



# FCF Bank Monitor

Q3 2023



THE FINANCING SPECIALIST



**EXECUTIVE SUMMARY**

# Executive Summary

*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), 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 long-term 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, and thus, several relevant regional banks are excluded (e.g. BTV, Oberbank, RLBOÖ, Sparkassen)
- 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 OVERVIEW



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

- 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 150 transactions with a total placement volume in excess of EUR 5.0 billion since foundation in 2005
- More than 15 professionals headquartered in Munich

## Capital Markets Capabilities and Services

Equity	Private / Pre-IPO	<ul style="list-style-type: none"> <li>■ Venture capital</li> <li>■ Growth capital</li> </ul>	<ul style="list-style-type: none"> <li>■ Private equity</li> </ul>
	Public	<ul style="list-style-type: none"> <li>■ Initial Public Offering (IPO) / Capital increase</li> <li>■ Dual-track (IPO and alternative transaction)</li> </ul>	<ul style="list-style-type: none"> <li>■ pursued in tandem</li> <li>■ Private investment in Public Equity (PIPE)</li> <li>■ Block trade</li> </ul>
Debt	Short-term Debt	<ul style="list-style-type: none"> <li>■ Receivables / Factoring / Asset-backed securities</li> <li>■ Borrowing base / Inventory</li> </ul>	<ul style="list-style-type: none"> <li>■ Working capital / Revolving credit facility</li> <li>■ Guarantees / Letter of credit</li> </ul>
	Long-term Debt	<ul style="list-style-type: none"> <li>■ Bank loan facility / Syndicated loans</li> <li>■ Sale-and-lease-back / Leasing</li> <li>■ Corporate bonds (public / private placement)</li> <li>■ High yield / PIK bond</li> </ul>	<ul style="list-style-type: none"> <li>■ Promissory note (<i>Schuldscheindarlehen</i>)</li> <li>■ Second lien / Subordinated loans</li> <li>■ Venture debt</li> <li>■ Unitranches</li> </ul>
	Hybrid	<ul style="list-style-type: none"> <li>■ Mezzanine capital</li> </ul>	<ul style="list-style-type: none"> <li>■ Convertible bonds</li> </ul>

## Selected Transactions

<b>European Investment Bank Debt Facility</b>  In Ovo B.V. EUR 40m August 2023	<b>Debt Facility</b>  JORA Holding GmbH & Co. KG ~ EUR 30m June 2023	<b>Acquisition Loan Facility</b>  KKA Management GmbH EUR 20m May 2023	<b>Capital Increase</b>  aerofols GmbH [confidential] March 2023	<b>M&amp;A (Sell-Side)</b>  Energieinsel [confidential] March 2023	<b>M&amp;A (Sell-Side)</b>  PMG Projekttraum Management GmbH [confidential] March 2023	<b>M&amp;A (Sell-Side)</b>  SER / RUZ Group [confidential] February 2023	<b>European Investment Bank Debt Facility</b>  German Bionic Systems GmbH EUR 15m December 2022	<b>Financial Advisory</b>  Mitteldeutsche Flughafen AG [confidential] December 2022	<b>Syndicated Loan</b>  ante Holding GmbH & Co. KG [confidential] December 2022	<b>Working Capital Facility</b>  CHO-Time Group EUR 7m November 2022	<b>Software-Leasing Facility</b>  Leading Global Device-as-a-Service Company EUR 10m October 2022
<b>Interest Rate Hedging</b>  Mitteldeutsche Flughafen AG EUR 150m October 2022	<b>European Investment Bank Debt Facility</b>  Evum Motors GmbH > EUR 12m September 2022	<b>Factoring Facility</b>  JORA Holding GmbH & Co. KG EUR 25m September 2022	<b>Equity Transaction – Joint Venture with Family Office</b>  Doppstadt Group > EUR 50m September 2022	<b>Acquisition Loan and Working Capital Facility</b>  Bencis > EUR 20m May 2022	<b>Acquisition Loan Facility</b>  Lloyd Fonds AG [confidential] April 2022	<b>European Investment Bank Debt Facility</b>  numares AG EUR 20m February 2022	<b>Syndicated Loan</b>  Schnellecke Logistics SE EUR 70m December 2021	<b>Syndicated Loan</b>  KWD Automotive AG & Co. KG EUR 70m December 2021	<b>Syndicated Loan</b>  Top 25 Pharmaceutical Company EUR 80m November 2021	<b>Syndicated Loan, Factoring, Real Estate Sale &amp; Lease-Back</b>  Ziegler Holzindustrie GmbH & Co. KG EUR 85m October 2021	<b>Syndicated Loan</b>  Ziegler Holzindustrie GmbH & Co. KG EUR 230m August 2021



**# 1**

financing advisor in Germany, purely focusing on corporate financing transactions



More than  
**15**

investment banking professionals



More than  
**100**

years of aggregated, investment banking / financing experience



More than  
**150**

completed transactions



More than  
**5 bn**

total volume of advised & closed transactions since 2005



**Network**

access to more than 4000 international financial institutions



**2000**

contacts to family offices and ultra-high-net-worth individuals worldwide



More than  
**25**

international conferences organized



More than  
**150**

articles and research papers published



**Leading**

advisor for financing transactions with EIB in the DACH region

## KEY FINDINGS



# Key Findings

*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 (3Q23)

### Macro findings

- In 3Q23, CDS spreads of most banks trended downwards from the recent 1Q23 highs following the collapse of SVB, Signature Bank and Credit Suisse. Emergency central bank liquidity backstops and less aggressive tightening of monetary policy have helped ease investor concerns regarding liquidity and solvency of financial institutions
- Mean CDS spreads of 81.0 bps (German and Foreign Institutions) are almost two times higher compared to 2021 levels (42.9 bps; all-time low levels) and match levels last seen in 2018
- 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 about the banks' expected future stability and crisis resistance:
  - Bayern LB (score: 107.2) heads the league table followed by ING (score: 90.5) and Credit Agricole (score: 88.5)
  - Deutsche Bank (score: 30.7) completes the league table ranking behind Commerzbank (score: 41.7) and Nord/LB (score: 42.8)
- The variation in CDS spreads and ratings highlights the differences in actual and expected bank stability, important considerations when selecting an institution as a lending bank (“Hausbank”) or transaction counterparty:
  - Across 1-year CDS spreads, the lowest CDS spread lies at 18.2 bps (ING) whilst the highest spread lies at 104.1 bps (RBI), 5.7x higher
  - Across 5-year CDS spreads, the lowest CDS spread lies at 46.9 bps (ING) whilst the highest spread lies at 192.5 bps (RBI), 4.1x higher
  - Across 10-year CDS spreads, the lowest CDS spread lies at 61.7 bps (ING) whilst the highest spread lies at 223.5 bps (RBI), 3.6x higher
  - Across S&P ratings, the highest rating is AA- (Helaba, LBBW and Bayern LB) whilst the lowest rating is BBB (UniCredit)
- The relationship between backward- and forward-looking indicators has strengthened over the last quarter whereby the correlation & explanatory power increased to R<sup>2</sup> of 35%. RBI and HCOB are the largest outliers in 3Q23, suggesting these institutions show a higher probability of a future rating downgrade (displaying higher CDS spreads than their current rating would indicate)

