

NEW ISSUE REPORT

Landesbank Baden-Wuerttemberg Public-Sector Covered Bonds

Covered Bonds / Germany

First Rating Assignment

1999

Table of Contents

DEFINITIVE RATINGS	1
TRANSACTION SUMMARY	1
OPINION	2
STRUCTURE SUMMARY	4
CB ANCHOR	4
COVERED BONDS SUMMARY	4
COLLATERAL SUMMARY	4
STRUCTURAL AND LEGAL ASPECTS	5
MOODY'S RATING METHODOLOGY	5
THE CREDIT QUALITY OF THE COVER POOL	5
OTHER CREDIT CONSIDERATIONS	5
MONITORING	7
APPENDIX 1: COVER POOL INFORMATION	8
MOODY'S RELATED RESEARCH	10

Analyst Contact

Dr. Martin Rast
Vice President - Senior Credit Officer
+44.20.7772.8676
martin.rast@moodys.com

MOODY'S CLIENT SERVICES:
London: +44.20.7772.5454
clientservices.emea@moodys.com
Monitoring: monitor.cb@moodys.com

ADDITIONAL CONTACTS:
Frankfurt: +49.69.2222.7847
Madrid: +34.91.414.3161
Milan: +39.02.3600.6333
Paris: +33.1.7070.2229
New York: +1.212.553.1653

Website: www.moodys.com

Definitive Ratings

Cover Pool (€)	Ordinary Cover Pool Assets	Covered Bonds (€)	Rating
18,160,860,534	Public-Sector Debt	12,091,621,789	Aaa

The ratings address the expected loss posed to investors. Moody's ratings address only the credit risks associated with the transaction. Other non-credit risks have not been addressed, but may have a significant effect on yield to investors

Transaction Summary

We have assigned a definitive long-term rating of Aaa to the covered bonds issued under the public-sector covered bond programme (*Oeffentliche Pfandbriefe* or covered bonds) of Landesbank Baden-Wuerttemberg (LBBW, or the issuer; Aa3(cr)). The covered bonds are full recourse to the issuer.

Following a CB anchor event,¹ the covered bondholder's claims will be secured by a pool of assets (cover pool). As of 30 September 2015, the assets in LBBW's cover pool amounted to €18.2 billion. The cover pool assets are public-sector debt. 94.9% of the cover assets are owed or guaranteed by German obligors.

The covered bonds are governed by the German *Pfandbrief* Act (*Pfandbriefgesetz*). There are a number of strengths in the German *Pfandbrief* legislation, including, *inter alia*, the regulatory requirement for the issuer to maintain a 2% over-collateralisation (OC) on a stressed present value (PV) basis. The issuer is also required to cover potential liquidity gaps over the next 180 days between payments expected to be received from the cover pool assets and payments due under the outstanding covered bonds.

In summary, the rating takes into account the following factors:

- » The credit strength of the issuer (CR Assessment Aa3(cr))
- » The German legal framework for *Pfandbriefe*
- » The cover pool's credit quality, which is reflected by the collateral score of 3.9%

As per 30 September 2015, the level of OC in the programme was 53.9% on an unstressed present value basis.

Based on data as of 30 September 2015, no over-collateralisation would be required to maintain the current covered bond rating. This shows that our analysis does not rely on over-collateralisation that is not in committed form.

As is the case with other covered bonds, we consider the transaction to be linked to the issuer's credit strength, particularly from a default probability perspective. Should the issuer's credit strength deteriorate, we expect all other things being equal that the covered bonds' rating will come under pressure.

In case of deterioration of the CB anchor or the pool quality, the issuer would have the ability, but not obligation, to increase the OC in the cover pool. Failure to increase the level of OC under these circumstances could lead to negative rating actions.

The principal methodology we use in rating the issuer's covered bonds is "Moody's Approach to Rating Covered Bonds", published in August 2015.

Other methodologies and factors that may have been considered in the rating process can also be found on <http://www.moodys.com>. 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.

