

Sparkasse Dortmund

Mortgage Pfandbriefe

Pfandbriefe Rating/Outlook	AAA/Stable	Asset type	Mortgage
Issuer Default Rating/Outlook	A+/Stable	Cover assets (EURm) ^a	0.772
Resolution uplift	2 notches	Covered bonds (EURm) ^a	0.330
Payment continuity uplift (PCU)	6 notches	Nominal OC (%) ^a	134.1
Recovery uplift	2 notches	Relied-upon OC (%)	96.1
Unused notches for rating	6	Basis of OC relied upon	Lowest last 12 months
Break-even overcollateralisation (OC) (%)	14	Covered bonds maturity type	Extendable
Credit loss (%)	13.9	Weighted average life (WAL) of the assets (years) ^a	16.6
ALM loss (%)	n.a.	WAL of the liabilities (years) ^a	10.2

^aData as of 30 September 2023.

Key Rating Drivers

Six-Notch Rating Cushion: The 'AAA' Pfandbriefe rating is based on Sparkasse Dortmund's (Sk Dortmund) Long-Term Issuer Default Rating (IDR) of 'A+', a resolution uplift of two notches, a payment continuity uplift (PCU) of six notches and a recovery uplift of two notches. The rating is also based on the overcollateralisation (OC) of 96.1% considered by Fitch Ratings in its analysis. This is higher than the agency's 'AAA' break-even OC of 14%. The six-notch buffer against a downgrade of the IDR supports the Stable Outlook on the Pfandbriefe rating.

Two-Notch Resolution Uplift: The two notches of resolution uplift reflect that the issuer's IDR is based on its participation in a mutual support scheme and that Pfandbriefe are exempt from bail-in in a resolution scenario. It is also based on our assessment that resolution of the issuer would not result in the direct enforcement of recourse against the cover pool and the low risk of under-collateralisation at the point of resolution.

Six-Notch PCU: The PCU reflects the principal liquidity protection provided by a 12-month maturity extension feature. The mandatory inclusion of liquid assets in the cover pool matching the maximum negative accumulated balance of cash flows for the next 180 days also provides effective protection for at least three months of interest payments and senior expenses.

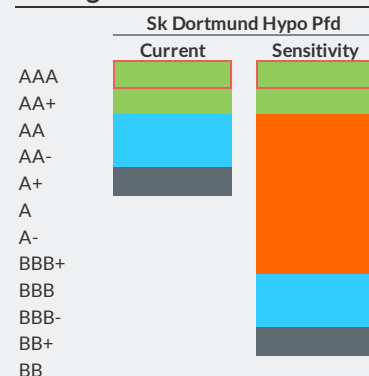
Two-Notch Recovery Uplift: Fitch has granted a recovery uplift of two notches to the programme. This is because the 'AA' timely payment rating level is in the investment-grade range and the agency expects outstanding recoveries on the cover pool consisting of standard mortgage loans.

'AAA' Break-Even OC: The 'AAA' break-even OC of 14% supports timely payments in a 'AA' stress scenario and recoveries given default in line with a two-notch recovery uplift under Fitch's criteria.

Credit Loss Drives Break-Even OC: The 'AAA' break-even OC of 14% is based on the 'AAA' credit loss of the cover pool, as the Pfandbriefe rating is based on a two-notch recovery uplift above the resolution reference point of 'AA'. Hence no modelling of asset-liability mismatches is performed with the Pfandbriefe being rated on a recovery basis.

An asset and liability management (ALM) loss component would be included in the break-even OC calculation, if Sk Dortmund's IDR were downgraded. The ALM loss component would then support a timely payment rating level above the resolution reference point.

Rating Sensitivity to IDR Downgrade



Covered bond rating	AAA
Recovery uplift (notches)	2
PCU (notches)	6
Resolution uplift (notches)	2
IDR	A+

Source: Fitch Ratings

[Click here for recorded webcast](#)



Analysts

Carlos Venegas
+49 69 768076 128
carlos.venegasmonard@fitchratings.com

Sebastian Seitz, CFA, CAIA
+49 69 768076 267
sebastian.seitz@fitchratings.com

Programme Highlights

High Regional Concentration: Sk Dortmund's operations are almost exclusively concentrated in the state of North Rhine-Westphalia and, more specifically, the city of Dortmund. German savings banks main objective is to provide banking products within a clearly defined area.

Predominantly Residential Cover Assets: At end-3Q23, the cover pool comprised 3,964 German residential mortgage loans with an average loan size of EUR160,000 and 102 German commercial real estate loans with an average loan size of EUR1.2 million. The share of assets is 83.5% for residential and 16.5% for commercial real estate. The weighted average current loan-to-value (CLTV) of 57.4% for the residential part and 57.3% for the commercial part allow for a large buffer to real-estate price declines before losses would materialise.

Other Risks Limited: The programme has no foreign-exchange exposure, with assets and liabilities exclusively denominated in euros. The outstanding fixed-rate Pfandbriefe are also secured by almost exclusively fixed-rate assets (99.8%).

Peer Comparison

The table below compares the key rating drivers for Sk Dortmund with those of the two other Sparkassen mortgage Pfandbrief programmes rated 'AAA' by Fitch based on the full rating approach, Sparkasse Hannover (Sk Hannover) and Sparkasse Pforzheim-Calw (Sk Pforzheim-Calw).

The Pfandbriefe issued by Sk Dortmund, Sk Hannover and Sk Pforzheim-Calw have the same high issuer IDR, two notches of both resolution uplift and recovery uplift, allowing them to reach the 'AAA' rating on a recovery basis and hence without modelling the asset-liability mismatches of the programmes. The break-even OC for these Pfandbriefe consists only of the credit loss component.

