba 🛓
12.		12.		12.	ABN·AMRO	12.	
13.	Raiffeisen Bank	13. ►	Raiffeisen Bank	13.		13.	
14.	Helaba 🛓 😑	14.	Helaba 🛓 📃	14.	● ¥ 圓 銀行 BANK OF CHINA	14.	O F B 錄行 BANK OF CHINA
15.	→ 「」 能行 BANK OF CHINA	15.		15.	HSBC	15.	NORD/LB
16.	COMMERZBANK	16.	HSBC	16.	COMMERZBANK 스	16.	Нѕвс
17.	НЅВС	17.	COMMERZBANK 🕗	17.	NORD/LB	17.	COMMERZBANK 스
18.	Deutsche Bank 🖊	18.	Deutsche Bank 🖊	18.	J.P.Morgan	18.	J.P.Morgan
19.	J.P.Morgan	19.	J.P.Morgan	19.	Deutsche Bank 🖊	19.	Deutsche Bank 🖊
20.	NORD/LB	20.	NORD/LB	20.	Raiffeisen Bank International	20.	Commercial Eank
21.	💋 UniCredit	21.	Commercial Bank	21.	Commercial Bank	21.	Raiffeisen Bank
22.	Commercial Commercial	22.	💋 UniCredit	22.	💋 UniCredit	22.	💋 UniCredit



Ranking Q2 2022 – Fundamental View Only

FCF allocated

scores of 1 (low) to 22 (high) to the 22 banks, based on:

- i. Return-on-Equity (RoE)
- ii. Return-on-Assets (RoA);
- iii. Tier-1 Capital Ratio,
- iv. Percentage of Non-Performing-Loans of Total Loans;
- v. Cost Efficiency (Cost-Income Ratio

The equal weighting of the fundamental scores results in the Total Overall Score in the League Table

The ranking provides a key indication for each banks' stability and solvency based on the most recent fundamental performance

JP Morgan (86.0) leads the ranking, whereas Deutsche Bank is last (27.0)

Rank	Trend	Bank	Country	Return on	Equity Rank	Return on	Assets Rank	Tier 1 Capit	al Ratio Rank	% Non-perf	. Loans Rank	Cost Effic	ency Rank	Total Overall	Delta vs Market
Q2 2022	2 vs. Q1 2022			RoE	Score	RoA		Tier 1 Ratio	Score	% NPL	Score	CIR	Score	Rank	View
1		J.P.Morgan		14.9	22	1.1	22	13.7	6	0.7	21	57.0	15	86.0	17
2	-	Commercial Bank		7.7	12	1.1	21	28.9	22	2.0	10	50.0	20	85.0	18
3	>	Def F E 能行 Bank of china	*)	10.1	18	0.9	19	13.3	3	1.3	16	28.2	22	78.0	11
4	\			10.5	19	0.8	18	15.6	12	2.0	9	55.6	16	74.0	9
5	>	Crédit 🖧 Mutuel		8.4	14	0.4	14	18.9	21	2.8	4	53.3	19	72.0	3
6	\	ING ಖ		10.1	17	0.5	16	16.5	15	1.8	12	60.6	11	71.0	-3
7	\$	DZ BANK		7.5	11	0.4	11	16.8	17	1.2	18	58.9	13	70.0	-3
8		📣 Santander	<u>ä</u> k	11.0	21	0.7	17	13.9	7	3.3	1	46.2	21	67.0	-1
8	\	Raiffeisen Bank International		10.7	20	0.9	20	13.3	2	2.4	7	53.5	18	67.0	13
10	\	HSBC		6.6	9	0.5	15	16.7	16	1.7	13	64.2	10	63.0	6
11	\$	♦ Bayern LB		3.8	5	0.2	5	17.3	18	0.7	20	59.0	12	60.0	-9
12				8.4	15	0.3	9	12.5	1	1.4	15	57.8	14	54.0	-7
13		LB≣BW		3.0	4	0.1	4	15.9	14	0.7	22	64.7	9	53.0	-12
14	~	ABN·AMRO		7.3	10	0.4	12	17.3	18	2.3	8	76.4	4	52.0	-4
15	\	Helaba 🛓		5.6	7	0.2	8	15.1	9	0.9	19	66.1	8	51.0	-4
16	\			9.2	16	0.4	13	15.1	9	3.3	2	67.0	7	47.0	-4
17	\	💋 UniCredit		1.5	2	0.1	2	17.9	20	3.1	3	54.6	17	44.0	5
18		🔊 BNP PARIBAS		7.9	13	0.3	10	13.5	4	2.5	6	67.3	6	39.0	-12
19	~	WNATIXIS BEYOND BANKING		5.6	8	0.2	7	13.5	4	1.9	11	73.3	5	35.0	-11
20	\	COMMERZBANK 스		1.8	3	0.1	3	15.4	11	1.5	14	79.3	3	34.0	-3
21	\	NORD/LB		0.3	1	0.0	1	15.6	13	1.2	17	94.0	1	33.0	-6
22	\	Deutsche Bank 🖊		4.2	6	0.2	6	14.6	8	2.6	5	84.0	2	27.0	-3