Opinion

Strengths of the Transaction

Issuer: The covered bonds are full recourse to Landesbank Baden-Wuerttemberg (Aa3(cr)).

The German legal framework: The covered bonds are governed by the German *Pfandbrief* Act. There are a number of strengths in the German *Pfandbrief* legislation, including, *inter alia*:²

- » Under the terms of the German legislation, the issuer is regulated and supervised by the Financial Supervisory Authority of Germany (*Bundesanstalt für Finanzdienstleistungsaufsicht* or BaFin).
- » If the issuer becomes insolvent, the covered bondholder will have priority claims over a pool of assets (cover pool).

- » The *Pfandbrief* Act sets out strict eligibility criteria for cover pool assets. As a rule, claims directly against sovereigns or regional or local governments, and loans to or other claims against entities guaranteed by them, are eligible assets for *Öffentliche Pfandbriefe*.
- » The issuer must maintain a minimum 2% stressed PV OC at all times.
- » The issuer must cover potential liquidity gaps over the next 180 days between payments expected to be received under the cover pool assets and payments due under the outstanding covered bonds.
- » A cover pool monitor (*Treuhänder*) is responsible for monitoring various cover pool operations.

Credit Quality of the Cover Pool

The covered bonds are supported by a cover pool backed by high quality assets. The majority of the claims are against regional and local governments in Germany or debt related to German local governments, which on average have very good credit quality.

The collateral quality is reflected in the collateral score, which is currently 3.9%.

Refinancing Risks

- » There is a well-established and deep market for German *Pfandbriefe*.
- » The liquidity matching requirements for the next 180 days reduce refinancing risk (see above).

Market Risks

- » The OC of 2% on a PV basis has to be maintained in stressed market conditions (e.g., yield curve movements, changes in the relevant exchange rates). LBBW opted for the static approach, which *inter alia* includes a parallel movement of the interest-rate curve by 250 basis points, to meet mandatory stress test requirements.
- » The FX risks are well matched in this programme. The vast majority of the assets and liabilities are denominated in euros.

De-linkage: Following an issuer default,³ the covered bondholders will benefit from a cover pool administrator (*Sachwalter*) that acts independently from the issuer's insolvency administrator. Furthermore, if BaFin deems it necessary, the *Sachwalter* may be appointed ahead of any issuer default.

Weaknesses and Mitigants

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. These changes could affect the cover pool's credit quality as well as the overall refinancing risk and market risks.

Mitigants: (1) The covered bondholders have a direct claim on the issuer; and (2) the requirements and controls imposed by the *Pfandbrief* legislation.

Cover Pool Credit Quality

The cover assets are debt owed or guaranteed by public-sector entities. The cover pool has the following concentrations: (1) geographical concentration: 94.9% of the cover pool are related to German borrowers or guarantors; and (2) obligor concentration: the 10 largest obligors account for 39.0%.

Mitigant: Our collateral score model takes into account, *inter alia*, the impact of borrower, regional and country concentrations.

As with most covered bonds in Europe, there are few restrictions on the future composition of the cover pool, creating substitution risk. Cover pool quality over time will be protected by, among others, the requirements of the German *Pfandbrief* Act. The *Pfandbrief* Act sets out rules detailing which assets qualify as ordinary cover assets for *Oeffentliche Pfandbriefe*. In addition, we will monitor the cover pool. If collateral quality deteriorates below a certain threshold, the issuer would have the ability, but not the obligation, to increase the OC in the cover pool. Failure to increase the level of OC following cover pool deterioration could lead to negative rating actions.

Refinancing Risk:

Following a CB anchor event, covered bondholders, to achieve timely principal payment, may need to rely on proceeds being raised through the sale of, or borrowing against, cover pool assets. Following a CB anchor event, the market value of these assets may be subject to high volatility. **Mitigants:** (1) the credit strength of the issuer. The stronger the credit of the issuer, the lower the chance of being exposed to this risk; (2) the depth of the German market; (3) the high level of support provided to *Pfandbriefe* in Germany; and (4) our use of stressed refinancing margins in modelling.