The 'AAA' break-even OC for Sk Dortmund's mortgage Pfandbriefe is 14%. This is higher than the 10.5% 'AAA' break-even OC for Sk Hannover's mortgage Pfandbriefe and the 6.5% 'AAA' break-even OC for Sk Pforzheim-Calw's mortgage Pfandbriefe.

The 'AAA' credit loss component of 13.9% for Sk Dortmund's mortgage assets is higher than for Sk Hannover and Sk Pforzheim-Calw due to the smaller size and higher borrower concentration in Sk Dortmund's cover pool, especially in commercial mortgage lending. In higher rating scenarios this leads to higher stress assumptions for Sk Dortmund's commercial mortgages included in the cover pool reflecting the risk of higher asset correlation and recoveries on loans assumed to default.

Please see Fitch's *Covered Bonds Snapshot - 3Q23* (October 2023) and the related Excel file for a detailed comparison of rating drivers across all Fitch-rated covered bond programmes.

Peer Comparison: Key Rating Drivers

	Sk Dortmund	Sk Hannover	Sk Pforzheim-Calw
IDR/Outlook	A+/Stable	A+/Stable	A+/Stable
Resolution uplift (notches)	2	2	2
PCU (notches)	6	6	6
Recovery uplift (notches)	2	2	2
B portfolio loss rate (%)	1.1	0.8	0.7
Break-even OC (%)	14	10.5	6.5
Break-even OC components (%)			
Credit loss (%)	13.9	10.5	6.4
ALM loss (%)	n/a	n/a	n/a
Pfandbrief rating/Outlook	AAA/Stable	AAA/ Stable	AAA/ Stable
Buffer against issuer downgrade	6 notches	6 notches	6 notches

Source: Fitch Ratings

Applicable Criteria

- Covered Bonds Rating Criteria (October 2023)
- Bank Rating Criteria (September 2023)
- Structured Finance and Covered Bonds Country Risk Rating Criteria (July 2023)
- Structured Finance and Covered Bonds Counterparty Rating Criteria (November 2023)
- Structured Finance and Covered Bonds Counterparty Rating Criteria: Derivative Addendum (November 2023)
- European RMBS Rating Criteria (June 2023)
- SME Balance Sheet Securitisation Rating Criteria (October 2021)

Related Research

- Covered Bonds Snapshot - 3Q23 (October 2023)
- German Sparkassen Mortgage Pfandbriefe Programmes - Peer Review (June 2023)
- Fitch Affirms Sparkassen-Finanzgruppe at 'A+'; Outlook Stable (April 2023)

Country Risk Impact

There is no country risk impact on this programme given that the Country Ceiling for Germany is at 'AAA'.

The Issuer

SkDortmund's IDR has been aligned with that of Sparkasse Finanzgruppe (SFG), which comprises 390 savings banks. The savings banks form a homogeneous and fairly cohesive group, and are organised into 12 regional savings banks associations. Sk Dortmund was founded in 1841 and is the 20th largest savings bank in Germany with almost EUR12 billion total assets as of end-2022. This includes the issuer's mortgage book of EUR2.7 billion, comprising both residential and commercial loans. The bank offers a full range of financial services to private and commercial clients.

Further details on Sparkassen-Finanzgruppe can be found in *Fitch Affirms Sparkassen-Finanzgruppe at 'A'; Outlook Stable*, published in April 2023.

Resolution Uplift: Two Notches

The two-notch resolution uplift granted to the mortgage covered bonds reflects that collateralised Pfandbriefe in Germany are exempt from bail-in in a resolution scenario and that Fitch deems the risk of under-collateralisation to be sufficiently low. A resolution of Sk Dortmund is not expected to lead to a direct enforcement of recourse to the cover pool.

The resolution uplift further reflects that the bank's 'A+' IDR is based on its participation in the mutual support scheme of SFG.

PCU: Six Notches

The PCU reflects the principal liquidity protection provided by a 12-month maturity extension feature. The mandatory inclusion of highly liquid assets in the cover pool matching the maximum negative accumulated balance of cash flows for the next 180 days also provides effective protection for at least three months' interest payments and senior expenses.

None of the factors influencing payment continuity analysed by Fitch (see *Appendix 4*) represents a high risk, which in Fitch's view would otherwise be reflected in a PCU reduction.

Recovery Uplift: Two Notches

A maximum recovery uplift of two notches has been granted to the mortgage Pfandbriefe, which reflects the view that the cover pool, which comprises standard German mortgage loans, should generate an outstanding level of recoveries in the event of a default on the Pfandbriefe.

Fitch did not identify any limitations to recovery expectations. Both the cover assets and the Pfandbriefe are denominated in euros.

Abbreviations

IDR: Issuer Default Rating

PCU: Payment Continuity Uplift

OC: Overcollateralisation

WA: Weighted average

WAL: Weighted average life

WAFF: Weighted average foreclosure frequency

WARR: Weighted average recovery rate

Cover Pool Analysis

Cover Pool Composition

The cover pool composition reflects the general characteristics associated with German saving bank cover pools concentrated on a set geographical market within Germany. In this case, 91% of assets are located in the state of North Rhine-Westphalia, especially in and around the city of Dortmund.