### Individual bank findings

- The Austrian RBI shows the highest CDS spreads in 3Q23 as investors continue to evaluate the full impact of the ongoing sale / spin-off of its highly profitable Russia business (in '22 nearly 50% of RBI profit was generated from its Russian operations)
- Despite solid fundamentals, HCOB shows very high CDS spreads in 3Q23, reflecting overall investor caution in relation to higher perceived risk, asset-based lending activities (especially commercial real estate and shipping finance)



# Combined Ranking Overview (Market & Fundamental)

## Q3 2023

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, liquidity and non-performing loan ratios)

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

Bayern LB (score 107.2) heads the league table, whereas Deutsche Bank ranks 22<sup>nd</sup> (30.7)

Rank	Trend	Bank	Country	Market View				Fundamental View						Fundamental View Score	Combined Total Score	Delta vs Market View	
				CDS 1Y Score	CDS 5Y Score	CDS 10Y Score	Rating Score	Market View Score	RoE	RoA	Tier 1 Cap	% NPL	Cost Eff.				LCR
1	→	Bayern LB		20	21	18	20	58.7	14	12	16	19	14	22	48.5	107.2	0
2	↗	ING		22	22	22	12	56.0	18	13	6	13	12	7	34.5	90.5	0
3	↗	CRÉDIT AGRICOLE		21	20	18	12	51.0	10	9	22	10	10	14	37.5	88.5	1
4	↘	LB BW		10	18	20	20	51.0	16	11	8	21	8	3	33.5	84.5	0
5	↘	Helaba		17	18	19	20	55.7	2	1	5	15	6	20	24.5	80.2	-2
6	↘	Santander		20	15	12	12	42.7	15	15	3	2	19	17	35.5	78.2	2
7	→	DZ BANK		11	19	21	12	45.7	6	4	18	16	5	13	31.0	76.7	-1
8	↗	J.P.Morgan		15	13	14	2	29.7	21	20	9	22	13	2	43.5	73.2	5
9	↗	ERSTE Group		5	7	7	12	24.7	17	19	14	14	17	11	46.0	70.7	6
10	↗	Crédit Mutuel		11	10	11	12	33.0	5	8	19	3	16	16	33.5	66.5	0
11	↘	ABN-AMRO		8	13	15	8	31.7	13	14	13	12	4	12	34.0	65.7	0
12	↘	中國銀行 BANK OF CHINA		12	7	5	12	27.3	12	16	2	18	22	6	38.0	65.3	2
13	→	BNP PARIBAS		18	17	16	12	45.3	9	6	4	4	7	5	17.5	62.8	-6
14	→	HSBC		15	9	7	2	22.0	19	17	15	11	15	4	40.5	62.5	2
15	→	UniCredit		6	4	4	1	10.3	20	18	21	8	18	17	51.0	61.3	4
16	→	Raiffeisen Bank International		1	1	1	2	4.0	22	22	16	7	21	21	54.5	58.5	6
17	→	Hamburg Commercial Bank		2	2	2	2	6.0	11	21	19	6	20	19	48.0	54.0	4
18	→	SOCIETE GENERALE		13	11	11	8	30.7	7	7	11	1	9	10	22.5	53.2	-6
19	→	NATIXIS BEYOND BANKING		16	14	14	8	37.0	3	2	1	17	2	1	13.0	50.0	-10
20	↗	NORD/LB		3	5	9	8	19.3	1	3	7	20	1	15	23.5	42.8	-3
21	↘	COMMERZBANK		7	8	8	2	16.7	4	5	12	9	11	9	25.0	41.7	-3
22	→	Deutsche Bank		4	3	3	2	8.7	8	10	10	5	3	8	22.0	30.7	-2

Source: S&P Capital IQ as of September 27th, 2023

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

# Combined Ranking Overview (Market & Fundamental)

## LTM Development

The German Bayern LB secures the top of the league table once again, overtaking LBBW in the rankings from 2Q23 onwards

The French Credit Agricole and American J.P. Morgan continue their upward trajectory with Credit Agricole climbing five ranks since 1Q23 to reach third place on the latest ranking and J.P. Morgan improving by three ranks to eight place over the same time period

Q4 2022		Q1 2023		Q2 2023		Q3 2023	
1.	ING	1.	LB=BW	1.	Bayern LB	1.	Bayern LB
2.	Bayern LB	2.	ING	2.	LB=BW	2.	ING
3.	LB=BW	3.	ERSTE Group	3.	Helaba	3.	CRÉDIT AGRICOLE
4.	DZ BANK	4.	Bayern LB	4.	ING	4.	LB=BW
5.	CRÉDIT AGRICOLE	5.	DZ BANK	5.	Santander	5.	Helaba
6.	ERSTE Group	6.	Santander	6.	CRÉDIT AGRICOLE	6.	Santander
7.	ABN-AMRO	7.	ABN-AMRO	7.	DZ BANK	7.	DZ BANK
8.	Helaba	8.	CRÉDIT AGRICOLE	8.	ABN-AMRO	8.	J.P.Morgan
9.	Crédit Mutuel	9.	中國銀行 BANK OF CHINA	9.	J.P.Morgan	9.	ERSTE Group
10.	Santander	10.	Helaba	10.	中國銀行 BANK OF CHINA	10.	Crédit Mutuel
11.	中國銀行 BANK OF CHINA	11.	J.P.Morgan	11.	Crédit Mutuel	11.	ABN-AMRO
12.	J.P.Morgan	12.	BNP PARIBAS	12.	ERSTE Group	12.	中國銀行 BANK OF CHINA
13.	BNP PARIBAS	13.	Crédit Mutuel	13.	BNP PARIBAS	13.	BNP PARIBAS
14.	Raiffeisen Bank International	14.	HSBC	14.	HSBC	14.	HSBC
15.	HSBC	15.	Raiffeisen Bank International	15.	UniCredit	15.	UniCredit
16.	Hamburg Commercial Bank	16.	UniCredit	16.	Raiffeisen Bank International	16.	Raiffeisen Bank International
17.	NATIXIS BEYOND BANKING	17.	NATIXIS BEYOND BANKING	17.	Hamburg Commercial Bank	17.	Hamburg Commercial Bank
18.	SOCIETE GENERALE	18.	SOCIETE GENERALE	18.	SOCIETE GENERALE	18.	SOCIETE GENERALE
19.	UniCredit	19.	Hamburg Commercial Bank	19.	NATIXIS BEYOND BANKING	19.	NATIXIS BEYOND BANKING
20.	COMMERZBANK	20.	COMMERZBANK	20.	COMMERZBANK	20.	NORD/LB
21.	NORD/LB	21.	NORD/LB	21.	NORD/LB	21.	COMMERZBANK
22.	Deutsche Bank	22.	Deutsche Bank	22.	Deutsche Bank	22.	Deutsche Bank