Source: S&P Capital IQ as of June 30th, 2022

Notes: Fundamental performance criteria are based on latest LTM figures. If no recent data was available, the latest FY figures were considered

Ranking Development LTM – Fundamental View Only

Two banks, JP Morgan and Hamburg Commercial Bank, consistently head the league table over the last four quarters

THE FINANCING SPECIALIST

Credit Agricole shows the most positive development over the last four quarters, gaining five places from rank 19 in Q3/21 to rank 12 in Q2/22)

HSBC experienced the sharpest drop in the league table, falling fiveplaces from rank 5 to rank 10

	Q3 2021		Q4 2021		Q1 2022		Q2 2022
1.	J.P.Morgan	·····•1.···•	J.P.Morgan	·····•1.···•	J.P.Morgan		J.P.Morgan
2.	Commercial Bank	2.	Commercial Bank	2.	Commercial Bank	2.	Commercial Eank
3.	O ¥ 圓 銀 行 BANK OF CHINA	3.		3.		3.	◆ ⑧ 縦 行 BANK OF CHINA
4.		4	HSBC	4.		4.	
5.	HSBC	5.		5.	ING ಖ	5.	Crédit 🖧 Mutuel
6.	Raiffeisen Bank	6.	Raiffeisen Bank		DZ BANK	6.	ING ಖ
7.	Crédit 🖧 Mutuel	7.	Crédit 🖧 Mutuel	7.	HSBC	7.	DZ BANK
8.	ING ಖ	8.	📣 Santander	8.	Raiffeisen Bank	8.	📣 Santander
9.	VZ DZ BANK	9.		9.	📣 Santander	.9.	Raiffeisen Bank
10.	📣 Santander	10. /	ING 🂫	10.	Crédit 🖧 Mutuel	10.	HSBC
11.	♦> Bayern LB	11/	DZ BANK	· 11.	Bayern LB	11.	♦> Bayern LB
12.	Helaba 🛓 🛓	12.	Bayern LB	12.		12.	
13.	LB Ξ BW	/ 13.		13. 🌂		13.	LB≣BW
14.	🔊 BNP PARIBAS	/ 14.	LB≣BW	14.	Helaba 😑	14.	ABN·AMRO
15.	ABN·AMRO	/ 15.	ABN·AMRO	15.	ABN·AMRO	15.	Helaba 🛓
16.	💋 UniCredit 🛛 🗸	16.	💋 UniCredit	16.	💋 UniCredit	16.	
17.		17.	Helaba 🛓	17.	LB≣BW	17.	💋 UniCredit
18.	NORD/LB	18.	BNP PARIBAS	18.	BNP PARIBAS	18.	🔊 BNP PARIBAS
19.		19.	NORD/LB	19.	COMMERZBANK 스	19.	
20.		20.	Deutsche Bank 🗾	20.	NORD/LB	20.	COMMERZBANK 스
21.	Deutsche Bank 🖊	21.	COMMERZBANK 스	21.	Deutsche Bank 🗾	21.	NORD/LB
22.	COMMERZBANK 스	22.		22.		22.	Deutsche Bank 🖊