Sample Cover Pool

At 30 September 2023

General			
Current principal balance (EURbn)	0.772	WA residential CLTV (%)	57.4
Number of loans	4,066	Loans in arrears >30 days (%)	0
Average loan size	189,867		
Loan characteristics (commercial)			
Loan characteristics (residential)		10 largest exposures (%)	43.5
Owner occupied properties (%)	60.3	Amortising loans (%)	92.0
10 largest exposures (%)	6.7	Interest-only loans (%)	8.0
Amortising loans (%)	86.7	Fixed-rate loans (%)	99.2
Interest-only loans (%)	13.3	Variable-rate loans (%)	0.8
Fixed-rate loans (%)	99.9	WA commercial CLTV (%)	57.3
Variable-rate loans (%)	0.1	Loans in arrears >30 days (%)	0

Source: Fitch Ratings, Sk Dortmund

Cover Pool Credit Analysis

Fitch analysed the collateral portfolio using its applicable mortgage loss criteria assumptions for German residential mortgage loans, outlined in its *European RMBS Rating Criteria* as well as for loans granted to small and medium-sized enterprises (SMEs) as outlined in its *SME Balance Sheet Securitisation Rating Criteria*.

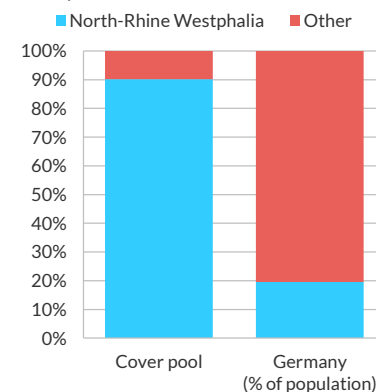
For German residential mortgage loans most assumptions are defined on the country level, Fitch has reviewed the issuer's historic default and foreclosure data and found them to be in line with the criteria assumptions. For the SME part of the cover pool, Fitch has received historical default data and supporting information on Sk Dortmund's internal ratings. The fairly small average financing volume per borrower of about EUR1.2 million and the absence of non-recourse special-purpose vehicles (SPVs) in the cover pool indicate that rental income is not the sole income source for these exposures. The portfolio includes multi-family houses with market values exceeding EUR1.5 million, which if present in the residential pool part, were re-classified as commercial for the purpose of our analysis.

Sk Dortmund has provided Fitch with a comprehensive set of loan-by-loan data, which includes all data necessary for the agency's analysis. Fitch has reviewed the issuer's loan-by-loan data along with its underwriting, servicing and collection practices (see *Appendix 6*) and considers its operational capability adequate and in line with the agency's expectations.

The composition and credit quality of the cover pool may change over time because of the dynamic nature of the programme.

Geographical Breakdown

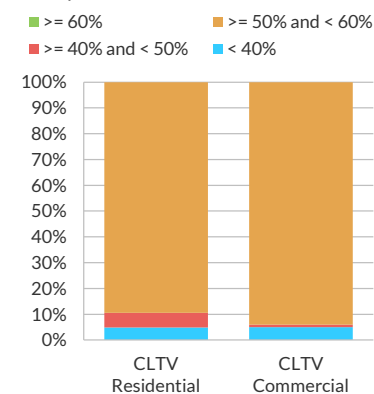
30 September 2023



Source: Fitch Ratings, SkDortmund

LTV Breakdown

30 September 2023



Source: Fitch Ratings, SkDortmund

Loss Rate Breakdown

Fitch derived a stressed cumulative default rate and recovery rate for the cover pool based on the loan-by-loan analysis of the cover assets and taking into account the features of the underlying mortgage loans for the residential part. For the commercial part, probability of default assumptions are assigned to the individual loans according to the classification as per Sk Dortmund's internal rating system. Based on past vintage cumulative default data, Fitch has applied a benchmark default rate assumption for Sk Dortmund's commercial loans of 1%, with a minimum default rate of 0.5%.

The recovery rate assumption is determined by the indexed CLTV for the residential loans in the cover pool as well as the asset recovery stresses as applicable for German residential properties under Fitch's *European RMBS Criteria*. For commercial loans, the CLTV is used as a basis for the recovery expectations under Fitch's *SME Balance Sheet Securitisation Rating Criteria*.

The individual foreclosure and loss rate assumptions for the sub-pools are combined into assumptions for the overall pool by weighting them according to their most recent proportion. Fitch will then apply a minimum loss assumption for the combined pool on a portfolio basis.

Default Model Output (%)

Rating level	WAFF	WARR	Loss rate
AAA	32.7	62.7	12.2
AA+	29.4	65.3	10.2
AA	27.7	65.1	9.7
Expected case	5.6	79.7	1.1

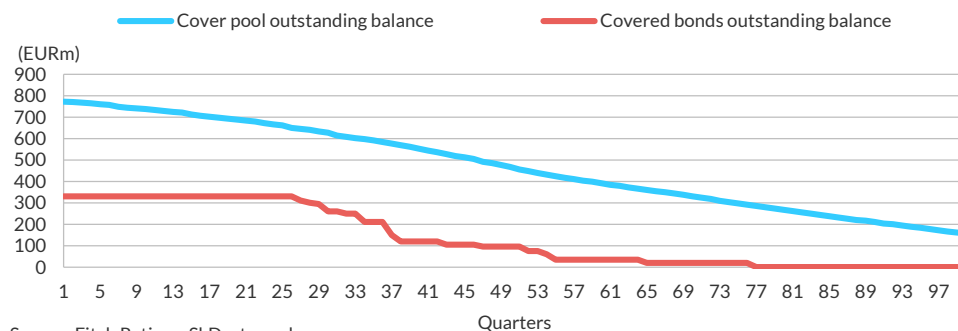
Source: Fitch Ratings

Asset-Liability Mismatches

With the timely payment rating level corresponding to the resolution reference point for the rating and considering two notches of recovery uplift granted, the rating for the mortgage Pfandbrief programme can reach 'AAA' on a recovery basis without testing for timely payments. The 'AAA' break-even OC of 14% is therefore based on the 'AAA' credit loss of the cover pool and no cash flow modelling of asset-liability mismatches has been conducted.

