# MOODY'S INVESTORS SERVICE

# CREDIT OPINION

24 April 2019

# Update

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# **Closing date**

September 2010

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# Sparebanken Sor Boligkreditt AS -Norwegian Mortgage Covered Bonds

Update to New Issue Report, reflecting data as of 30.09.2018

# Ratings

#### Exhibit 1

Cover Pool (NOK)	Ordinary Cover Pool Assets	Covered Bonds (NOK)	Rating
NOK 36,741,429,591.00	Residential Mortgage Loans	NOK 30,351,150,000.00	Aaa

Sources: Sparebanken Sor Boligkreditt AS, Moody's Investors Service

#### Summary

The covered bonds issued by Sparebanken Sor Boligkreditt AS (the issuer) are full recourse to the issuer and are secured by a cover pool of assets consisting mostly of residential mortgage loans (96.9%) in Norway. We see a high likelihood of timely payments of the covered bonds even in case of issuer insolvency.

Credit strengths include the full recourse of the covered bonds to the issuer and support provided by Norway's covered bond legal framework, which governs the issuer's regulation and supervision.

Credit challenges include the covered bonds' high level of dependency on the issuer. As with most covered bonds in Europe, there are a few restrictions on the future composition of the cover pool. Our credit analysis takes into account the cover pool's credit quality (reflected in the collateral score of 5.0%) and the current over-collateralisation (OC) of 21.1% (on a nominal basis) as of 30 September 2018 (the cut-off date).

# **Credit strengths**

- » Recourse to the issuer: The covered bonds are full recourse to the issuer, which is a standalone legal entity wholly owned by <u>Sparebanken Sor (Aa3(cr))</u>. (See "Covered bond analysis")
- Support provided by the Norwegian legal framework: The covered bonds are governed by the Norwegian covered bond legislation, which includes several strong features. As a regulated financial institution (*kredittforetak*), this issuer is subject to ongoing supervision by the Norwegian Financial Services Authority. (See "Covered bond description")
- » **Specialist issuers**: Norwegian covered bond issuers must be specialist credit institutions, so they may continue to operate for a period after their parent or support provider defaults. However, this structure also reduces the value of an unsecured claim because issuers typically have few assets outside the cover pool. (See "Covered bond description")

- » High credit quality of the cover pool: The covered bonds are supported by a cover pool of high-quality assets. Most of the assets are residential mortgage loans backed by properties in Norway. The strong collateral quality is reflected in the collateral score, which is currently 5.0%. (See "Cover pool analysis")
- » Ability to reset loan rates: The issuer can reset loan rates on floating rate residential mortgages (100% of the cover pool) on six weeks' notice to the borrower. In the event of the issuer's default, the insolvency administrator will be able to similarly reset the loan rates, which improves the sales value of the cover pool.
- » **Soft-bullet bonds:** Covered bonds issued under this programme benefit from a 12-month maturity extension period, which reduces the bonds' refinancing risk. (See "Covered bond analysis")
- » Set-off, clawback and commingling risk effectively mitigated: A combination of legislative, structural and operational features mitigates the risk of losses for covered bond investors stemming from set-off, clawback and commingling. (See "Additional covered bond analysis")

# **Credit challenges**

- » High level of dependency on the issuer: As with most covered bonds, before the insolvency of the issuer, the issuer can materially change the nature of the programme. For example, the issuer can add new assets to the cover pool, issue new covered bonds with varying promises and enter into new hedging arrangements. Also, similar to most covered bonds in Europe, this programme has few restrictions on the future composition of the cover pool. These changes could affect the credit quality of the cover pool as well as the overall refinancing and market risks. Further, if the quality of the collateral deteriorates below a certain threshold, the issuer would have the ability, but not the obligation, to increase the OC in the cover pool. (See "Covered bond analysis")
- » Refinancing risk: Following a covered bond (CB) anchor event, covered bondholders may need to rely on proceeds that are raised via the sale of, or borrowed against, cover pool assets to make timely payments of the principal on the bonds. Following a CB anchor event, the market value of these assets may be subject to high volatility. A CB anchor event occurs when the issuer, or another entity within the issuer group that supports the issuer, ceases to service the payments on the covered bonds. (See "Covered bond analysis")
- » **Currency risk and interest rate risk, mitigated by external swap arrangements:** Similar to most Norwegian covered bonds, investors are exposed to currency risk because 46.9% of the bonds are denominated in euro, while 100% of the cover pool assets are denominated in Norwegian krona. In addition, there is an interest rate risk because 49.7% of the bonds are with fixed interest rates, while 100% of the cover pool assets are floating interest rates. The issuer has entered into swap arrangements with highly rated external swap counterparties to mitigate this risk. (See "Covered bond analysis")
- » Floating interest rates expose borrowers to rising debt service burden: In line with Norwegian market standards, all the loans in the cover pool feature floating interest rates. These interest rates expose the borrowers to the risk of increasing debt service payments in case of increasing interest rates, possibly leading to higher pool arrears. Furthermore, increasing interest rates may exert downward pressure on house prices, increasing the loan-to-value (LTV) ratios in the cover pool. (See "Cover pool analysis")
- » Lack of liquidity facility: The programme does not benefit from any designated source of liquidity if cash flow collections are interrupted. (See "Covered bond analysis")
- » Time subordination: After a CB anchor event, later-maturing covered bonds are subject to time subordination. Principal cash collections may be used on a first-come, first-served basis, paying earlier-maturing covered bonds before later-maturing covered bonds. This subordination could lead to the erosion of OC before any payments are made to later-paying covered bonds. (See "Covered bond analysis")