Credit Default Swaps

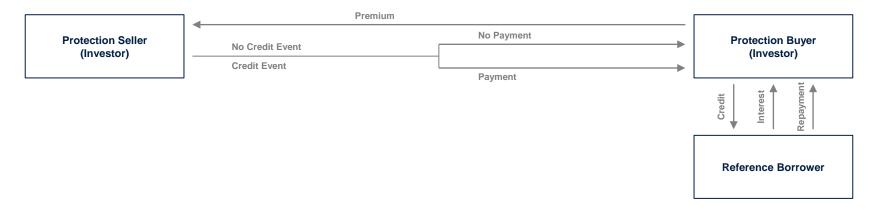
Credit Default Swaps (CDS) are, in simplest terms, very much like insurance policies. The main difference between a classical insurance policy and a CDS is that those buying the CDS can trade in and out of their contracts.

A CDS is a privately negotiated contract in which one party, the Protection Buyer (the one seeking to shed the risk, for example a lender to a bank), pays a fee (also premium or 'spread') to the Protection Seller (the one taking on the risk, for example specialized financial institutions) for protection against a loss that may be incurred from the exposure to a loan in case of unforeseen developments (e.g. non-repayment of / default on the loan). The development is known as a credit event, indicating that the borrower (the reference entity) on which the CDS contract is written is unable to pay its debts. If, such a credit event occurs, the Protection Seller will make a payment to the Protection Buyer of the contract.

For example: A typical contract provides for the Protection Buyer to pay the Protection Seller 500 bps per year (5.0% p.a.) for protection against a default of Bank A on its senior debt. The contract's notional size is for EUR 10m. This means that the Protection Buyer pays EUR 500,000 per year (4 quarterly payments of EUR 125,000). If another bank, Bank B, has a CDS spread priced at 250 bps (2.5% p.a.), Bank B is perceived to have a lower credit risk than Bank A.

The higher the credit risk of a bank (as seen in the CDS spread), the greater the funding costs that a bank incurs will be. Funding costs represent rate at which the bank is able to borrow from the institutional / inter-bank market (funding cost risk premium). As a direct consequence, the funding cost risk premium has a direct impact on the rates that a bank will charge its clients: Bank B will be able to offer i) cheaper, longer financing conditions and ii) greater flexibility during periods of stress with their clients (corporates), ceteris paribus.

Aside from the direct impact on a banks' lending rates, the CDS spread is also a good proxy of a banks' current / future behavior towards its corporate clients in times of market (macro) or client specific (micro) volatility / stress.





Background Information

The FCF Bank Monitor highlights the key developments of German and foreign banks most active in the German and Austrian midcap financing market

The FCF Bank Monitor outlines several key factors that should be considered when selecting banks during a (re)financing of existing financial liabilities

Background Information

- CDS spreads of banks reveal two fundamental market principles that have significant implications for borrowers:
 - Solvency / crisis resistance: CDS spreads put a price on the future solvency of a bank according to all information currently available in the market and signal the bank's ability to remain operational in periods of crisis / illiquid markets.
 - > Banks with lower, more stable CDS spreads should respond less erratically during periods of stress with their borrowers (i.e. breach of covenant), ceteris paribus
 - Refinancing costs / ability to lend at low rates: CDS spreads indicate the perceived solvency of banks, hence their future ability to refinance in the future (funding costs). Consequently, banks with lower, more stable CDS spreads generally have to pay lower risk premia as part of their funding costs, enabling them to offer cheaper, longer financing conditions to their customers / borrowers, ceteris paribus
- Reference bonds of banks and their corresponding CDS spreads are strongly impacted by regulatory changes / events:
 - In '18, the SAG was modified to also allow German commercial banks to issue 'preferred' bonds as of May '19
 - The corresponding reference CDS spreads of German commercial banks (e.g. Deutsche Bank, Commerzbank) decreased sharply in May '19 and can now be compared 'like-for-like' with their European competitors
- League Tables are based on available data of Dealogic, a major database for loan transactions. Please note that the respective deal volumes and numbers do not represent the total German & Austrian corporate lending market as not all transactions - in particular bilateral loans and not-Bookrunner-eligible loans - are reported to / available in the database





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