The chart below shows the amortisation profile of the assets assuming no prepayment until final legal maturity and the amortisation of the outstanding Pfandbriefe. The cover pool predominantly consists of fixed-rate exposures (99.8%) with a small exposure to Euribor-linked floating-rate loans.

Assets and Liabilities Unstressed Amortisation Profile



Source: Fitch Ratings, SkDortmund

Hedging

The covered bond programme includes no dedicated swaps either on the asset or liability side.

Break-Even OC for the Rating

Without cash flow modelling no ALM loss component is included into the break-even OC, which consists of the credit loss component of 13.9% for the 'AAA' rating level instead.

OC Fitch Relies Upon in Its Analysis

In its analysis, Fitch gives credit to the minimum nominal OC for the covered bonds over the past 12 months. This is in line with Fitch's criteria for issuers with an IDR of at least 'BBB-' or 'F3'. Under this approach, we give credit in our analysis to an OC of 96.1%. This provides more protection than Fitch 'AAA' break-even OC of 14%.

Sensitivity Analysis

The mortgage Pfandbriefe's 'AAA' rating represents the highest rating on the Fitch rating scale and hence cannot be upgraded.

The mortgage Pfandbriefe's 'AAA' rating would be vulnerable to a downgrade if there was a downgrade of Sk Dortmund's Long-Term IDR to 'BB' or below, or if the OC Fitch relies upon would decrease below the 'AAA' break-even OC.

If the OC Fitch relies upon decreases to the minimum legal OC of 2% on a nominal basis, the covered bond rating would be downgraded 'AA+', Fitch's resolution reference point for the rating plus one notch of recovery uplift.

Applicable Criteria, Models and Data Adequacy

Applicable Criteria

Fitch applies its *European RMBS Rating Criteria* and its *SME Balance Sheet Securitisation Rating Criteria* as its sector-specific criteria under the *Covered Bonds Rating Criteria* master criteria. The cross-sector criteria apply to specific counterparty and interest rate risks. A full list of applicable criteria is on page 2.

Criteria Variations

No criteria variations were applied in the rating of this programme.

Applicable Models

Fitch derived its portfolio default rate, recovery rate and loss rate assumptions for the pool using its ResiGlobal model for the residential pool part and its Portfolio Credit Model for the commercial pool part. The model-derived assumptions are calculated using loan-by-loan data, by analysing each loan's individual default and recovery rate assumptions as well as assumed correlation in the cover pool at various rating stress levels.

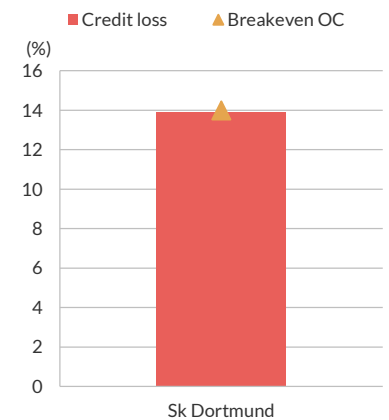
Data Adequacy

Fitch's analysis takes into account the loan characteristics, borrower profile and portfolio-specific factors that influence the default assumption and recovery assumptions for different rating stresses. The analysis also includes a review of Sk Dortmund's origination, underwriting and servicing practices and procedures, which are deemed to be of a high quality. In addition, Fitch reviewed a selection of loan files from the cover pool. The composition and credit quality of the cover pool may change over time because of the dynamic nature of the programme.

Programme Review

Cover pool and covered bond information is updated on a quarterly basis and displayed on Fitch's covered bond surveillance pages, available at www.fitchratings.com, and in the quarterly *Covered Bonds Surveillance Snapshot*.

Breakeven OC Breakdown



Source: Fitch Ratings

Disclaimer

References in this report to the content and impact of relevant legislation and/or regulation represent Fitch's interpretation. Fitch relies on legal opinions or memoranda provided by issuers' and/or other outside legal counsel. As Fitch has always made clear, Fitch does not provide legal advice or confirm that a country's legal or regulatory framework, the legal opinions or memoranda, or any other programme documents or any structures are sufficient for any purpose. The disclaimer at the foot of this report makes it clear that this report does not constitute legal, tax and/or structuring advice from Fitch, and should not be used or interpreted as legal, tax and/or structuring advice from Fitch. Should readers of this report need legal, tax and/or structuring advice, they are urged to contact relevant advisers in the relevant jurisdictions.