## 5-YEAR CDS SPREADS



# 5-Year CDS Spreads

## Overview & Historical Analysis

Over the last 3 years, CDS spreads have generally trended upwards. In 3Q23, CDS spreads of foreign & domestic banks trade at a mean of 81.0 bps. Since 2021, all banks showed a significant increase (e.g., deterioration) in CDS spreads, in particular driven by the Russian invasion into Ukraine and the ensuing sanctions, high inflation and increased economic uncertainty

German Institutions	10-Year Price Development (in bps)											3-Year Changes (in %)			Volatility 90 Days	Long-Term Ratings		
	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	Sep-23	Δ 20-23	Δ 21-23	Δ 22-23		S&P	Moody's	Fitch
Bayern LB	101.0	77.2	75.8	68.6	32.9	38.3	35.3	64.4	37.4	57.2	53.4	-17.2%	42.7%	-6.7%	2.8%	-	Aa3	A
Commerzbank	110.7	83.6	90.6	117.3	54.5	124.7	35.2	38.7	44.4	85.9	90.7	134.4%	104.2%	5.7%	1.7%	A-	A2	-
Deutsche Bank	84.3	79.7	96.5	162.3	72.4	204.6	60.9	54.5	45.8	123.0	120.5	121.2%	163.1%	-2.1%	1.4%	A-	A1	A
DZ Bank	82.4	75.9	78.1	78.6	70.2	66.1	62.0	62.5	33.6	57.7	56.5	-9.6%	68.0%	-2.0%	3.7%	A+	Aa2	AA
Hamburg Commercial	189.3	193.8	187.0	172.1	147.6	149.0	109.0	75.2	66.1	198.5	139.0	84.8%	110.5%	-30.0%	3.5%	-	A3	-
Helaba	67.2	58.3	58.2	52.3	46.2	46.9	42.3	56.0	39.7	67.3	55.1	-1.6%	38.8%	-18.1%	4.8%	-	Aa3	AA-
LBBW	80.8	61.4	64.8	50.0	36.6	38.8	48.0	46.9	33.1	48.3	58.9	25.6%	78.0%	22.0%	1.8%	-	Aa3	A
NORD/LB	na	104.6	114.1	115.8	72.8	93.5	67.2	95.1	69.2	109.0	96.8	1.7%	40.0%	-11.2%	3.1%	-	A3	A
Min	67.2	58.3	58.2	50.0	32.9	38.3	35.2	38.7	33.1	48.3	53.4	-17.2%	38.8%	-30.0%	1.4%	-	-	-
Max	189.3	193.8	187.0	172.1	147.6	204.6	109.0	95.1	69.2	198.5	139.0	134.4%	163.1%	22.0%	4.8%	-	-	-
Median	84.3	78.4	84.3	97.2	62.4	79.8	54.5	59.2	42.1	76.6	74.8	13.7%	73.0%	-4.4%	2.9%	-	-	-
Mean	102.2	91.8	95.7	102.1	66.6	95.3	57.5	61.7	46.2	93.4	83.9	42.4%	80.7%	-5.3%	2.9%	-	-	-

Foreign Institutions	10-Year Price Development (in bps)											3-Year Changes (in %)			Volatility 90 Days	Long-Term Ratings		
	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	Sep-23	Δ 20-23	Δ 21-23	Δ 22-23		S&P	Moody's	Fitch
ABN AMRO	90.2	62.1	66.2	65.4	45.0	64.0	19.6	21.2	39.4	59.4	66.2	213.1%	68.1%	11.4%	1.3%	A	A1	A+
Bank of China	113.6	120.1	130.4	142.4	66.1	81.8	35.5	34.3	56.6	94.1	94.0	174.4%	66.2%	-0.1%	3.6%	A+	Aa3	AA
BNP Paribas	83.3	69.6	70.8	85.6	22.5	73.0	25.4	32.0	33.7	63.2	55.5	73.6%	64.9%	-12.1%	1.7%	A+	Aa3	AA-
Credit Agricole	104.1	70.3	70.6	73.7	19.8	65.0	23.1	27.7	30.9	55.9	52.6	90.4%	70.4%	-5.9%	1.7%	A+	Aa3	A+
Crédit Mutuel	109.1	64.8	41.9	24.0	26.5	40.6	37.2	44.2	39.6	63.3	70.0	58.5%	76.5%	10.6%	3.6%	A+	Aa3	AA-
Erste Group Bank	116.8	159.3	123.2	127.7	47.3	52.8	47.5	42.6	39.6	62.5	89.7	110.5%	126.5%	43.6%	4.1%	A+	A1	A
HSBC	65.4	52.1	83.1	81.2	35.3	91.3	50.2	44.1	45.6	91.6	84.9	92.6%	86.0%	-7.3%	2.5%	A-	A3	A+
ING Bank	81.2	54.8	52.4	64.4	16.9	39.1	19.6	21.4	23.8	44.4	46.9	119.3%	96.8%	5.4%	1.7%	A+	A1	AA-
JP Morgan	67.0	62.9	72.7	63.8	37.4	69.0	33.0	46.7	48.1	79.5	64.2	37.5%	33.6%	-19.2%	1.5%	A-	A1	AA-
Natixis	100.9	58.3	68.5	80.2	30.2	62.0	50.6	34.1	35.8	63.7	60.7	77.8%	69.5%	-4.7%	1.9%	A	A1	A
RBI	126.4	239.6	211.5	142.4	62.8	80.8	75.5	47.0	38.7	186.9	192.5	309.2%	397.3%	3.0%	0.4%	A-	A1	-
Santander	123.2	79.6	139.7	119.3	31.8	74.9	27.9	35.3	37.8	67.9	62.7	77.8%	66.0%	-7.7%	1.9%	A+	A2	A-
Societe Generale	102.1	93.7	69.7	84.6	23.4	74.0	26.7	32.8	37.0	68.7	66.5	103.1%	79.9%	-3.2%	1.8%	A	A1	A
UniCredit	146.6	128.0	132.7	173.8	61.4	177.4	76.3	71.2	67.8	121.9	104.2	46.2%	53.6%	-14.6%	1.8%	BBB	Baa1	BBB
Min	65.4	52.1	41.9	24.0	16.9	39.1	19.6	21.2	23.8	44.4	46.9	37.5%	33.6%	-19.2%	0.4%	-	-	-
Max	146.6	239.6	211.5	173.8	66.1	177.4	76.3	71.2	67.8	186.9	192.5	309.2%	397.3%	43.6%	4.1%	-	-	-
Median	103.1	69.9	71.7	82.9	33.6	71.0	34.3	34.8	39.1	65.8	66.4	91.5%	70.0%	-3.9%	1.8%	-	-	-
Mean	102.1	93.9	95.2	94.9	37.6	74.7	39.2	38.2	41.0	80.2	79.3	113.2%	96.8%	0.0%	2.1%	-	-	-