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

# **Key characteristics**

#### Exhibit 2

#### Covered bond characteristics

Moody's Programme Number:	263
Issuer:	Sparebanken Sør Boligkreditt AS
Covered Bond Type:	Residential Mortgage Loans
Issued under Covered Bonds Law:	Yes
Applicable Covered Bonds Law:	Norwegian covered bond legislation
Entity used in Meedule TDI englysion	Creation Los
Entity used in Moody's TPI analysis:	Sparebanken Sør
CR Assessment:	Aa3(cr)
CB Anchor:	CR assessment +1 notch
Senior unsecured/deposit rating:	n/a
Total Covered Bonds Outstanding:	NOK 30,351,150,000
Main Currency of Covered Bonds:	NOK (53.1%), EUR (46.9%)
Extended Refinance Period:	Yes (100% of bonds)
Principal Payment Type:	Soft Bullet (1 year extension period)
Interest Rate Type:	Floating rate covered bonds (50.3%), fixed rate covered bonds (49.7%)
Committed Over-Collateralisation:	2.0%
Current Over-Collateralisation:	21.1% (on a nominal basis)
Main Swap Provider	DNB Bank, Nordea, Swedban, Danske - for details, see Performance Overview report
Monitoring of Cover Pool:	Cover pool monitor, mandatory by operation of the Norwegian covered bond legislation
Trustees:	n/a
Timely Payment Indicator:	High
TPI Leeway:	5 notches

Sources: Sparebanken Sor Boligkreditt AS, Moody's Investors Service

#### Exhibit 3

## Cover pool characteristics

Size of Cover Pool:	NOK 36,741,429,591
Main Collateral Type in Cover Pool:	Residential (96.9%)
Main Asset Location of Ordinary Cover Assets:	Norway (100%)
Main Currency:	NOK (100%)
Loans Count:	29,672
Number of Borrowers:	26,166
WA unindexed LTV: Whole Loan / Senior Loan (*)	66.9% / 60.3%
WA Indexed LTV: Whole Loan / Senior Loan:	62.6% / 54.4%
WA Seasoning:	41 months
WA Remaining Term:	200 months
Interest Rate Type:	Floating rate assets(100.0%)
Collateral Score:	5.0%(4.3% excluding systemic risk)
Cover Pool Losses:	8.7%
Further Cover Pool Details:	See Appendix 1
Pool Cut-off Date:	30 September 2018

Sources: Sparebanken Sor Boligkreditt AS, Moody's Investors Service

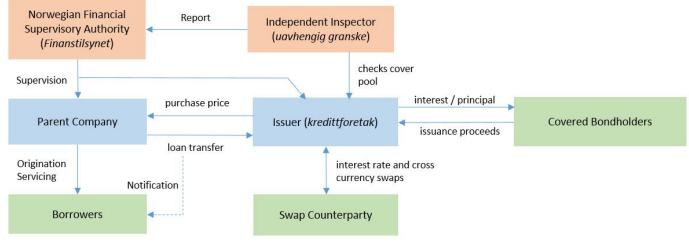
# **Covered bond description**

The covered bonds issued under the mortgage covered bond programme of Sparebanken Sor Boligkreditt AS are full recourse to the issuer. Upon a CB anchor event, covered bondholders would have access to a cover pool of residential mortgage loan receivables.

#### Structural diagram

## Exhibit 4

#### Legal structure of a typical covered bond transaction



Source: Moody's Investor Services

#### **Structure description**

#### The bonds

All outstanding covered bonds benefit from a 12-month maturity extension. If the Issuer fails to redeem the Covered Bonds in full on the scheduled maturity date or within two business days thereafter, the maturity of the principal amount outstanding of the covered bonds will automatically be extended up to one year to the extended maturity date without constituting an event of default or giving holders of the Covered Bonds any right to accelerate payments on the Covered Bonds.

#### Issuer recourse

The covered bonds are full recourse to the issuer. Therefore, the issuer is obliged to repay principal and pay interest on the covered bonds.

#### Recourse to cover pool and over-collateralisation

If the issuer becomes insolvent, the covered bondholders would have priority claims over a pool of assets (cover pool). The Norwegian legal framework requires full coverage of the bonds by assets on a net present value basis, and a 2.0% over-collateralisation (OC) on a nominal basis. These requirements need to be fulfilled at all times, taking into account loan amounts only up to a maximum of 75% of a property's prudent market value, and giving no value to non-performing loans. The OC reported by the issuer considers only loan parts within the loan-to-value limit and excludes non-performing loans. (See "Cover pool description" for the cover pool characteristics and "Cover pool analysis" for our analysis of the pool)

The OC in the cover pool is currently 21.1% on a nominal basis of which the issuer provides 2.0% on a nominal basis in a committed form (legal minimum OC under the Norwegian legal framework). Under our Cobol model, the minimum OC consistent with the Aaa rating is 0.5%, of which the issuer should provide 0% in a committed form to be given full value (numbers in nominal terms). We are currently relying on uncommitted OC in our expected loss analysis.