Appendix 1: Structural and Legal Aspects of the Programme

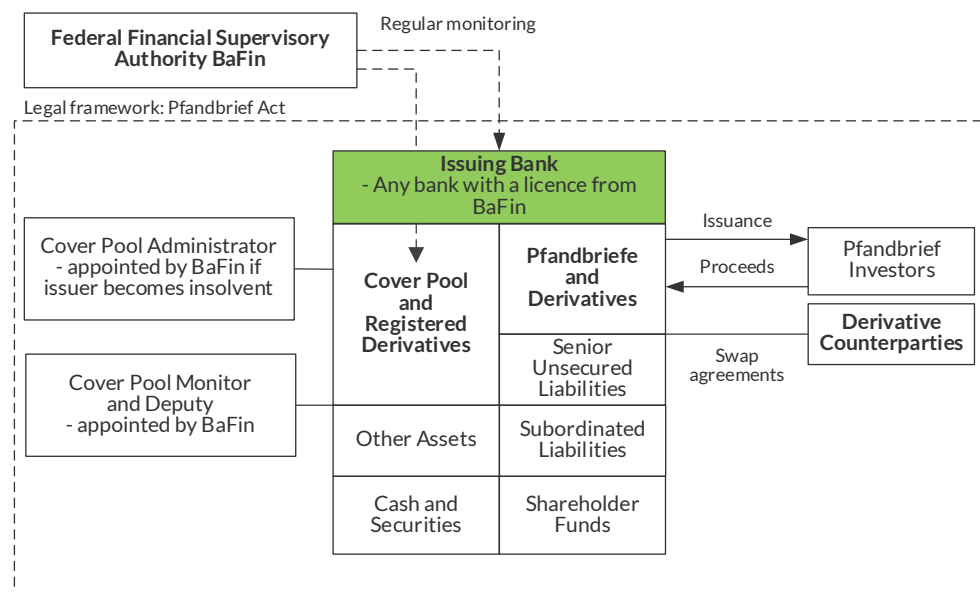
Overview and Basis of Dual Recourse

Sparkasse Dortmund can issue extendable-maturity Pfandbriefe under this programme, which are secured by a dynamic pool of mortgage lending assets. These assets are recorded in a dedicated cover register and would not belong to the insolvency estate of the issuer but constitute a separate, bankruptcy-exempt estate.

As long as the issuer is solvent, it will repay covered bond obligations when due pari passu among themselves and with their senior liabilities, irrespective of the performance of the cover assets. On a second recourse, if issuer insolvency proceedings were started, outstanding covered bonds and registered cover assets would constitute a separate legal estate in the form of a so-called Pfandbriefbank with limited business activity (PBwLBA). The scope of this PBwLBA is restricted to administration of the cover assets and repayment of the covered bond obligations.

The legislation also foresees a conditional two-stage maturity extension possibility. Bond principal and interest payments may initially be postponed by the cover pool administrator for four weeks on its appointment. Principal payments may be postponed for a total of 12 months by the administrator, if this is deemed to lead to a better outcome for bondholders. Furthermore, the alternative manager has the right to sell assets, to receive the cash flows from the assets, to take out loans or to issue new Pfandbriefe.

Diagram of a Pfandbrief Issuance



Source: Fitch Ratings

Flows of Funds Within the Programme

Mortgage loans are cover pool eligible up to 60% of their mortgage lending value. On registration of a loan in the cover register, it becomes part of the cover pool. The issuance proceeds of the mortgage covered bonds flow in the general bank account and are not earmarked for the funding of mortgage loan origination.

Covered bond repayment will also be made from this account unless there has been an enforcement of the recourse to the cover pool. Fitch believes that, on its appointment, the alternative manager (Sachwalter) is the sole party entitled to disburse incoming cash flows from the cover assets to satisfy covered bond payments becoming due. The alternative manager is appointed by a court at the request of BaFin, at the latest on the issuer's insolvency.

Priority of Payments

Two different priorities of payment for application of cash flows received from the cover assets exist. These depend on the timing of the appointment of the alternative manager.

Priority of Payments Before Alternative Manager Appointment

Before the appointment of an alternative manager, all cash flows from the asset portfolio flow to the general bank account. Whenever covered bond payments, interest or principal, are due, the issuer must settle these in full and timely according to the bonds' terms and conditions. The issuer also bears all administrative costs related to the cover pool and the bonds.

The issuer is accountable for compliance with all legal requirements, in particular adherence with all eligibility criteria, minimum OC and liquidity requirements.

Priority of Payments After Appointment

After being appointed, the alternative manager holds the exclusive right to manage the cover assets. This includes liquid assets and incoming cover asset interest and principal repayments. This right is not limited to the amount registered in the cover pool but extends to the whole loan. The alternative manager will deduct appropriate administration costs from the incoming mortgage loan cash flows.

Subsequently, the alternative manager is responsible for separating the incoming whole loan cash flows according to their legal status, i.e. cash flows will be split between cover pool loan part and junior ranking loan parts. The cash flows of junior ranking loan parts will be transferred to the general insolvency estate. From the cash flows of the registered loan parts, the alternative manager will deduct administrative costs relating to the cover pool, such as remuneration and special cover pool audit costs. All remaining funds must be used to repay the mortgage Pfandbriefe according to their terms and conditions.

Payments to privileged derivative counterparties rank pari passu with covered bond payments.

Should funds remain after all administration costs are satisfied and all privileged liabilities have been redeemed in full, the alternative manager will pass these on to the general insolvency estate.

The flow of funds may be affected by the table of events shown in *Appendix 3*.

Structural Features of the Programme

Sk Dortmund's mortgage covered programme is based on the Pfandbrief legislation (see *Appendix 4*). The programme does not contain any additional structural features.

Appendix 2: ESG Relevance Scores

Credit-Relevant ESG Derivation

Sparkasse Dortmund, Mortgage Covered Bonds has 6 ESG potential rating drivers				key driver	0	issues	5
➔	Sparkasse Dortmund, Mortgage Covered Bonds has exposure to compliance risks including fair lending practices, mis-selling, repossession/foreclosure/recovery practices, borrower/consumer data protection (data security) but this has very low impact on the rating.			driver	0	issues	4
➔	Sparkasse Dortmund, Mortgage Covered Bonds has exposure to macroeconomic factors and sustained structural shifts in secular preferences affecting consumer behavior and underlying mortgages and/or mortgage availability but this has very low impact on the rating.			potential driver	6	issues	3
➔	Governance is minimally relevant to the rating and is not currently a driver.			not a rating driver	5	issues	2
					3	issues	1

Environmental (E) Relevance Scores

General Issues	E Score	Sector-Specific Issues	Reference	E Relevance
GHG Emissions & Air Quality	2	Regulatory risks, fines, or compliance costs from building emissions standards (including energy consumption) and related reporting standards	Asset Stresses; Cash Flow Stresses; OC Protection	5
Energy Management	2	Assets' energy/fuel efficiency and impact on valuation (including from potential regulatory risks)	Asset Stresses; Cash Flow Stresses; OC Protection	4
Water & Wastewater Management	1	n.a.	n.a.	3
Waste & Hazardous Materials Management; Ecological Impacts	2	Environmental site risk and associated remediation/liability costs; sustainable building practices including Green building certificate credentials	Asset Stresses; Cash Flow Stresses; OC Protection	2
Exposure to Environmental Impacts	2	Asset, operations and/or cash flow exposure to extreme weather events and other catastrophe risk, including but not limited to flooding, hurricanes, tornadoes, and earthquakes	Asset Stresses; Cash Flow Stresses; OC Protection	1

How to Read This Page

ESG relevance scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant to the credit rating and green (1) is least relevant.