All Institutions	10-Year Price Development (in bps)											3-Year Changes (in %)			Volatility 90 Days	Long-Term Ratings		
	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	Sep-23	Δ 20-23	Δ 21-23	Δ 22-23		S&P	Moody's	Fitch
Min	65.4	52.1	41.9	24.0	16.9	38.3	19.6	21.2	23.8	44.4	46.9	-17.2%	33.6%	-30.0%	0.4%	-	-	-
Max	189.3	239.6	211.5	173.8	147.6	204.6	109.0	95.1	69.2	198.5	192.5	309.2%	397.3%	43.6%	4.8%	-	-	-
Median	101.0	76.6	77.0	82.9	41.2	71.0	39.7	44.1	39.5	67.6	66.4	81.3%	70.0%	-3.9%	1.9%	-	-	-
Mean	102.2	93.2	95.4	97.5	48.2	82.2	45.8	46.7	42.9	85.0	81.0	87.4%	90.9%	-2.0%	2.4%	-	-	-

5-Year Govt. Interest Rates	10-Year Price Development (in bps)											3-Year Changes (in %)			Volatility 90 Days	Long-Term Ratings		
	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19	Dec-20	Dec-21	Dec-22	Sep-23	Δ 20-23	Δ 21-23	Δ 22-23		S&P	Moody's	Fitch
EU Central Government Bond	107.1	7.1	1.7	-47.3	-16.6	-26.3	-44.6	-72.4	-47.9	245.1	277.7	483.6%	680.2%	13.3%	1.6%	AA+	Aaa	AAA
United Kingdom Government Debt	204.2	113.1	125.6	48.0	72.0	90.7	60.6	-11.2	73.1	366.3	439.4	4,023.2%	501.1%	20.0%	1.3%	AA	Aa3	AA-

Source: S&P Capital IQ as of September 27th, 2023

Notes: All calculations based on mid prices

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

# 5-Year CDS Spreads

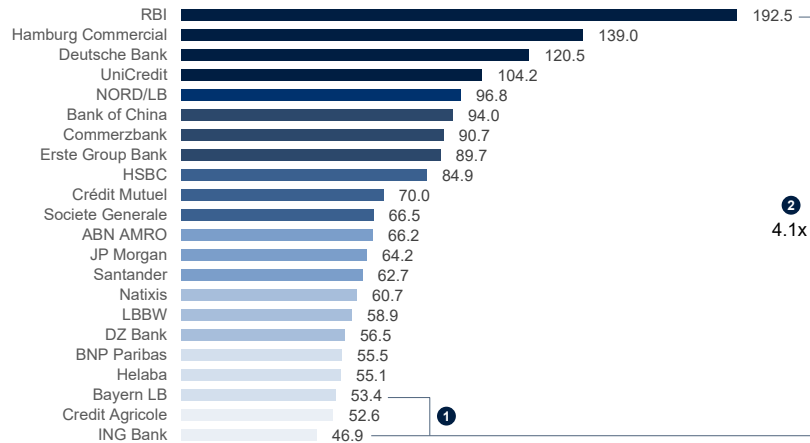
## Pricing, Rating, Volatility & Development

1 Based on the latest 5-year CDS spreads, the most solvent banks are the Dutch ING Bank, German BayernLB alongside the French Credit Agricole with CDS spreads below 54 bps

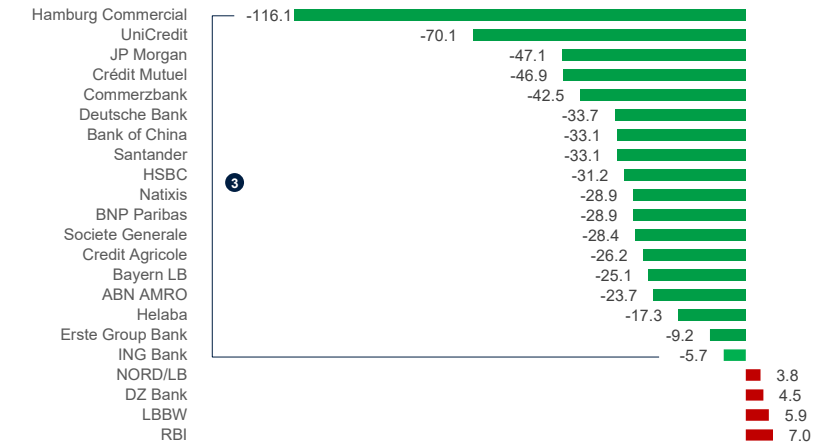
2 The ratio between the least and most solvent bank decreased from 4.6x (in 2Q23) to 4.1x (192.5 bps vs. 46.9 bps)

3 Majority of banks experienced lower CDS spreads than 12 months prior. The largest improvements in CDS spreads were seen with German Hamburg Commercial, Italian UniCredit and American J.P. Morgan

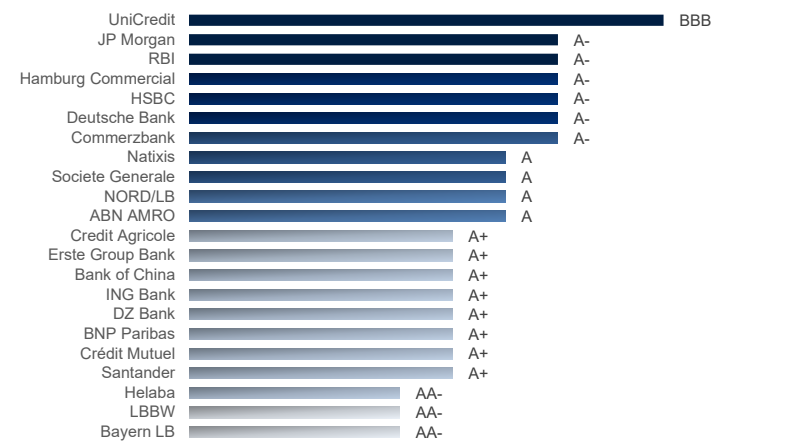
CDS Mid-Price as of 27/09/2023 (in bps)