Interest Rate and Currency Risk:

As with most European covered bonds, there is potential for market risk exposure. For example, following issuer default, covered bondholders may be exposed to interest rate and foreign exchange risk, which could arise from the different payment promises and durations made on the cover pool and the covered bonds. Currently 69.0% of the assets and 88.4% of the liabilities are fixed rate. **Mitigant:** the requirement that the stressed present value OC of the cover pool must exceed, by at least 2%, the total of outstanding covered bonds issued against the cover pool.

Liquidity:

The programme does not benefit from any designated source of liquidity if cash flow collections are interrupted. **Mitigants:** the strengths of the *Pfandbrief* Act, which include (1) the alternatives given to the *Sachwalter* for raising funds against the cover pool; (2) the minimum 2% OC on a stressed present value basis; and (3) the liquidity matching requirements for the next 180 days.

Time Subordination:

After issuer default, 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 prior to later-maturing covered bonds. This could lead to OC being eroded before any payments are made to later-paying covered bonds.

Structure Summary

Issuer:	Landesbank Baden-Wuerttemberg (Aa3(cr))
Covered Bond Type	Public-sector covered bonds (Oeffentliche Pfandbriefe)
Issued under Covered Bonds Law:	Yes
Applicable Covered Bonds Law:	German Pfandbrief Act
Main Originators:	LBBW
Main Servicers:	LBBW
Intra-group Swap Provider:	n/a (no swaps)
Monitoring of Cover Pool:	Cover pool monitor (Treuhänder), mandatory by operation of the Pfandbrief Act
Trustees:	n/a
Timely Payment Indicator:	High
TPI Leeway	5 notches

CB Anchor

CR Assessment	Aa3(cr)
Senior unsecured rating	A1
Adjusted BCA	baa1
CB Anchor	CR assessment + 1 notch

Covered Bonds Summary

Total Covered Bonds Outstanding:	€12,091,621,789
Main Currency of Covered Bonds:	Euro (98.2%)
Extended Refinance Period:	No
Principal Payment Type:	Hard bullet (no extension period)
Interest Rate Type:	Fixed rate covered bonds (88.4%), variable rate covered bonds (11.6%)

Collateral Summary

Size of Cover Pool:	€18,160,860,534
Main Collateral Type in Cover Pool:	Public-sector Debt (100%)
Main Asset Location:	Germany (94.9%)
Main Currency:	Euro (96.4%)
Loans Count:	13,825
Number of Borrowers	2,962
Concentration of 10 Biggest Borrowers:	39.0%
WA Remaining Term:	69 months
Interest Rate Type:	Fixed rate assets (69.0%), floating rate assets (31.0%)
"Committed" Over-Collateralisation:	2% (mandatory minimum OC based on stressed present value calculation required by the Pfandbrief Act)
Current Over-Collateralisation	53.9% (on non-stressed present value basis)
Collateral Score:	3.9%
Cover Pool Losses	9.0%
Further Details:	See Appendix 1
Pool Cut-off Date:	30 September 2015

Structural and Legal Aspects

Oeffentliche Pfandbriefe Governed by the *Pfandbrief Act*

Landesbank Baden-Wuerttemberg's public-sector covered bonds (*Oeffentliche Pfandbriefe*) are governed by the German *Pfandbrief Act*. No specific structural features beyond the statutory requirements are implemented for the covered bonds.

A description of the general legal framework for *Oeffentliche Pfandbriefe* governed by the *Pfandbrief Act* is contained in Moody's Special Report [Germany - Legal Framework for Covered Bonds](#), published in August 2015.

Moody's Rating Methodology

Our approach for rating covered bond transactions is detailed in our Rating Methodology.⁴ The impact of the credit strength of the issuer, collateral quality, refinancing and market risks are considered below.

Credit Strength of the Issuer

The covered bondholders have full recourse to Landesbank Baden-Wuerttemberg. For a description of the rating drivers, please see an extract from our [Credit Opinion](#), published January 2016

We use a CB anchor of CR assessment plus one notch for covered bonds issued under a EU covered bond law.