The Environmental (E), Social (S) and Governance (G) tables break out the ESG general issues and the sector-specific issues that are most relevant to each industry group. Relevance scores are assigned to each sector-specific issue, signaling the credit-relevance of the sector-specific issues to the issuer's overall credit rating. The Criteria Reference column highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis. The vertical color bars are visualizations of the frequency of occurrence of the highest constituent relevance scores. They do not represent an aggregate of the relevance scores or aggregate ESG credit relevance.

The Credit-Relevant ESG Derivation table's far right column is a visualization of the frequency of occurrence of the highest ESG relevance scores across the combined E, S and G categories. The three columns to the left of ESG Relevance to Credit Rating summarize rating relevance and impact to credit from ESG issues. The box on the far left identifies any ESG Relevance Sub-factor issues that are drivers or potential drivers of the issuer's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the relevance score. All scores of '4' and '5' are assumed to result in a negative impact unless indicated with a '+' sign for positive impact.

Classification of ESG issues has been developed from Fitch's sector ratings criteria. The General Issues and Sector-Specific Issues draw on the classification standards published by the United Nations Principles for Responsible Investing (PRI), the Sustainability Accounting Standards Board (SASB), and the World Bank.

Social (S) Relevance Scores

General Issues	S Score	Sector-Specific Issues	Reference	S Relevance
Human Rights, Community Relations, Access & Affordability	2	Accessibility to affordable housing; GSE/agency issued or provision for social good; services for underbanked and underserved communities	Asset Stresses; Cash Flow Stresses; OC Protection	5
Customer Welfare - Fair Messaging, Privacy & Data Security	3	Compliance risks including fair lending practices, mis-selling, repossession/foreclosure/recovery practices, borrower/consumer data protection (data security)	Asset Stresses; Cash Flow Stresses; OC Protection; Issuer Risk Present	4
Labor Relations & Practices	1	n.a.	n.a.	3
Employee Wellbeing	1	n.a.	n.a.	2
Exposure to Social Impacts	3	Macroeconomic factors and sustained structural shifts in secular preferences affecting consumer behavior and underlying mortgages and/or mortgage availability	Asset Stresses; Cash Flow Stresses; OC Protection	1

Governance (G) Relevance Scores

General Issues	G Score	Sector-Specific Issues	Reference	G Relevance
Rule of Law, Institutional and Regulatory Quality	3	Jurisdictional legal risks; regulatory effectiveness; supervisory oversight; foreclosure laws; government support and intervention	Issuer Risk Present; Payment Continuity Assessment; OC Protection; Asset Stresses; Cash Flow Stresses	5
Transaction & Collateral Structure	3	Asset isolation; resolution/insolvency remoteness; legal structure; structural risk mitigants; complex structures	Issuer Risk Present; Payment Continuity Assessment; OC Protection; Asset Stresses; Cash Flow Stresses	4
Transaction Parties & Operational Risk	3	Counterparty risk; origination, underwriting and/or aggregator standards; borrower/lessee/sponsor risk; originator/servicer/manager/operational risk	Issuer Risk Present; Payment Continuity Assessment; OC Protection; Asset Stresses; Cash Flow Stresses	3
Data Transparency & Privacy	3	Transaction data and periodic reporting	Issuer Risk Present; Payment Continuity Assessment; OC Protection; Asset Stresses; Cash Flow Stresses	2
				1

CREDIT-RELEVANT ESG SCALE - DEFINITIONS

How relevant are E, S and G issues to the overall credit rating?	
5	Highly relevant; a key transaction or program rating driver that has a significant impact on an individual basis.
4	Relevant to transaction or program ratings; not a key rating driver but has an impact on the ratings in combination with other factors.
3	Minimally relevant to ratings; either very low impact or actively mitigated in a way that results in no impact on the transaction or program ratings.
2	Irrelevant to the transaction or program ratings; relevant to the sector.
1	Irrelevant to the transaction or program ratings; irrelevant to the sector.