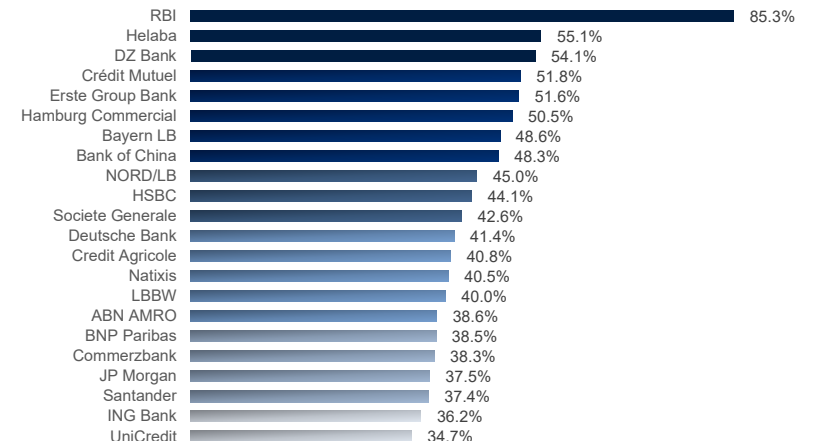
12 Month Change in CDS Mid-Price (in bps)



Long-Term Rating\* as of 27/09/2023



3 Month (90 days) Volatility as of 27/09/2023



# 5-Year CDS Spreads

## 36 Month Spread Development of German vs. Foreign Institutions

German and foreign banks have showed similar trends over the past 3 years

- 1 In 1Q22, CDS spreads started to increase following the Russia / Ukraine war, peaking in 3Q22 due to increased fears of energy shortages, high inflation and a global recession
- 2 The collapse of major banking institutions in the USA (SVB) and in Europe (Credit Suisse) have caused significant market uncertainty and rising CDS spreads (risk of contagion)



# 5-Year CDS Spreads

## 36 Month Spread Development of German Institutions

Over the last 3 years, HCOB and Deutsche Bank were the most volatile German banks with standard deviations of 65 bps and 37 bps, respectively

LBBW and NORD/LB were the least volatile (standard deviations 8 bps and 12 bps, respectively)

① Growing investor fears of a deep recession peaked in 3Q22 due to fears of a widespread energy shortage and aggressive monetary tightening

② The collapse of major banking institutions in the USA (SVB) and in Europe (Credit Suisse) have caused market uncertainty and rising CDS spreads



# 5-Year CDS Spreads

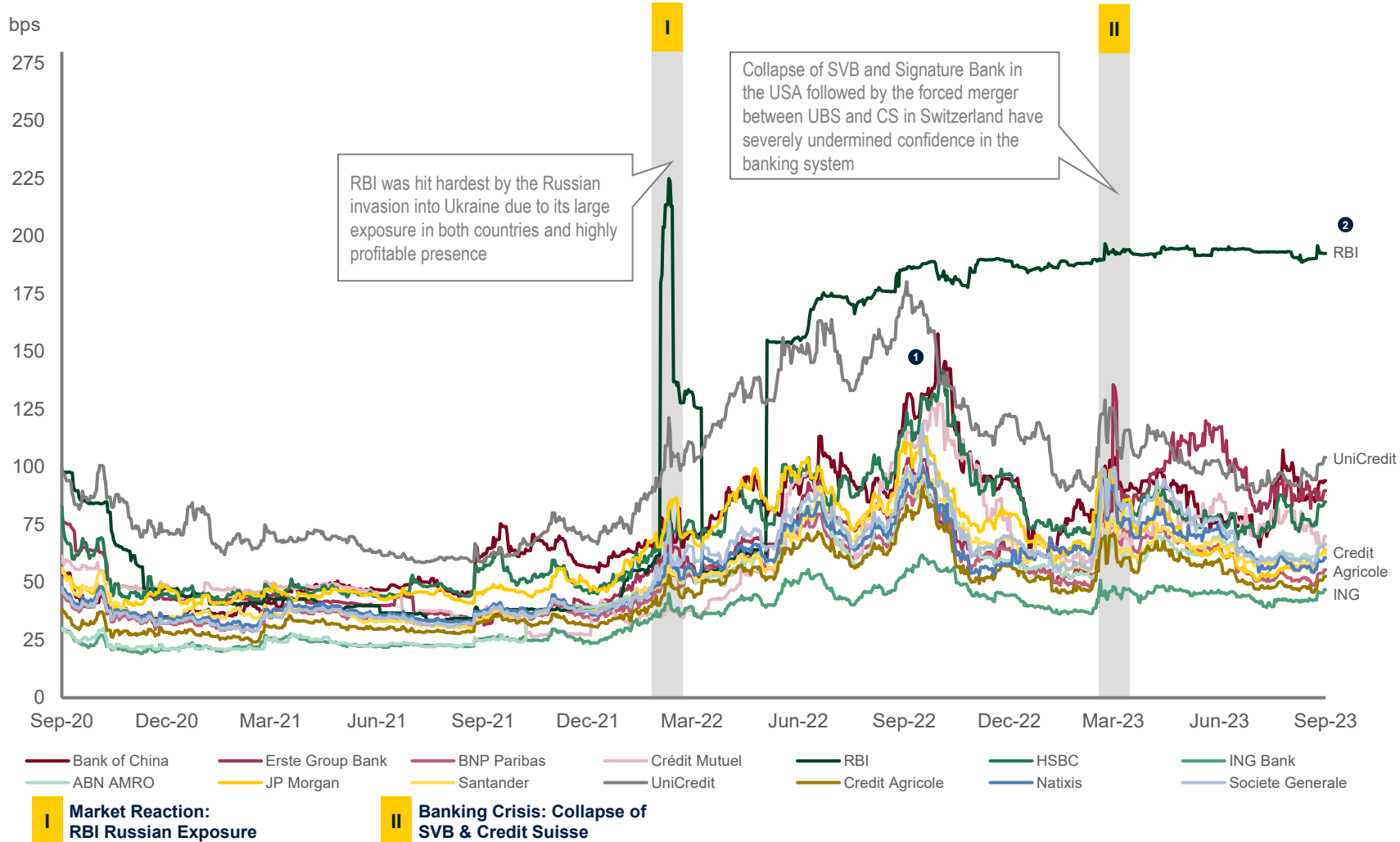
## 36 Month Spread Development of Foreign Institutions

Over the last 3 years, RBI and UniCredit were the most volatile foreign banks with standard deviations of 69 bps and 30 bps, respectively

ING Bank and Credit Agricole were the least volatile (standard deviations of 11 bps and 15 bps, respectively)

① Growing investor fears of a deep recession peaked in 3Q22 due to fears of a widespread energy shortage and aggressive monetary tightening