The Credit Quality of the Cover Pool

As of 30 September 2015, the cover pool consists of debt owed or guaranteed by public-sector entities. The public-sector entities are mainly located in Germany (94.9%).

On a nominal value basis, the cover pool assets total €18.2 billion, which are backing €12.1 billion covered bonds. This translates into an OC level on a PV basis of 53.9%.

Public-Sector Debt

The vast majority of the debtors or guarantors are located in Germany; 38.1% of them located in Baden-Wuerttemberg.

From a credit perspective, we view positively the following characteristics of the cover assets:

- » All assets are currently performing, and none are in arrears.
- » The obligors are generally of high credit quality.
- » The cover pool benefits from some regional diversification within Germany.

From a credit perspective, we view negatively the following portfolio characteristics:

- » Obligor concentration: The 10 largest borrowers account for 39.0% of the cover pool.
- » Regional concentration: The vast majority (94.9%) are located in Germany. **Mitigants:** (1) The credit quality of the obligors, including the largest obligors in the cover pool, is generally high; and (2) in our modelling, we have considered the obligor and regional concentrations.
- » **Mitigants:** We have considered the obligor and regional concentrations in our credit analysis.

Summary Collateral Analysis: Collateral Score

The factors discussed above have been incorporated into our analysis. We calculate a collateral score⁵ based on the credit quality of the cover pool assets as described above. In addition, the collateral score published in this report reflects all adjustments made; this number therefore includes the cushion built in to address the factors described above.

For this transaction, the collateral score of the current pool is 3.9% which is below the average collateral score in German public-sector covered bonds (see Related Research: [Moody's Global Covered Bonds Monitoring Overview: Q2 2015](#), published in November 2015).

Other Credit Considerations

Legal Risks for Assets Located Outside Germany

In the event of the issuer's insolvency, we believe that cover pool assets located outside Germany are less protected against claims of the issuer's other creditors than are assets located in Germany. In particular, we have identified and analysed the following scenarios:

- » **Claims against borrowers located outside Germany or loans not governed by German law:** In the case of loans not governed by German law, the borrower may be allowed to exercise set-off, thereby reducing the amount payable to the benefit of covered bondholders. **Mitigant:** The majority of the cover pool assets are located in Germany.
- » **Loans to borrowers located outside the European Economic Area (EEA):** In addition to the above risk, we understand that these cover pool assets may not be available to the covered bondholders on a priority basis because other (unsecured) creditors of the issuer may successfully access the assets in the cover pool. This may — due to secondary proceedings being commenced under the respective domestic law, for example — result in lower recovery. **Mitigant:** The cover pool contains mainly assets located within the EEA. We give limited benefit to asset outside the EEA in our modelling.⁶

Substitution Risks are Mitigated by the *Pfandbrief Act*

As with most covered bonds in Europe, there are few restrictions or limitations on the future composition of the cover pool. This may create substitution risk. **Mitigants:**

(1) requirements of the *Pfandbrief* Act; and (2) our monitoring of the cover pool composition.

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 to support the current rating. If additional OC is not added following a deterioration of the collateral, this could lead to a negative rating action.

For further information on the credit quality of the cover pool, see Appendix 1.

Refinancing Risk

Following a CB anchor event, the "natural" amortisation of the cover pool assets alone cannot be relied on to repay 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 certain volatility. Examples of the stressed refinancing margins we use for different types of prime-quality assets are published in our Rating Methodology (see Related Research: "[Moody's Approach to Rating Covered Bonds](#)", published in August 2015).⁷

Refinancing-positive aspects of this covered bond programme include:

- » *Pfandbrief* Act: The *Sachwalter* has the ability to sell all or part of the cover pool, with or without all or parts of the liabilities attached.
- » The depth of the German market and the high level of support provided to *Pfandbriefe* in Germany, where refinancing risk is perceived as lower than in most other jurisdictions. In the modelling of this transaction, we have used refinance margins that are lower than the refinance margins used for most other jurisdictions.
- » The issuer is required to cover potential liquidity gaps over the next 180 days between payments expected to be received under the cover pool assets and the payments due under the outstanding covered bonds.