Appendix 3: Summary of Events and Relevant Consequences

Table of Events and Relevant Consequences to the Issuer and the Bondholders

Event	Trigger	Structural consequence	Payer	Acceleration?	Timely payments	Full repayment
Ongoing (before any of the following events)	None.	The issuer makes scheduled payments to the covered bonds out of its resources. All costs incurred are borne by the issuer. Any funds in connection with privileged swap agreements are to be paid directly to or by the issuer.	Issuer	No	Interest and principal to be paid on their due date.	Principal payments to be met in full by the issuer.
Appointment of alternative manager	Commencement of issuer insolvency proceedings; or as a measure in case of danger as per Art.46 Kreditwesengesetz.	Upon commencement of insolvency proceedings cover pool, privileged derivatives and covered bonds are legally separated into the PBwLBA. BaFin proposes at least one and up to three alternative managers. The responsible court formally appoints the alternative manager. Upon appointment, the alternative manager is the only party allowed to dispose of cover assets including incoming payments on the cover assets. Covered bond payments are settled by the alternative manager. Swap payments rank pari passu and are also settled by the alternative manager. Expenses are deducted from incoming cash flows before settling bond and swap payments.	PBwLBA	No	Interest and principal payments may initially be postponed by the cover pool administrator for four weeks upon its appointment. Principal payments may be postponed for a total of 12 months by the administrator, if this is deemed to lead to a better outcome for bondholders. Interest payments would then need to be paid timely.	Principal payments to be met in full by the PBwLBA.
Default of the PBwLBA	Default on any of its obligations, including covered bonds, or overindebtedness of the PBwLBA.	BaFin files an application for commencement of insolvency proceedings against the PBwLBA. All covered bonds become immediately due and payable at their early redemption amount plus accrued interest.	Insolvency estate of the PBwLBA	Yes	No	Depending on the proceeds derived from the portfolio sale.

Source: Fitch Ratings, Pfandbrief Act

Appendix 4: Main Characteristics of Applicable Legislation

The table below is based on Fitch’s understanding of certain aspects of the applicable regime and is not a substitute for the original texts and/or German legal advice.

Main Characteristics of German Legislative Pfandbriefe

Issuers	Financial institutions with a licence to issue Pfandbriefe.
Supervision	German Federal Financial Supervisory Authority (BaFin).
Mortgage collateral	<ul style="list-style-type: none"> Residential or commercial mortgages; Geographical scope to the EU/EEA, the UK, Switzerland, the US, Canada, Japan, Australia, New Zealand or Singapore; Up to 20% of the outstanding Pfandbriefe can be substitute assets.
Loan-to-value limits for mortgage loans	60% LTV based on the mortgage lending value.
Public-sector assets	<ul style="list-style-type: none"> Public-sector assets; Geographical scope to the EU/EEA; For assets from the US, the UK, Canada, Japan and Switzerland, the debtor must be assigned to credit quality step 1; Up to 15% of the outstanding Pfandbriefe can be substitute assets.
Transfer of assets	Integrated template, assets remain on the issuer’s balance sheet.
Cover register	Cover register is required for the respective cover pool.
Cover pool monitor	Independent cover pool monitor (Treuhand) appointed by BaFin.
Alternative manager (Sachwalter)	A dedicated alternative manager would take over the management of the cover assets and outstanding liabilities post issuer default. He would be appointed by a court at the request of BaFin, at the latest upon the issuer’s insolvency.
Maturity extension	The legislation foresees a two-stage maturity extension process. Bond principal and interest payments may initially be postponed by the cover pool administrator for four weeks upon its appointment. Principal payments may be postponed for a total of 12 months by the administrator, if this is deemed to lead to a better outcome for bondholders.
180-day liquidity buffer	Liquidity needs matching the maximum negative accumulated balance of cash flows for the next 180 days are required to be covered at all times.
Minimum OC	<ul style="list-style-type: none"> 2% nominal value; 2% stressed net present value (NPV). The NPV is detailed in a specific net present value regulation (Barwertverordnung) including procedures, stress scenarios and risk models. The approach can be static or dynamic, or based on internal models.
Treatment of swap counterparties	Derivative counterparties rank pari-passu with the claims of the covered bond holders.
Pfandbriefbank with limited business activity	The cover pool constitutes an insolvency-free asset and continues to exist post-issuer default as a PBwLBA to ensure the timely payment of the liability obligations. The PBwLBA would be managed by the alternative manager.

Source: Fitch Ratings, Pfandbrief Act

Appendix 5: Other Payment Continuity Risk Considerations

Asset Segregation

Fitch expects that ring-fencing of the cover pool will be effective given the ‘all or nothing’ nature of this risk. The ring-fencing of cover assets from any claims from unsecured creditors of the defaulted financial institution is achieved by virtue of law. This is often in the form of an exemption to normal bankruptcy legislation, or through a transfer of the assets to a bankruptcy-remote SPV acting as a guarantor of the issued covered bonds.

Asset Segregation: No Negative Impact on PCU

Component driver	Fitch assessment
Segregation of cover pool from other creditors of issuer	Cover assets are segregated through their registration in the cover register (Deckungsregister). Registered assets form a special estate (PBwLBA) and are exclusively available for the claims of the bondholders and privileged derivative counterparties.
Excess OC immune from claims from other creditors	Residual risk remains as the German covered bond law states that assets should be given back to the general insolvency estate if they are “obviously not necessary” to cover the claims of the bondholders, the minimum OC and the costs of the PBwLBA.
Asset and liability claw back risk	A remote risk of asset and liability clawback as circumstances in which clawback may occur are rare and rather hypothetical.
Commingling risk	Residual risk remains as prior to the commencement of insolvency proceedings or appointment of an alternative manager collections received are not separated from the general bank account in the issuer’s name. No structural mitigating factors are in place. Commingling is legally prohibited after the start of insolvency proceedings or appointment of an alternative manager.
Set-off risk for deposits	Set-off against assets entered into the pool is excluded by law.

Source: Fitch Ratings

Alternative Management

Systemic Alternative Management

Fitch takes into consideration the framework or contractual clauses governing the appointment of a substitute manager, together with the length of time required to appoint one. We also consider any potential conflict of interest (in cases where a single administrator in a bankruptcy takes care of covered bonds and other creditors) and the manager’s responsibilities in the servicing. Other factors we consider include liquidation of the cover assets to meet payments due on the covered bonds and any further protection due to oversight or potential support for regulated covered bonds.

This regulated programme benefits from the statutory role of BaFin to request a suitably qualified alternative manager for the covered bond programme to manage a designated institution’s covered bond activities upon an issuer’s insolvency. The responsible court would then formally appoint the alternative manager.