② CDS spreads remain high for RBI as the divestiture process of the highly profitable Russian subsidiary drags on





# 5-Year CDS Spreads

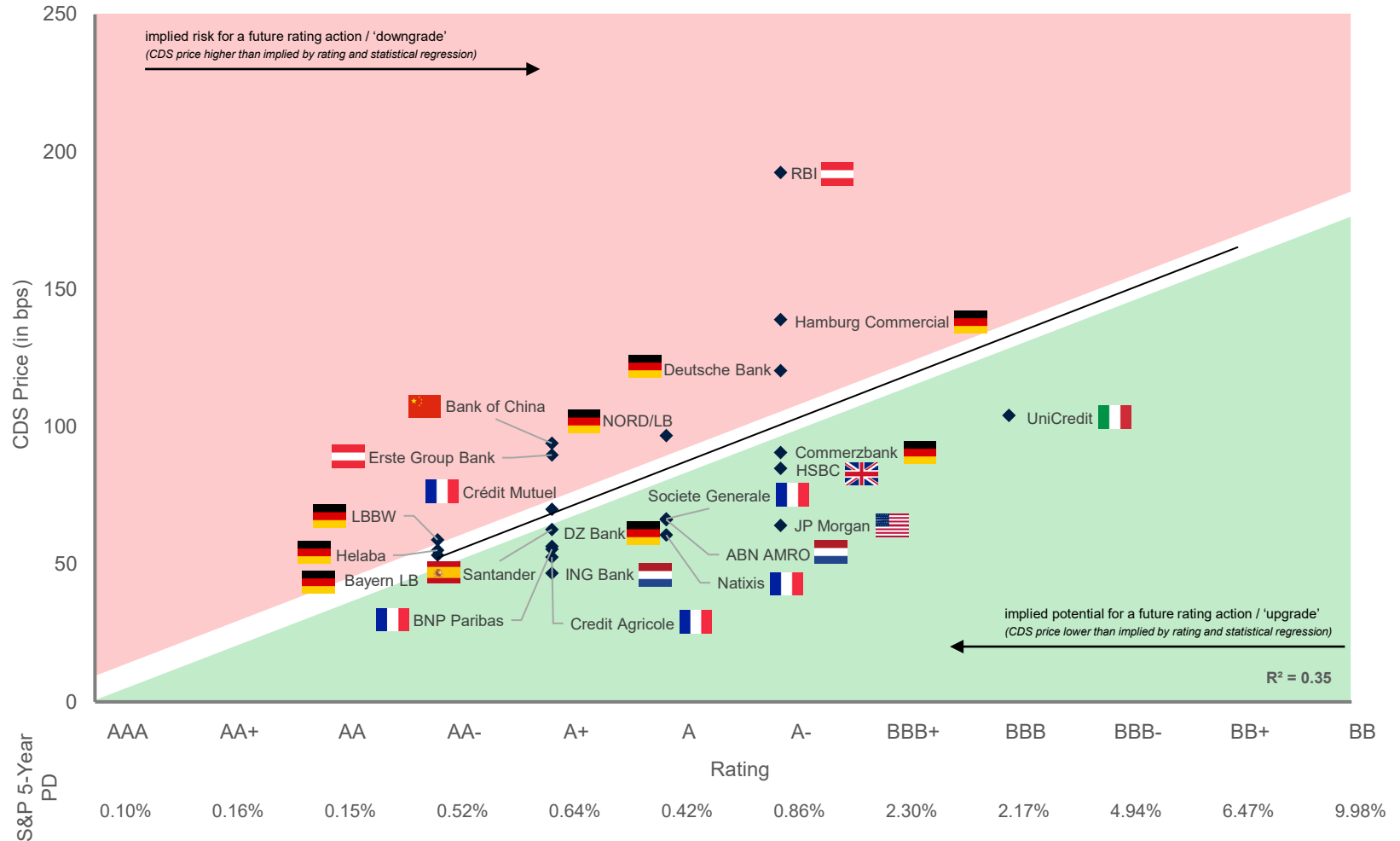
## CDS vs. Rating for 5 Year Spreads

The comparison of current CDS spreads with current ratings highlights the relationship between these forward- and backward-looking solvency indicators

The correlation between CDS spreads and ratings increased slightly from a  $R^2$  of 31% in the previous quarter to 35% in 3Q23

The slope implies that (on average) a 1-notch drop in rating would result in a higher 5-Year CDS price by c. 16.1 bps

Banks above the trendline seem to possess greater solvency risk than their rating would imply; a possible indicator for a future rating 'downgrade'



Source: S&P Capital IQ as of September 27th, 2023

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

**APPENDIX**



# Market Ranking Overview

## Q3 2023

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;
- ii. 5-Year CDS spread;
- iii. 10-Year CDS spread;
- 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 BayernLB (58.7) on the top of the ranking, whereas RBI ranks last (4.0)