Refinancing-negative aspects of this covered bond programme include:

- » The programme does not benefit from any contractual provisions to allow for an extension of a principal refinancing period; all covered bonds issued under this programme will have a hard bullet repayment with no extension period.
- » As usual in German *Pfandbrief* programmes, all covered bonds are bullets.

Interest Rate and Currency Risk

As with the majority of European covered bonds, there is potential for interest-rate and currency risks. For example, following a CB anchor event, covered bondholders may be exposed to interest-rate risk, which could arise from the different payment promises and durations made on the cover pool and the covered bonds.

EXHIBIT 1

Overview Assets and Liabilities

	Assets (%)	Liabilities (%)	WAL Assets (Years)	WAL Liabilities (Years)
Fixed rate	69.0	88.4	6.9	5.1
Variable rate	31.0	11.6	3.1	5.8

WAL = weighted-average life

n/a = not applicable

As of the date of this report, LBBW has not entered any swaps into the cover pool register. We understand that there are no plans to change this in the near future.

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

- » Very limited currency risk.
- » The mandatory present value cover test stipulated by the German *Pfandbrief* Act. The requirement that *Pfandbrief* issuers must regularly run stress tests regarding interest-rate and foreign-exchange risks. LBBW opted for the 'static' stress test to meet mandatory stress tests requirements.

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

- » A potential sale of fixed-rate assets (in order to meet due payments on covered bonds following a CB anchor event) could lead to a crystallisation of mark-to-market losses caused by interest-rate movements upon issuer default; most of the cover pool assets are fixed rate.

In the case of issuer insolvency, we currently do not assume that the special cover pool administrator (*Sachwalter*) will always be able to efficiently manage any natural hedge between the cover pool and the covered bonds. Therefore, following a CB anchor event, our Covered Bond Model separately assesses 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 and currency stressed rates used over different time horizons are published in our Rating Methodology (see Related Research: "[Moody's Approach to Rating Covered Bonds](#)", published in August 2015).

Linkage

All covered bonds are linked to the covered bonds issuer. The covered bonds will therefore come under rating stress if the issuer's credit strength deteriorates. Reasons for this include:

- » Refinancing risk: Following a CB anchor event, if principal receipts from collections of the cover pool are not sufficient to meet the principal payment on a covered bond, funds may need to be raised against the cover pool. However, the fact that the issuer has defaulted may negatively affect the ability to raise funds against the cover pool.
- » 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, issue further bonds and enter new hedging arrangements. Such actions could negatively affect the value of the cover pool.
- » More generally, by the incorporation of the strength of the issuer in accordance with our rating methodology.

As a result of this linkage, the probability of default of the covered bonds may be higher than expected for a senior unsecured debt with the same rating. However, our primary rating target is the expected loss that takes loss severity into account, which in this case is consistent with the covered bond rating.

Timely Payment Indicator

Our Timely Payment Indicator (TPI)⁸ assesses the likelihood that timely payments will 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 amount of OC.

TPI-positive aspects of this covered bond programme include:

- » The high level of support provided to *Pfandbriefe* in Germany
- » German *Pfandbrief* legislation, including:
 - At the time of the declaration of issuer's bankruptcy, or earlier if BaFin considers it necessary, a cover pool administrator (*Sachwalter*) will take over management responsibility of the covered bond programme.
 - The *Sachwalter* will act independently from the issuer's insolvency administrator. Having an independent cover pool administrator may reduce potential conflicts of interest between the covered bondholders and other creditors.
 - The issuer is required to cover potential liquidity gaps over the next 180 days between payments expected to be received under the cover pool assets and payments due under the outstanding covered bonds.
 - Set-off: We understand, with respect to covered bonds governed by the *Pfandbrief Act*, that set-off risk for loans registered in the cover pool, made under German law and located in Germany, is excluded by the operation of the *Pfandbrief Act*.