Although the issuer has the ability to increase the OC in the cover pool if the collateral quality deteriorates below a certain threshold, the issuer does not have any obligation to do so. A failure to increase OC following a deterioration of the collateral could lead to a negative rating action.

#### Legal framework

The covered bonds are governed by the Norwegian covered bond legislation. There are a number of above-average strengths in this legislation, which include, inter-alia, the following conditions: (1) because issuers are specialist credit institutions, a default of the parent or the group supporting the issuer would not necessarily trigger an immediate default or insolvency of the issuer; (2) the issuer must limit interest rate risk (unless swapped) by reference to the potential losses resulting from a parallel shift of one percentage point in all interest-rate curves and distortions of the interest rate curves; (3) swap counterparties must post collateral or provide other security if their credit quality declines; (4) nonperforming assets are excluded from cover pool tests and therefore are less likely to dilute the cover pool quality; and (5) set-off is excluded in respect of any asset in the cover pool. (See "Moody's related publications: Norway - Legal Framework for Covered Bonds")

#### Other structural features

In its capacity as a regulated financial institution under the terms of the Norwegian covered bond legislation, the issuer has obtained a license from the Norwegian Financial Services Authority (*Finanstilsynet*) to issue covered bonds and is subject to ongoing supervision. The license and its subsequent maintenance are subject to the issuer satisfying, on an ongoing basis, several requirements in respect of procedures and risk control systems set out by the Norwegian covered bond legislation and other applicable regulations.

# **Covered bond analysis**

Our credit analysis of the covered bonds primarily focuses on the issuer's credit quality, refinancing risk, interest rate risk and currency risk, as well as the probability that payments on the covered bonds would be made in a timely fashion following a CB anchor event, which we measure using the Timely Payment Indicator. (See "Timely Payment Indicator")

#### Primary analysis

#### Issuer analysis - Credit quality of the issuer

Sparebanken Sor Boligkreditt AS is unrated. The reference point for the issuer's credit strength in our analysis is the CB anchor of Sparebanken Sor which, in line with other Norwegian covered bond issuers, is the Counterparty Risk (CR) Assessment plus one notch.

The covered bond rating is linked to the credit strength of Sparebanken Sor, mainly because the parent has established a revolving credit facility for the benefit of the issuer. Sparebanken Sor's commitment to the covered bond programme is further underlined by the range of functions it carries out on behalf of the issuer. Sparebanken Sor's CR Assessment is Aa3(cr). For a description of the parent's (Sparebanken Sor) rating drivers, see its <u>Credit Opinion</u>, published in December 2018.

The issuer is a specialist credit institution. An advantage of this is that, should Sparebanken Sor default, the issuer may continue to operate on a standalone basis for a period of time. A disadvantage, however, is that most of the issuer's assets are inside the cover pool, which lowers the value of covered bondholders' unsecured claim on the issuer.

## Issuer analysis - Dependency on the issuer's credit quality

The credit quality of the covered bonds depends primarily on the credit quality of the issuer (as measured by the CB anchor). If the issuer's credit strength were to deteriorate, there would be a greater risk that a CB anchor event would occur, leading to refinancing risk for the covered bonds. Consequently, the credit quality of the covered bonds would deteriorate unless other credit risks were to decrease. In the event that the CB anchor deteriorates, the issuer would have the ability, but not the obligation, to increase the OC in the cover pool. A failure to increase the level of OC under these circumstances could lead to a negative rating action.

The reasons for the covered bonds' high level of dependency on the issuer also include their exposure to decisions made by the issuer in its discretion as manager of the covered bond programme. For example, before a CB anchor event, the issuer may add new assets to the cover pool, remove assets from the cover pool, issue further bonds and enter new hedging arrangements. Such actions could reduce the value of the cover pool.

As with most covered bonds in Europe, there are few contractual restrictions on the future composition of the cover pool, which creates substitution risk. Nevertheless, the cover pool quality over time will be protected by, among other things, the requirements of the Norwegian legal framework, which specifies what types of assets are eligible. (See "Moody's related publications: Norway - Legal Framework for Covered Bonds")

#### **Refinancing risk**

Following a CB anchor event, the natural amortisation of the cover pool assets alone cannot be relied on to repay the principal. We assume that funds must be raised against the cover pool at a discount if covered bondholders are to receive timely principal payment. Where the portion of the cover pool that is potentially exposed to refinancing risk is not contractually limited, our expected loss analysis typically assumes that this amount is in excess of 50% of the cover pool. After a CB anchor event, the market value of these assets may be subject to volatility. Examples of the stressed refinancing margins we use for different types of prime-quality assets are published in our rating methodology. (See "Moody's related publications - Moody's Approach to Rating Covered Bonds")