Rank	Trend	Bank	Country	CDS 1Y				CDS 5Y				CDS 10Y				CDS Weighted CDS Score	Rating		Total Overall Rank
				Last Price	Rank Score	90-Day Ø Price	Rank Score	Last Price	Rank Score	90-Day Ø Price	Rank Score	Last Price	Rank Score	90-Day Ø Price	Rank Score		Last Rating	Rank Score	
1	→	Bayern LB		27.4	19	25.1	20	53.4	20	47.9	21	76.2	17	71.4	19	38.7	4	20	58.7
2	↗	ING		18.2	22	15.9	22	46.9	22	44.4	22	61.7	22	58.3	22	44.0	5	12	56.0
3	↘	Helaba		31.2	16	29.1	18	55.1	19	57.9	17	73.0	20	77.3	17	35.7	4	20	55.7
4	↘	LB BW		40.8	10	37.7	9	58.9	16	52.9	19	73.1	19	66.2	20	31.0	4	20	51.0
4	↗	CRÉDIT AGRICOLE		21.1	21	21.9	21	52.6	21	54.9	18	74.6	18	75.5	18	39.0	5	12	51.0
6	↘	DZ BANK		40.9	9	32.6	13	56.5	17	49.2	20	69.0	21	61.9	21	33.7	5	12	45.7
7	→	BNP PARIBAS		28.3	18	29.2	17	55.5	18	60.5	16	77.2	16	81.8	15	33.3	5	12	45.3
8	↘	Santander		24.3	20	25.4	19	62.7	14	63.2	15	90.4	12	89.2	12	30.7	5	12	42.7
9	↗	NATIXIS		29.9	17	30.7	15	60.7	15	67.0	12	81.5	15	86.2	13	29.0	6	8	37.0
10	→	Crédit Mutuel		38.0	12	37.7	10	70.0	10	76.4	10	91.1	11	100.3	10	21.0	5	12	33.0
11	↘	ABN-AMRO		42.3	8	37.9	8	66.2	12	63.5	14	88.8	13	81.3	16	23.7	6	8	31.7
12	↗	SOCIETE GENERALE		33.1	14	33.8	11	66.5	11	72.2	11	95.3	10	97.6	11	22.7	6	8	30.7
13	↗	J.P.Morgan		33.8	13	29.4	16	64.2	13	64.5	13	86.8	14	86.2	14	27.7	7	2	29.7
14	↘	中國銀行 BANK OF CHINA		38.8	11	33.6	12	94.0	6	86.0	7	133.3	5	126.7	5	15.3	5	12	27.3
15	→	ERSTE		53.1	5	48.5	5	89.7	8	96.5	6	115.3	8	125.6	6	12.7	5	12	24.7
16	→	HSBC		32.6	15	32.4	14	84.9	9	79.2	9	128.6	6	119.5	7	20.0	7	2	22.0
17	→	NORD/LB		75.4	3	67.7	3	96.8	5	96.7	5	108.7	9	110.1	9	11.3	6	8	19.3
18	→	COMMERZBANK		45.2	7	41.5	7	90.7	7	84.6	8	126.2	7	115.6	8	14.7	7	2	16.7
19	→	UniCredit		48.6	6	42.9	6	104.2	4	100.7	4	142.4	4	132.7	4	9.3	9	1	10.3
20	→	Deutsche Bank		68.8	4	66.7	4	120.5	3	121.6	3	157.1	3	143.4	3	6.7	7	2	8.7
21	→	Hamburg Commercial Bank		93.4	2	84.7	2	139.0	2	147.1	2	170.8	2	180.5	2	4.0	7	2	6.0
22	→	Raiffeisen Bank International		104.1	1	99.1	1	192.5	1	193.1	1	223.4	1	224.9	1	2.0	7	2	4.0

# Market Ranking Overview

## LTM Development

The German Bayern LB secures the top of the league table, after replacing LBBW at the top of the ranking from 2Q23

The Austrian RBI remains unchanged at the last place in the ranking following the ongoing uncertainty surrounding its Russian banking division

Q4 2022		Q1 2023		Q2 2023		Q3 2023	
1.	LB≡BW	1.	LB≡BW	1.	Bayern LB	1.	Bayern LB
2.	Bayern LB	2.	ING	2.	Helaba	2.	ING
3.	ING	3.	Helaba	3.	ING	3.	Helaba
4.	CRÉDIT AGRICOLE	4.	CRÉDIT AGRICOLE	4.	LB≡BW	4.	LB≡BW
5.	DZ BANK	5.	Bayern LB	5.	DZ BANK	5.	CRÉDIT AGRICOLE
6.	Helaba	6.	DZ BANK	6.	CRÉDIT AGRICOLE	6.	DZ BANK
7.	BNP PARIBAS	7.	BNP PARIBAS	7.	BNP PARIBAS	7.	BNP PARIBAS
8.	ABN-AMRO	8.	Santander	8.	Santander	8.	Santander
9.	NATIXIS	9.	ABN-AMRO	9.	ABN-AMRO	9.	NATIXIS
10.	Santander	10.	Crédit Mutuel	10.	Crédit Mutuel	10.	Crédit Mutuel
11.	Crédit Mutuel	11.	ERSTE	11.	NATIXIS	11.	ABN-AMRO
12.	ERSTE	12.	NATIXIS	12.	中國銀行	12.	SOCIETE GENERALE
13.	SOCIETE GENERALE	13.	中國銀行	13.	SOCIETE GENERALE	13.	J.P.Morgan
14.	中國銀行	14.	SOCIETE GENERALE	14.	J.P.Morgan	14.	中國銀行
15.	J.P.Morgan	15.	COMMERZBANK	15.	ERSTE	15.	ERSTE
16.	NORD/LB	16.	HSBC	16.	HSBC	16.	HSBC
17.	HSBC	17.	NORD/LB	17.	NORD/LB	17.	NORD/LB
18.	COMMERZBANK	18.	J.P.Morgan	18.	COMMERZBANK	18.	COMMERZBANK
19.	Deutsche Bank	19.	UniCredit	19.	UniCredit	19.	UniCredit
20.	Raiffeisen Bank International	20.	Hamburg Commercial Bank	20.	Deutsche Bank	20.	Deutsche Bank
21.	UniCredit	21.	Raiffeisen Bank International	21.	Hamburg Commercial Bank	21.	Hamburg Commercial Bank
22.	Hamburg Commercial Bank	22.	Deutsche Bank	22.	Raiffeisen Bank International	22.	Raiffeisen Bank International

# Fundamental Ranking Overview

## Q3 2023

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)
- vi. Liquidity Coverage 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

RBI (109.0) leads the ranking, whereas Natixis is last (26.0)

Rank	Trend	Bank	Country	Return on Equity		Return on Assets		Tier 1 Capital Ratio		% Non-perf. Loans		Cost Efficiency		Liquidity Coverage		Total Overall Rank	Delta vs Market View
				RoE	Rank Score	RoA	Rank Score	Tier 1 Ratio	Rank Score	% NPL	Rank Score	CIR	Rank Score	LCR	Rank Score		
Q3 2023 vs. Q2 2023																	
1	→	Raiffeisen Bank International		18.0	22	1.6	22	17.6	16	2.4	7	36.6	21	192.5	21	109.0	21
2	↗	UniCredit		13.7	20	1.0	18	18.6	21	2.4	8	47.0	18	161.0	17	102.0	17
3	↗	Bayern LB		11.0	14	0.5	12	17.6	16	0.9	19	56.2	14	195.5	22	97.0	-2
4	↘	Hamburg Commercial Bank		9.0	11	1.3	21	18.5	19	2.5	6	44.0	20	168.3	19	96.0	17
5	→	ERSTE Group		13.1	17	1.0	19	16.5	14	1.7	14	53.4	17	141.8	11	92.0	10
6	↘	J.P.Morgan		16.0	21	1.2	20	15.4	9	0.5	22	58.0	13	112.0	2	87.0	7
7	→	HSBC		13.3	19	0.9	17	17.0	15	1.9	11	55.0	15	131.8	4	81.0	9
8	→	中國銀行 BANK OF CHINA		9.5	12	0.8	16	13.6	2	1.3	18	27.9	22	133.5	6	76.0	6
9	↗	CRÉDIT AGRICOLE		8.7	10	0.4	9	18.6	22	2.0	10	62.3	10	147.9	14	75.0	-5
10	↘	Santander		11.1	15	0.6	15	13.7	3	3.1	2	45.8	19	161.0	17	71.0	-2
11	↗	ING		13.2	18	0.6	13	14.5	6	1.7	13	60.4	12	134.0	7	69.0	-9
12	↘	ABN-AMRO		10.9	13	0.6	14	16.4	13	1.8	12	69.2	4	144.0	12	68.0	-1
13	↘	Crédit Mutuel		6.7	5	0.4	8	18.5	19	2.9	3	54.6	16	153.3	16	67.0	-3
13	↘	LB BW		11.2	16	0.5	11	15.2	8	0.6	21	65.6	8	129.2	3	67.0	-9
15	↗	DZ BANK		6.9	6	0.3	4	17.8	18	1.5	16	67.9	5	145.3	13	62.0	-9
16	↘	COMMERZBANK		5.5	4	0.3	5	16.3	12	2.0	9	61.8	11	141.1	9	50.0	2
17	↘	Helaba		4.5	2	0.2	1	14.5	5	1.6	15	67.5	6	176.9	20	49.0	-14
18	↗	NORD/LB		4.1	1	0.2	3	14.9	7	0.8	20	97.6	1	150.2	15	47.0	-1
19	↗	SOCIETE GENERALE		7.4	7	0.4	7	16.3	11	3.2	1	64.1	9	141.4	10	45.0	-7
20	↘	Deutsche Bank		7.7	8	0.4	10	16.1	10	2.7	5	74.9	3	135.0	8	44.0	0
21	↘	BNP PARIBAS		7.8	9	0.3	6	13.9	4	2.9	4	66.8	7	132.3	5	35.0	-14
22	→	NATIXIS BEYOND BANKING		5.0	3	0.2	2	13.5	1	1.3	17	78.9	2	110.2	1	26.0	-13

# Fundamental Ranking Overview

## LTM Development

The Austrian RBI continuous to lead the fundamental ranking table for a third quarter in a row

The Italian UniCredit shows the most positive development over the last year, gaining 11 places from rank 13 in 4Q22 to rank 2 in 3Q23

The French BNP Paribas continues its downward trend, ranking second to last in 3Q23

Q4 2022	Q1 2023	Q2 2023	Q3 2023
1.  Hamburg Commercial Bank	1.  Raiffeisen Bank International	1.  Raiffeisen Bank International	1.  Raiffeisen Bank International
2.  J.P.Morgan	2.  ERSTE Group	2.  Hamburg Commercial Bank	2.  UniCredit
Raiffeisen Bank International	3.  J.P.Morgan	3.  UniCredit	3.  Bayern LB
4.  中國銀行 BANK OF CHINA	4.  UniCredit	4.  Bayern LB	4.  Hamburg Commercial Bank
5.  ERSTE Group	5.  中國銀行 BANK OF CHINA	5.  ERSTE Group	5.  ERSTE Group
6.  Crédit Mutuel	6.  HSBC	6.  J.P.Morgan	6.  J.P.Morgan
7.  ING	7.  Hamburg Commercial Bank	7.  HSBC	7.  HSBC
8.  HSBC	8.  ABN-AMRO	8.  中國銀行 BANK OF CHINA	8.  中國銀行 BANK OF CHINA
Santander	9.  Santander	9.  Santander	9.  CRÉDIT AGRICOLE
ABN-AMRO	10.  LB BW	10.  ABN-AMRO	10.  Santander
11.  DZ BANK	11.  Bayern LB	11.  Crédit Mutuel	11.  ING
12.  Bayern LB	12.  DZ BANK	12.  LB BW	12.  ABN-AMRO
13.  UniCredit	13.  ING	13.  ING	13.  Crédit Mutuel
14.  CRÉDIT AGRICOLE	14.  CRÉDIT AGRICOLE	14.  Helaba	14.  LB BW
15.  Helaba	15.  Deutsche Bank	15.  COMMERZBANK	15.  DZ BANK
16.  BNP PARIBAS	16.  Crédit Mutuel	16.  CRÉDIT AGRICOLE	16.  COMMERZBANK
17.  LB BW	17.  BNP PARIBAS	17.  DZ BANK	17.  Helaba
18.  COMMERZBANK	18.  COMMERZBANK	18.  Deutsche Bank	18.  NORD/LB
Deutsche Bank	19.  SOCIETE GENERALE	19.  BNP PARIBAS	19.  SOCIETE GENERALE
20.  SOCIETE GENERALE	20.  Helaba	20.  NORD/LB	20.  Deutsche Bank
21.  NORD/LB	21.  NORD/LB	21.  SOCIETE GENERALE	21.  BNP PARIBAS
22.  NATIXIS BEYOND BANKING	22.  NATIXIS BEYOND BANKING	22.  NATIXIS BEYOND BANKING	22.  NATIXIS BEYOND BANKING

## Credit Default Swaps

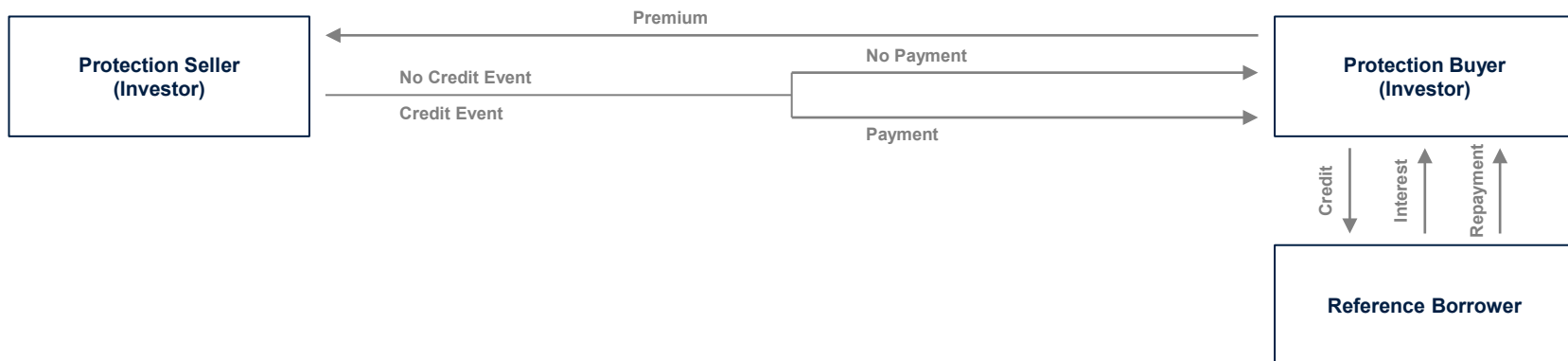
**Credit Default Swaps (CDS)** are, in simplest terms, very much like insurance policies. The main difference between a classical insurance policy and a CDS is that those buying the CDS can trade in and out of their contracts.

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 the 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 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.



*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

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- 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



**CONTACT DETAILS &  
DISCLAIMER**



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