- The credit quality of the cover pool assets, which is evidenced by the collateral score of 3.9%.

TPI-negative aspects of this covered bond programme include:

- » All covered bonds outstanding have a bullet repayment at maturity, without any extension period for the repayment of the bonds.
- » The covered bond programme does not benefit from any designated source of liquidity if cash flow collections are interrupted.
- » Commingling risk: Upon the appointment of the *Sachwalter*, it is our understanding that the *Sachwalter* has a priority claim on all cash flows stemming from the cover pool assets. However, these cash flows have to be separated from other cash flows to the issuer before they can be used to make payments to covered bondholders.

In line with the other Public-sector covered bonds issued under the German *Pfandbrief Act*, we have assigned a TPI of High to this transaction.

The TPI Leeway measures the number of notches by which Moody's might lower the CB anchor before the rating agency downgrades the covered bonds because of TPI framework constraints. Based on the current TPI of High, the TPI Leeway for this programme is 5 notches, therefore a downgrade of the CB anchor of more than 5 notches could lead to a downgrade of the covered bonds, all other variables being equal.

Monitoring

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 could negatively affect the ratings or, in some cases, our ability to continue to rate the covered bonds.

Appendix 1: Cover Pool Information

Public-Sector Debt

Overview	
Asset Type	Public-Sector Debt
Asset balance:	18,160,860,534
WA remaining Term (in months):	69
Number of borrowers:	2,962
Number of loans / bonds:	13,825
Exposure to the 10 largest borrowers:	39.0%
Average exposure to borrowers:	6,131,283

Specific Loan and Borrower characteristics	
Repo eligible loans / bonds:	6.8%
Percentage of fixed rate loans/bonds:	69.0%
Percentage of bullet loans/bonds:	49.7%
Loans/bonds in non-domestic currency:	3.6%
Performance	
Loans / bonds in arrears (≥ 2 months - < 6 months):	0.0%
Loans / bonds in arrears (≥ 6months - < 12 months):	0.0%
Loans / bonds in arrears (≥ 12months):	0.0%
Loans / bonds in a foreclosure procedure:	0.0%

EXHIBIT A

Borrower Type

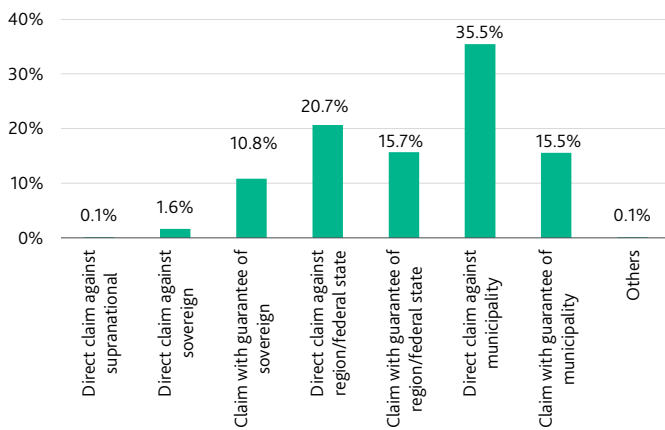


EXHIBIT B

Asset Types in the Cover Pool

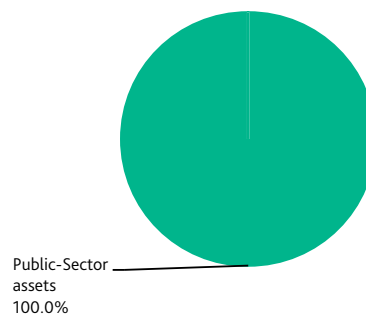


EXHIBIT C

Borrower Concentration

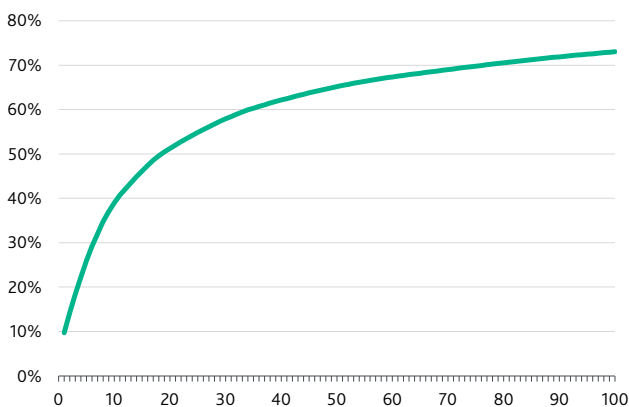


EXHIBIT D

Pool Distribution by Country Exposure Rating⁹

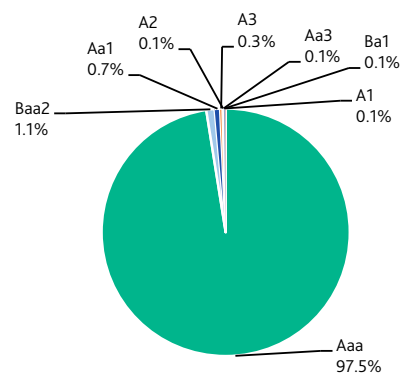


EXHIBIT E

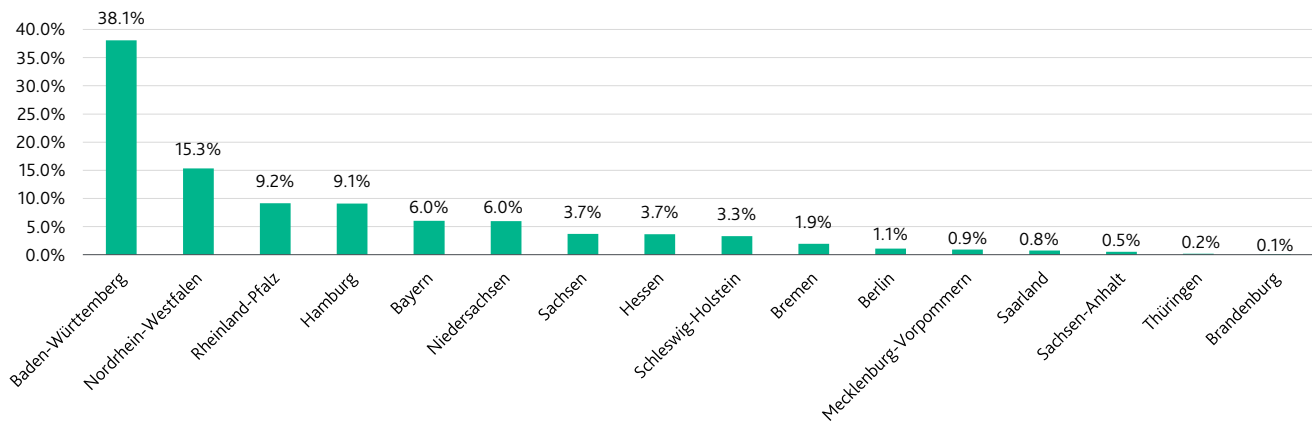
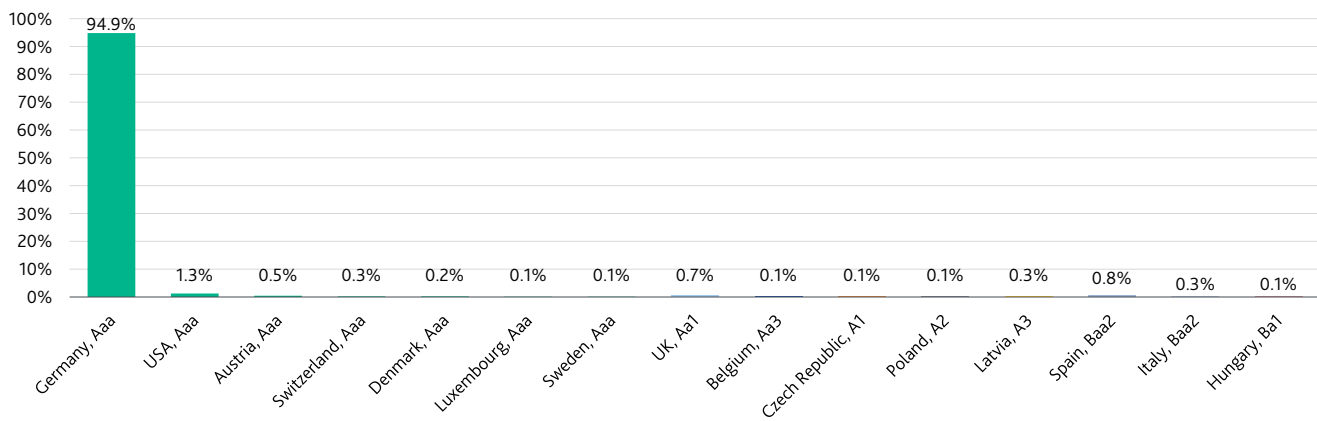
Main Country Regional Distribution¹⁰

EXHIBIT F

Distribution by Country, Rating¹¹

Qualitative Collateral Information

All cover pool characteristics are actual levels (rather than assumed levels) based on reports from LBBW.

Moody's Related Research

For a more detailed explanation of Moody's approach to this type of transaction as well as similar transactions please refer to the following reports:

Rating Methodology:

- » [Moody's Approach to Rating Covered Bonds, August 2015 \(SF412595\)](#)

Special Comments:

- » [EU Bank Recovery and Resolution Regime Strengthens German Covered Bonds and Improves Their Ratings, July 2015 \(1006468\)](#)
- » [Moody's Global Covered Bonds Monitoring Overview: Q2 2015, November 2015 \(SF406323\)](#)
- » [Structural Protection Mechanisms for Non-EEA Assets in German Cover Pools, July 2014 \(SF374519\)](#)
- » [Germany – Legal Framework Covered Bonds, August 2015 \(1006760\)](#)
- » [European Covered Bond Legal Frameworks: Moody's Legal Checklist, German Translation, January 2006 \(SF67969\)](#)
- » [European Covered Bond Legal Frameworks: Moody's Legal Checklist, December 2005 \(SF66418\)](#)

Performance Overview:

- » [Landesbank Baden-Wuerttemberg - Public-sector covered bonds, January 2016 \(SF425455\)](#)

Credit Opinion:

- » [Landesbank Baden-Wuerttemberg](#)

Webpage:

- » www.moodys.com/coveredbonds

To access any of these reports, 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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- ¹ A CB anchor event occurs when the issuer, or another entity in the issuer group that supports the issuer, ceases to service the debt obligations under the covered bonds.
 - ² See "[Germany – Legal Framework Covered Bonds](#)", published August 2015 (see Related Research).
 - ³ Issuer default is defined as removal, from the cover pool, of (1) support provided by entities within the issuer; (2) ancillary activities of the issuer (i.e., those not related to the cover pool); and usually (3) management functions of the issuer.
 - ⁴ [Moody's Approach to Rating Covered Bonds](#), published August 2015 (see Related Research).
 - ⁵ The collateral score can be seen as the amount of risk-free enhancement required to protect a Aaa rating from otherwise unsupported assets. Therefore, the stronger the credit quality of the collateral, the lower the collateral score. This only considers the credit deterioration of the assets and ignores any market risk (see Rating Methodology [Moody's Approach to Rating Covered Bonds](#), published August 2015 (see Related Research)).
 - ⁶ Please see Related Research: "[Structural Protection Mechanisms for Non-EEA Assets in German Cover Pools](#)", published in July 2014.
 - ⁷ Please see Related Research: "[Moody's Approach to Rating Covered Bonds](#)", published in August 2015.
 - ⁸ See [Moody's Approach to Rating Covered Bonds](#), published August 2015.
 - ⁹ This information is based on the location of the guarantors.
 - ¹⁰ This information is based on the location of the guarantors.
 - ¹¹ This information is based on the location of the guarantors.

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