The refinancing-positive factors outweigh the negative ones. The refinancing-positive aspects of this covered bond programme include:

- » The high credit quality of the cover pool, which is reflected in the low collateral score of 5.0%. A high credit quality of the cover pool will lead to a lower write-off for losses and lower refinancing margins applied, all other variables being equal.
- » Provisions to allow for a bond maturity extension by 12 months, which should, in the event of a CB anchor event, improve the sales value of the cover pool and increase the chances of timely principal payments on the covered bonds.
- » The administrator has wide powers to manage cover pool assets and liquidity, and a duty to ensure timely payment. This includes (1) entering into contracts for hedging post-issuer default; (2) selling cover pool assets for the purpose of making timely payments; and (3) entering into liquidity loans or repo agreements. However, note that cover pool assets may not be pledged in favour of a particular creditor, and unsecured lending would not benefit from a priority right to the cover pool.
- » The ability of the issuer to increase the interest rate charged on floating-rate loans to the underlying borrowers on six weeks' notice, which enables margins on the cover pool assets to increase and reduces any refinancing discount. This right also applies to any potential public administrator in charge of the cover pool after a CB anchor event.

The refinancing-negative aspects of this covered bond programme include:

- » In line with other covered bond programmes, upon a CB anchor event, the cover pool assets will have a significantly higher weighted-average life, compared with the outstanding covered bonds.
- » No separate cover pool administrator following a CB anchor event. The Norwegian covered bond legislation provides for a public administration board to be appointed for both the insolvency estate and management of the cover pool. While the public administrator board is not dedicated to the cover pool, it should, however, face a minimum of conflicts because the issuer is a specialist institution with few creditors outside the cover pool.
- » The covered bond programme does not benefit from any designated source of liquidity if cash flow collections are interrupted.

#### Interest rate and currency risk

The covered bonds are exposed to interest rate and currency risks, which could result in losses because of the different payment promises made on and durations of the cover pool and the covered bonds. The issuer has entered into swap arrangements with highly rated external swap counterparties to mitigate these risks.

#### Exhibit 5

#### Overview of assets and liabilities

	WAL Assets (Years)	WAL Liabilities (Years)	Assets (%)	Liabilities (%)
Fixed rate	0.0	3.7	0.0%	49.7%
Variable rate	8.7	2.9	100.0%	50.3%

WAL = weighted average life.

n/a = not applicable.

Sources: Sparebanken Sor Boligkreditt AS, Moody's Investors Service

In the event of issuer insolvency, we currently do not assume that the public administration board would always be able to efficiently manage any natural hedge between the cover pool and the covered bonds. Therefore, following a CB anchor event, our model would separately assess the impact of increasing and decreasing interest rates on the expected loss of the covered bonds, taking the path of

interest rates that leads to the worst result. The interest rate and currency stresses used over different time horizons are published in our rating methodology.

Aspects of this covered bond programme that are market-risk positive include:

- » The issuer has entered into swap contracts with highly rated external swap counterparties. The current swap counterparties are <u>DNB</u> <u>Bank ASA</u>, <u>Nordea Bank Finland plc</u>, <u>Swedbank AB</u> and <u>Danske Bank A/S</u>. The swap contracts include credit-positive features such as:
  - Neither the insolvency of Sparebanken Sor nor of the issuer should cause a termination of the swap contracts.
  - The current swap documentation foresees that the swap counterparty must post collateral upon breach of certain rating triggers, and is required to replace itself with another counterparty upon breach of another rating trigger.
  - The swap arrangements are a one-way contract where the swap counterparty posts collateral to the issuer. Only cash in NOK is stipulated as eligible for collateral posting purposes in the documentation.
- » It is the issuer's policy to fully hedge interest rate and currency risk exposures via such external swap arrangements on an ongoing basis.

Aspects of this covered bond programme that are market-risk negative include:

- » The volume of currency risk, before taking the mitigating fact of swaps into account, is significant because 46.9% of all covered bonds are denominated in euro, while 100% of the cover pool assets are denominated in Norwegian krona.
- » The volume of interest rate risk, before taking the mitigating aspects of swaps into account, is significant because 49.7% of all covered bonds are with fixed interest rate, while 100% of the cover pool assets are with floating interest rate arrangements.

#### **Timely Payment Indicator**

Our Timely Payment Indicator (TPI) assesses the likelihood that timely payments would be made to covered bondholders following a CB anchor event, and thus determines the maximum rating a covered bond programme can achieve with its current structure while allowing for the addition of a reasonable level of OC. We have assigned a TPI of High to these covered bonds, which is in line with covered bonds from a number of other Norwegian issuers.

Based on the current TPI of High, the TPI leeway for this programme is five notches. This five-notch leeway implies that we might downgrade the covered bonds' rating because of a TPI cap if we were to lower the CB anchor by more than five notches, all other variables being equal.

#### **Additional analysis**

#### Scenarios following a CB anchor event

Following a CB anchor event, the Norwegian covered bond legislation would not contemplate the dissolution of the issuer, nor would it include any acceleration event or event of default. Following a CB anchor event, any one or more of the following scenarios may occur:

- » Despite a CB anchor event in relation to the parent, the issuer is able to remain solvent, in which case the issuer may continue to operate the covered bond programme for the time being. However, the issuer or the parent may decide to terminate arrangements by which the parent provides services to the issuer.
- » Should the issuer become insolvent, payments to the creditors with a preferential claim over the cover pool (which include covered bondholders and, if derivatives form part of the cover pool, derivative counterparties) could be continued by the public administration board of the issuer. The public administration board would be appointed by the Ministry of Finance and would be responsible for running the general insolvency estate and the cover pool of the issuer.

» Should the issuer become insolvent, the public administration board may decide that it may not be able to repay covered bondholders in full and introduce a halt of payments. The creditors would be informed of the halt of payments and the date on which it is to be introduced. All preferential claims over the cover pool would be calculated by discounting them to present value as of the date when payments have been halted. The liquidation proceeds from the cover pool would be used to repay the claims of all preferential creditors of the cover pool on a present-value basis.

#### Liquidity

The programme does not benefit from any designated source of liquidity if cash flow collections are interrupted following an insolvency of the issuer. As a result, the issuer's ability to make interest or principal payments on the covered bonds may be adversely affected. This risk is partially mitigated by:

- » The 12-month maturity extension period on the covered bonds;
- » The administrator's ability to enter into loan agreements or carry out asset sales to create liquidity;
- » Substitute assets, representing 3.1% of the cover pool, in the form of highly rated covered bonds issued by Norwegian and Swedish financial institutions.

#### Time subordination

After a CB anchor event, later-maturing covered bonds would be subject to time subordination. Principal cash collections may be used on a first-come, first-served basis, paying earlier-maturing covered bonds before later-maturing covered bonds. Such payments could result in the erosion of OC before any payments are made to later-paying covered bonds, although the possibility for a halt of payments mitigates this risk.

Exhibit 6	5
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#### Comparables -

#### Sparebanken Sor Boligkreditt AS - Mortgage Covered Bonds and other selected Norwegian deals

PROGRAMME NAME	Sparebanken Sor Boligkreditt AS - Mortgage Covered Bonds	OBOS Boligkreditt AS - Mortgage Covered Bonds	DNB Boligkreditt AS - Mortgage Covered Bonds	SpareBank 1 Boligkreditt AS - Mortgage Covered Bonds	Sparebanken Vest Boligkreditt A Mortgage Covered Bonds
Dverview					
Programme is under the law	Norwegian legal framework	Norwegian legal framework	Norwegian legal framework	Norwegian legal framework	Norwegian legal framework
Main country in which collateral is based	Norway	Norway	Norway	Norway	Norway
Country in which issuer is based	Norway	Norway	Norway	Norway	Norway
otal outstanding liabilities	30,351,150,000	13,500,000,000	418,022,250,475	201,170,506,018	65,250,956,475
otal assets in the Cover Pool	36,741,429,591	15,943,596,407	626,622,297,634	218,482,448,811	78,473,201,345
suer name	Sparebanken Sør Boligkreditt AS	OBOS Boligkreditt AS	DNB Boligkreditt	SpareBank 1 Boligkreditt	Sparebanken Vest Boligkreditt
suer CR assessment	n/a	n/a	Unpublished	Unpublished	n/a
roup or parent name	Sparebanken Sør	OBOS-banken AS	DNB Bank ASA	Sparebank 1 Alliance	Sparebanken Vest
roup or parent CR assessment	Aa3(cr)	A3(cr)	Aa1(cr)	Unpublished	Aa3(cr)
lain collateral type	Residential	Residential	Residential	Residential	Residential
ioliateral types	Residential 97%, Commercial 0%, Public Sector 0%, Other/Supplementary assets 3%	Residential 100%, Commercial 0%, Public Sector 0%, Other/Supplementary assets 0%	Residential 100%, Commercial 0%, Public Sector 0%, Other/Supplementary assets 0%	Residential 84%, Commercial 0%, Public Sector 0%, Other/Supplementary assets 16%	Residential 97%, Commercial 0%, Public Sector 0%, Other/Supplementary assets 3%
atings					
overed bonds rating	Aaa	Aaa	Aaa	Aaa	Aaa
ntity used in Moody's EL & TPI analysis	Sparebanken Sor	OBOS-banken AS	DNB Boligkreditt AS	SpareBank 1 Boligkreditt AS	Sparebanken Vest
B anchor	CR Assessment + 1 notch	CR Assessment + 1 notch	CR Assessment + 1 notch	CR Assessment + 1 notch	CR Assessment + 1 notch
CR Assessment	Aa3(cr)	A3(cr)	Unpublished	Unpublished	Aa3(cr)
SUR / LT Deposit	n/a	n/a	Unpublished	Unpublished	n/a
nsecured claim used for Moody's EL analysis	No	No	Yes	Yes	No
alue of Cover Pool					
ollateral Score	5.0%	5.0%	5.0%	5.0%	5.0%
ollateral Score excl. systemic risk	4.3%	4.1%	3.8%	2.7%	4.9%
ollateral Risk (Collateral Score post-haircut)	3.4%	3.4%	3.4%	3.4%	3.4%
arket Risk	5.4%	7.0%	8.2%	5.6%	5.7%
ver-Collateralisation Levels					
ommitted OC*	2.0%	2.0%	2.0%	2.0%	2.0%
urrent OC	21.1%	18.1%	49.9%	8.6%	20.3%
C consistent with current rating	0.5%	6.0%	0.0%	0.5%	0.5%
urplus OC	20.6%	12.1%	49.9%	8.1%	19.8%
imely Payment Indicator & TPI Leeway					
PI	High	High	Probable	High	High
'PI Leeway	5	2	4	4	5
Reporting date	30 September 2018	30 September 2018	30 September 2018	30 September 2018	30 September 2018

\*We consider this level of OC as committed according to our methodology even though the level of OC provided via the asset cover test might be higher because the issuer could reduce the level of OC down to this level without a rating impact on our covered bond rating.

Sources: Sparebanken Sor Boligkreditt AS, Moody's Investors Service

# **Cover pool description**

#### Pool description as of 30 September 2018

As of 30 September 2018, the cover pool consisted of residential mortgage loans (96.9%), and further cover assets that constitute substitute assets under the Norwegian legal framework (3.1%). All of the properties backing the loans are located in Norway.

On a nominal value basis, the cover pool assets total NOK 36.74 billion, which back NOK 30.35 billion in covered bonds, resulting in an OC level of 21.1% on a nominal value basis. The OC reported by the issuer considers only loan parts within the 75% loan-to-value limit and excludes non-performing loans. (For Sparebanken Sor's underwriting criteria, see "Appendix: Income underwriting and valuation")

The market value of the properties backing the pool's mortgage loans is determined with an automated valuation method provided by Eiendomsverdi. These valuations do not include a physical inspection of the property. The quarterly revaluations of the cover pool also use this method, which may be a more accurate basis for revaluation than using a property index.

Exhibits 7 and Exhibit 8 show more details about the cover pool characteristics as of the cut-off date.

#### **Residential mortgage loans**

#### Exhibit 7

#### Cover pool summary

#### Residential assets

Overview		Specific Loan and Borrower characteristics	
Asset type:	Residential	Loans with an external guarantee in addition to a mortgage:	0.0%
Asset balance (in NOK):	35,591,429,591	Interest only Loans (***) / Flex Loans (****)	1.6% / 22.4%
Average loan balance:	1,198,598	Loans for second homes / Vacation:	0.0%
Number of loans:	29,672	Buy to let loans / Non owner occupied properties:	2.1%
Number of borrowers:	26,166	Limited income verified:	0.0%
Number of properties:	28,564	Adverse credit characteristics (*****)	0.0%
WA remaining term (in months):	200		
WA seasoning (in months):	41	Performance	
		Loans in arrears ( ≥ 2months - < 6months):	0.0%
Details on LTV		Loans in arrears ( ≥ 6months - < 12months):	0.00%
WA unindexed LTV: Whole Loan / Senior Loan (*)	66.9% / 60.3%	Loans in arrears ( $\geq$ 12months):	0.00%
WA Indexed LTV: Whole Loan / Senior Loan:	62.6% / 54.4%	Loans in a foreclosure procedure:	0.00%
Valuation type:	Market value		
LTV threshold:	75.0%	Multi-Family Properties	
Junior ranks(**):	6.6%	Loans to tenants of tenant-owned Housing Cooperatives:	0.00%
Prior ranks:	4.0%	Other type of Multi-Family loans (*****)	0.00%

\* May be based on property value at time of origination or further advance or borrower refinancing.

\*\* Junior ranks are equal to the delta between unindexed whole loan WA LTV (including group-internal junior ranks) and unindexed senior loan WA LTV (excluding internal junior ranks).

\*\*\* Includes loans which currently are in an initial interest only period before they start amortizing.

\*\*\*\* Flex Loans have an amortization profile and can be re-drawn by the customer up to a certain limit.

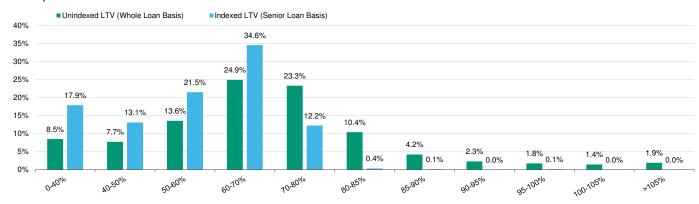
\*\*\*\*\* Typically borrowers with a previous personal bankruptcy or borrowers with record of court claims against them at time of origination.

\*\*\*\*\*\* "Other" type refers to loans directly to Housing Cooperatives and to Landlords of Multi-Family properties (not included in Buy to Let).

Sources: Sparebanken Sor Boligkreditt AS, Moody's Investors Service

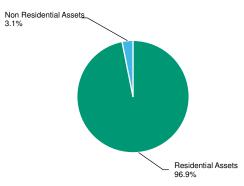
#### Exhibit 8 Cover pool characteristics

#### Exhibit A Balance per LTV band

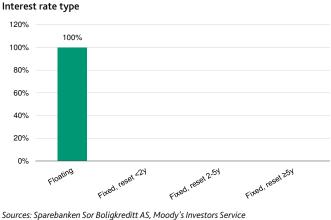


Sources: Sparebanken Sor Boligkreditt AS, Moody's Investors Service

#### Exhibit B Percentage of residential assets

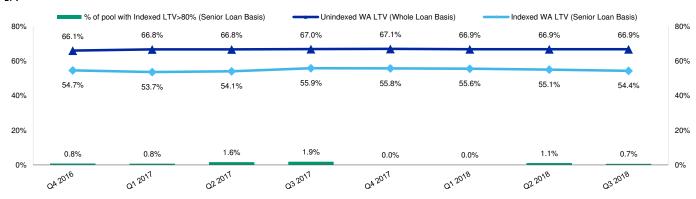






Sources: Sparebanken Sor Boligkreditt AS, Moody's Investors Service

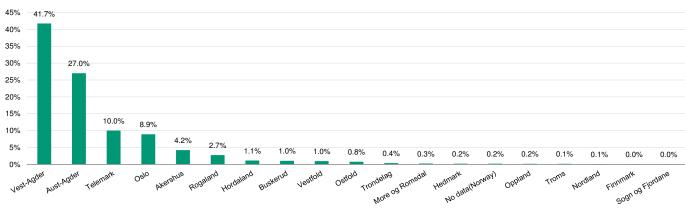




Sources: Sparebanken Sor Boligkreditt AS, Moody's Investors Service

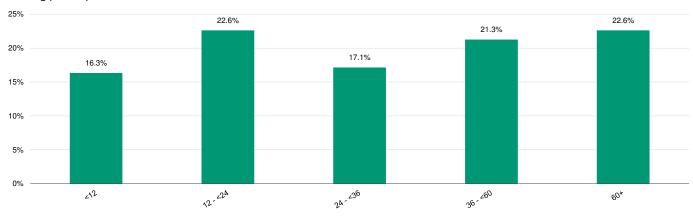
# Exhibit E





Sources: Sparebanken Sor Boligkreditt AS, Moody's Investors Service

Exhibit F Seasoning (months)



Sources: Sparebanken Sor Boligkreditt AS, Moody's Investors Service

#### Substitute assets

Of the cover assets, NOK 1.14 billion (3.1%) are substitute assets. The substitute assets currently consist primarily of highly rated covered bonds issued by Norwegian and Swedish financial institutions. The substitute assets do not include any debt held by entities that are part of the issuer group.

#### **Cover pool monitor**

There is an external cover pool monitor (*uavhengig gransker*) responsible for monitoring various operations with respect to the cover pool. The appointment of an independent cover pool monitor is mandatory by operation of the Norwegian covered bond legislation. (See "Moody's related publications: Norway - Legal Framework for Covered Bonds")

# Cover pool analysis

Our credit analysis of the pool takes into account specific characteristics of the pool, as well as legal risks.

#### Primary cover pool analysis

We calculate the collateral score for the cover pool using a scoring model to assess the credit risk for the residential assets in the cover pool. Our analysis takes into account, among other factors, the LTV ratios of the mortgage loans, the seasoning and the geographical distribution.

The strong collateral quality is reflected in the 5.0% collateral score of the pool, in line with the average collateral score in other Norwegian mortgage covered bonds. (See "Moody's related publications - Moody's Global Covered Bonds Monitoring Overview: Q2 2018")

The following factors support the credit quality of the pool:

- » All of the assets (100.0%) are performing as of the cut-off date.
- » Borrowers' income is always independently verified, and the income restricts the amount that can be lent.
- » All loans are granted to individuals and are secured by a first economic lien on residential properties in Norway.
- » The weighted average indexed LTV of the residential assets is relatively low at 54.4% (this figure does not take into account juniorranking loan parts not transferred to the cover pool).
- » 76% of the cover pool are loans with regular amortisation over the loan life. Typically the total loan term is a maximum of 30 years. Only NOK 17.7 million, a negligible amount, are foreseen to have total loan term over 30 years based on the current rate of amortisation.

» Loan parts above the 75% loan-to-value limit and non-performing loans may remain in the cover pool but the issuer reported cover pool asset value and OC considers only loan parts within the 75% loan-to-value limit and excludes non-performing loans.

On the other hand, we regard the following portfolio characteristics as credit negative:

- » In line with the Norwegian market standard, the loans in the cover pool feature floating interest rates. This exposes the borrowers to the risk of increasing debt service payments in case of increasing interest rates, possibly leading to higher pool arrears. This risk is partially mitigated by a standard five-percentage-point stress applied to the interest rate during the borrower's debt affordability testing.
- » In the cover pool, 22.4% of the loans are flexi loans. Flexi loans have an amortisation profile and can be redrawn by the customer up to a certain limit. In our view, this loan product may increase default risk if it leads to large one-off payment obligations for borrowers at loan maturity.

#### Additional cover pool analysis

#### Set-off risk

Under the Norwegian covered bond legislation, no right of set-off may be declared for an asset included in the cover pool. It is our understanding that if a borrower exercises set-off in violation of the Norwegian covered bond legislation, the issuer will have a monetary claim against the borrower equal to the amount set off. Furthermore, the issuer is not a deposit-taking institution.

#### Commingling risk

The payment flows with respect to the assets in the cover pool are transferred daily from the account to the issuer's account held at Sparebanken Sor. Following a CB anchor event, the insolvency administrator has the right and the ability to redirect all payments made by Norwegian Interbank Clearing System to a suitable issuer collection account within a very short time frame.

#### Clawback risk

All borrowers will be notified at the time the loans are transferred from the parent to the issuer. Provided that the borrowers have been notified and that the transfer has been performed in accordance with market practice, it cannot be subject to clawback by the transferor or any public administration board appointed in respect of the transferor.

# Methodology and monitoring

The primary methodology we use in rating the issuer's covered bonds is Moody's Approach to Rating Covered Bonds, published in February 2019. Other methodologies and factors that may have been considered in the rating process can also be found on <a href="http://www.moodys.com">http://www.moodys.com</a>. In addition, we publish a weekly summary of structured finance credit, ratings and methodologies, available to all registered users of our website, at www.moodys.com/SFQuickCheck.

We expect the issuer to deliver certain performance data to us on an ongoing basis. In the event that this data is not made available to us, our ability to monitor the ratings may be impaired. This lack of data availability could negatively affect the ratings or, in some cases, our ability to continue to rate the covered bonds.

# Appendix: Income underwriting and valuation

1. Income Underwriting	
1.1 Is income always checked?	Yes
1.2 Does this check ever rely on income stated by borrower ("limited income verification")?	No
1.3 Percentage of loans in Cover Pool that have limited income verification	None
1.4 If limited income verification loans are in the Cover Pool, describe what requirements lender has in place for these loans.	Not applicable
<ol> <li>1.5 Does income in all cases constrain the amount lent (for example through some form of Income Sufficiency Test ("IST").</li> </ol>	Yes
1.6 If not, what percentage of cases are exceptions.	No exceptions.
For the purposes of any IST	
1.7 Is it confirmed income after tax is sufficient to cover both interest and principal.	Yes
1.8 If so over what period is it assumed principal will be paid (typically on an annuity basis)? Any exceptions?	Payment of interest and principal on an annuity basis over the life of the relevant loan, normally 20-30 years.
1.9 Does the age of the borrower constrain the period over which principal can be amortised?	No
1.10 Are any stresses made to interest rates when carrying out the IST? If so when and for what type of products?	Yes. On granting a long-term loan, the borrower's ability to withstand an interest rate increase of 5% should be assessed.
1.11 Are all other debts of the borrower taken into account at point loan made?	Yes
1.12 How are living expenses of the borrower calculated? And what is the stated maximum percentage of income (or income multiple if relevant) that will be relied on to cover debt payments. (specify if income is pre or post tact)	Expenses are based on standard indices prepared by governmental consumer research (SIFO). The borrower's liquidity after tax and debt payment, as well as an interest rate increase of 5% is calculated and has to be positive if the loan shall be granted.
2. Valuation	
2.1 Are valuations based on market or lending values?	Market values
2.2 Are all or the majority of valuations carried out by external (with no direct ownership link to any company in the Sponsor Bank group) valuers?	A majority of valuations are carried out by Eiendomsverdi, but also some by Sørmegleren AS.
2.3 How are valuations carried out where external valuer not used?	Not applicable
2.4 What qualifications for external valuers require?	Valuations are based on estimates received from Eiendomsverdi AS.
2.5 What qualifications do internal valuers require?	Not applicable
2.6 Do all external valuations include an internal inspection of a property?	No
2.7 What exceptions?	AVMs by Eiendomsverdi are based on historical and statistical data, but do not include an internal inspection of the property.
2.8 Do all internal valuations include an internal inspection of a property?	No
2.9 What exceptions?	Not applicable

Source: Sparebanken Sor Boligkreditt AS

# Moody's related publications

## **Rating Methodology**

» Moody's Approach to Rating Covered Bonds, February 2019 (1154442)

# **Special Comments**

- » Covered bonds Europe: EU framework will strengthen covered bond laws and set market standards, April 2018 (1117209)
- » Covered Bonds Sector update Q4 2018, February 2019 (1157737)
- » Norway Legal Framework for Covered Bonds, October 2016
- » Cross Sector Norway maintains stricter Oslo-specific mortgage regulations, a credit positive for banks, June 2018 (1131511)
- » Covered Bonds Norway: Covered Bonds Well-Placed Amid Rising Housing Market Risks in Oslo, February 2017 (1056788)
- » Sector update Q3 2018: Harmonization gathers pace; first Green Bond Assessment and SONIA-linked covered bonds(1113304)

#### **Performance Overview**

» Sparebanken Sør Boligkreditt AS - Mortgage Covered Bonds, January 2019

#### **Credit Opinion**

» Sparebanken Sor

#### Webpages

- » Covered Bonds: www.moodys.com/coveredbonds
- » Covered Bond Legal Frameworks: www.moodys.com/Pages/CoveredBondLegalFrameworks.aspx

To access any of these reports or webpages, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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