If Fitch assesses that systemic alternative management represents a high risk to payment continuity, the otherwise achievable PCU for the programme would be reduced by one notch if it is in the one-to-three-notch range. The PCU for the programme would be reduced by two notches if it was in the four-to-eight-notch range.

Systemic Alternative Management: No Negative Impact on PCU

Component driver	Fitch assessment
Administrator takes exclusive care of covered bondholders? When are they appointed?	An alternative manager will service the pool in the interest of the bondholders. The alternative manager will be appointed at the latest at insolvency of the issuer by a court at the request of BaFin. Prior appointment is possible.
Importance of timeliness of payments in the legal provisions	The Pfandbrief act foresees a two-stage maturity extension process. Bond principal and interest payments may initially be postponed by the cover pool administrator for four weeks upon its appointment. Principal payments may be postponed for a total of 12 months by the administrator, if this is deemed to lead to a better outcome for bondholders. Interest payments would then need to be made in a timely manner.
Substitute manager able to sell cover assets or borrow to make timely payments	The alternative manager has the power to sell assets and take bridge-financing, take out loans or issue new Pfandbriefe.
Regulatory oversight	BaFin

Source: Fitch Ratings

Cover Pool-Specific Alternative Management

Fitch focuses on the likely ease of the transferability of relevant data and IT systems to an alternative manager and buyer, with such quality and ease also judged on the quality and quantity of data provided to Fitch.

We would lower the programme PCU driven by its liquidity protection if Fitch assesses cover-pool-specific alternative management to represent a high risk. This would reflect a greater link to the Long-Term IDR of the issuing institution via a reduction by one notch if the otherwise achievable PCU is in the one-to-three-notch range. A reduction of two notches would apply if it was in the four-to-eight-notch range.

Cover Pool Alternative Management: No Negative Impact on PCU

Component driver	Fitch assessment
Cover assets, debtors' accounts and privileged swaps clearly identified within IT systems	Market standard systems are in place that ensure identification of registered assets.
Standardised or custom-made IT systems used	Fitch considers used systems to be well known in the market, enabling an alternative manager to easily start managing the programme.
Automation and speed of cover pool reporting	Fitch encountered limitations on available information, which did not enable the agency to perform a full asset analysis. Stratified information has been provided and will be provided on a quarterly basis.
Adequate filing of loan documentation, evidence of security	Loan files for residential loans are available partially in electronic and paper-based form.

Source: Fitch Ratings

Appendix 6: Origination and Servicing

Origination and Underwriting

Fitch views Sk Dortmund's origination practices to be aligned with market standards. The credit risk assessment of mortgage loan applications is based on key principles documented in its credit policy. Sk Dortmund's operations are almost exclusively concentrated in and around Dortmund, which is common practice for the savings banks.

Loans are originated using different channels, mainly through Sk Dortmund's own branch network. Underwriting processes are centralised and supported by standardised IT system and risk-management processes. The approvals of lending and credit monitoring are linked to the level of the individual risk. Corresponding credit competencies are defined depending on the volume and creditworthiness of the borrowers, so that credit decisions are always made at the appropriate level depending on the risk. Several internally developed scorecards and check-lists are used to ensure a complete and consistent approach.

Valuations are conducted by a qualified in-house appraiser and typically include a physical inspection of the property.

Servicing

The covered bond programme is managed with market standard software, allowing for a daily pool registration of new loans. For all newly originated mortgage loans, specialists check loan and property cover pool eligibility. Selection criteria are based on the Pfandbrief Act and internal guidelines. Loans are registered to the pool after cover pool eligibility has been confirmed for each loan by dedicated assistants to the cover pool monitor. For de-registration of loans cover pool monitor consent is required.

Business Continuity

Sk Dortmund has business continuity plans in place, supported by back-up data centres. Fitch believes the issuer's business continuity plans are sufficiently robust to allow for the resumption of operations at alternative locations without any significant interruption.

SOLICITATION & PARTICIPATION STATUS

For information on the solicitation status of the ratings included within this report, please refer to the solicitation status shown in the relevant entity's summary page of the Fitch Ratings website.

For information on the participation status in the rating process of an issuer listed in this report, please refer to the most recent rating action commentary for the relevant issuer, available on the Fitch Ratings website.

DISCLAIMER & DISCLOSURES

All Fitch Ratings (Fitch) credit ratings are subject to certain limitations and disclaimers. Please read these limitations and disclaimers by following this link: <https://www.fitchratings.com/understandingcreditratings>. In addition, the following <https://www.fitchratings.com/rating-definitions-document> details Fitch's rating definitions for each rating scale and rating categories, including definitions relating to default. Published ratings, criteria, and methodologies are available from this site at all times. Fitch's code of conduct, confidentiality, conflicts of interest, affiliate firewall, compliance, and other relevant policies and procedures are also available from the Code of Conduct section of this site. Directors and shareholders' relevant interests are available at <https://www.fitchratings.com/site/regulatory>. Fitch may have provided another permissible or ancillary service to the rated entity or its related third parties. Details of permissible or ancillary service(s) for which the lead analyst is based in an ESMA- or FCA-registered Fitch Ratings company (or branch of such a company) can be found on the entity summary page for this issuer on the Fitch Ratings website.

In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed.

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.

Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (the "NRSRO"). While certain of the NRSRO's credit rating subsidiaries are listed on Item 3 of Form NRSRO and as such are authorized to issue credit ratings on behalf of the NRSRO (see <https://www.fitchratings.com/site/regulatory>), other credit rating subsidiaries are not listed on Form NRSRO (the "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratings issued by or on behalf of the NRSRO.

Copyright © 2023 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved.