

# Bausparkasse Wüstenrot AG

## Austrian Mortgage-Covered Bonds – Performance Update

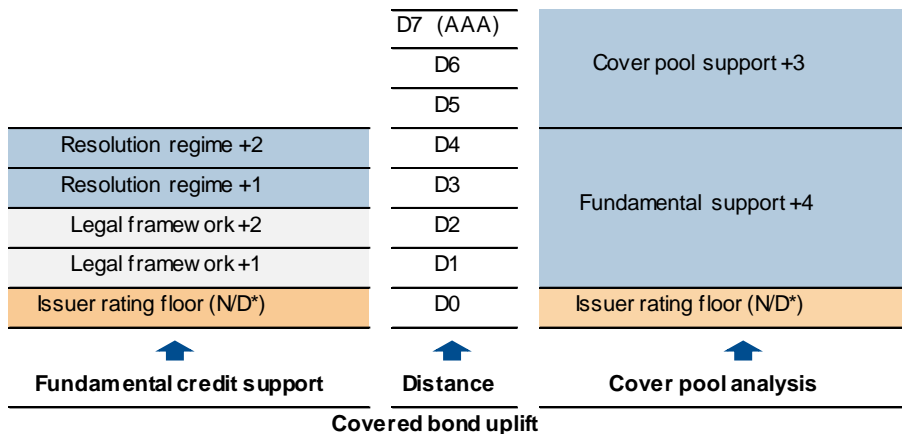


### Ratings

Cut-off date	Eligible cover pool	Cover asset type	Covered bonds*	Rating/Outlook
31 Mar 2018	EUR 410.09mn	Residential mortgage loans	EUR 132mn	AAA/Stable

\*Hypothekendarlehenbrief – Austrian mortgage-covered bonds issued under the Pfandbriefgesetz  
Scope's covered bond ratings constitute an opinion about the relative credit risks and reflect the expected loss associated with the payments contractually promised by an instrument on a particular payment date or by its legal maturity. See Scope's website for the covered bond [rating definitions](#).

### Mortgage-covered bonds



#### Covered bond uplift

\*N/D: not disclosed; Scope assigned a private monitored issuer rating to the bank. The issuer solicited the assigned rating and has taken part in the rating process.

\*Maximum issuer-specific uplift of seven notches (D7) as per Scope's methodology. The rated covered bonds reflect a seven-notch uplift: four notches (fundamental credit support) + three notches (cover pool-analysis)

### Rating rationale (summary)

Scope has rated AAA with Stable Outlook the Austrian mortgage-covered bonds issued by Bausparkasse Wüstenrot AG (Wüstenrot). This reflects the bank rating enhanced by:

- Four notches of fundamental support reflecting the Austrian covered bond legal and resolution frameworks, constrained by the issuer's low relevance in covered bonds and the moderate importance of covered bonds in Austria; plus
- Three notches of cover pool support reflecting the cover pool's credit- and market-risk assessment.

Wüstenrot is the oldest and only independent Bausparkasse (building society) in Austria. Our credit assessment of the bank reflects a prudent and conservative management of capital and liquidity, which is rooted in its independent position.

On 17 July 2018 we [upgraded Wüstenrot's covered bonds to AAA from AA+](#). This was driven by an upgrade of the issuer due to an amendment to section 131 of the Austrian Bank Recovery and Resolution Act.

### Outlook

Scope's Stable Outlook on the covered bonds reflects: i) the continuous availability of high overcollateralisation, which provides a significant buffer against a rise in credit and market risks, thereby maintaining the three-notch cover pool-based support; ii) our Stable Outlook on the issuer rating; and iii) our view that European covered bond harmonisation will not negatively impact the fundamental support factors relevant for the issuer and Austrian mortgage-covered bonds in general.

### Ratings & Outlook

Issuer rating	N/D*
Outlook	N/D*
Last rating action	Upgrade*
Last rating action date	N/D*
Covered bond rating	AAA
Outlook	Stable
Rating action	Upgrade
Last rating action date	17.07.2018

\*N/D – Not disclosed; Scope has assigned a private, monitored issuer rating to the bank. The issuer has solicited the assigned rating and participated in the rating process.

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### Rating-change drivers

A downgrade may occur if: i) the issuer's credit rating is downgraded by one notch or more; ii) the risk in the covered bond programme increases and provided overcollateralisation no longer supports a seven-notch rating uplift; or iii) we revise downwards the fundamental support factors relevant to the issuer and Austrian mortgage covered bonds.

### Rating drivers and mitigants (summary)

#### Positive rating drivers

**The issuer.** Long history in housing finance and low-risk credit profile; prudent and conservative capital and liquidity management that provides support during low-profitability periods

**Austrian covered bond legal framework (+2 notches).** Laws that address all rating-relevant aspects, allowing the full legal framework uplift

**Resolution regime assessment (+2 notches).** Austrian covered bonds' exclusion from bail-in; issuer's resolvability due to sufficient level of bail-inable liabilities

**Cover pool support (+3 notches).** High overcollateralisation and sound asset quality

#### Positive rating-change drivers

**Issuer and group.** Successful implementation of cost-saving programme, improving profitability and flexibility; entry into strategic partnership that helps stabilise prudential metrics

**Covered bond legal framework.** Not applicable as highest rating uplift already achieved.

**Resolution regime assessment.** Increased relevance for the issuer in covered bonds and for Austrian covered bonds in general; improved cohesion among Austrian covered bond stakeholders

**Cover pool support.** Not applicable as highest rating already achieved

#### Negative rating drivers and mitigants

**The issuer.** Business model challenged by the lower-for-longer interest rate environment

**Covered bond legal framework.** Not applicable

**Resolution regime assessment.** The only moderate importance of covered bonds in Austria; issuer's limited visibility in covered bond markets

**Cover pool support.** High asset-liability mismatch risk driven by negative carry from the bonds' high duration, reinforced by our stressed prepayment assumptions

#### Negative rating-change drivers

**Issuer/group.** Change in risk profile weakening credit quality; reputational risk from subsidiaries; decreasing market shares and reduced capital market access

**Legal covered bond framework.** Implementation of upcoming European covered bond directive that does not address all rating-relevant aspects

**Resolution-regime assessment.** Significantly reduced capitalisation and/or market share that lowers the regulator's incentive to maintain the issuer as a going concern

**Cover pool support.** Significant deterioration in cover pool's asset quality; large reduction in overcollateralisation and issuance activity (particularly jumbo formats) that results in an excessive increase in the asset-liability mismatch – all of which are not mitigated

Wüstenrot is the only independent Austrian Bausparkasse and has a low-risk credit profile

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## 1. The issuer

We monitor and maintain a private rating on Wüstenrot, the only independent Bausparkasse in Austria.

Austria's Bausparkassen are facing challenges, mainly from the lower-for-longer interest rate environment and the related dwindling profitability. Because Bausparkassen are bound by a specialised law and defined business models, we believe these institutions lack the flexibility of other banking models to adjust services.

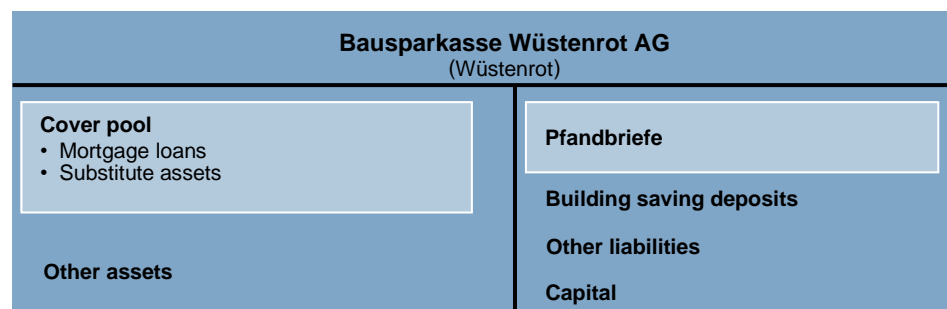
Nevertheless, Wüstenrot has been able to increase lending over the past years, in line with its very conservative risk strategy. The bank's safe and well-diversified asset base has enabled it to operate profitably over the past decade, albeit at lower and partly stronger-fluctuating levels. Wüstenrot has recently updated its strategy and restructured the group to better exploit intra-group efficiencies: as of YE2017 the first positive results linked to these measures were visible.

Wüstenrot's independent structure results in a larger cost base and fewer opportunities for economies of scale than peers. Furthermore, Wüstenrot does not have access to a larger capital- and liquidity-supporting group structure. We nevertheless regard positively that both the bank and the overall group have a 'no dividend' policy to organically strengthen capital positions for all group entities. With regard to the bank's capital-raising abilities, we note the potentially limited support from its majority owner.

For further details on our bank credit analysis see Appendix I.

## 2. Covered bond structure

Figure 1: On-balance sheet issuance structure



Wüstenrot is the regulated entity of a retail-focused financial conglomerate (see Appendix I). As a Bausparkasse focused on both the promotion of residential mortgage lending and regular savings, Wüstenrot is subject to specific regulations under the Austrian building savings act. This act significantly restricts business opportunities for Bausparkassen when compared to universal banks. In late 2013, Wüstenrot received the licence to issue covered bonds, allowing the bank to widen refinancing opportunities.

Covered bond issuance is governed by the Austrian covered bond act (see Legal Framework Analysis). Austria's Financial Market Authority (FMA) currently limits covered bond issuances to 10% of the bank's balance sheet – a restriction common for Austrian Bausparkassen.

Maximum credit differentiation of seven notches based on fundamental and credit analysis

Two-notch rating uplift reflects minimum fulfilment of criteria for the legal framework

Resolution-regime analysis supports two-notch additional credit differentiation

### 3. Covered bond rating analysis

Wüstenrot's covered bond ratings are seven notches above its issuer rating due to: i) fundamental credit support of four notches; and ii) cover pool support of three notches.

Ample available overcollateralisation mitigates credit, market and liquidity risks commensurate with the rating assigned to the bank's mortgage-covered bonds.

#### 3.1. Fundamental credit support

The Austrian covered bond framework, particularly the Pfandbriefgesetz relevant for Wüstenrot's mortgage-covered bonds, combined with our positive view on the resolution regime has provided the covered bonds a fundamental-analysis-based credit differentiation of four notches above the bank's rating.

##### 3.1.1. Legal framework

A credit differentiation of two notches is driven by benefits from the Austrian legal covered bond framework.

Our analysis of the Pfandbriefgesetz confirms that the framework just meets the criteria to assign the maximum credit differentiation under our methodology. The provisions ensure that the cover pool is segregated from the issuer's insolvency estate; bond payments continue after insolvency; and identified risks can be mitigated by overcollateralisation, which generally remains available after insolvency. Austrian covered bonds also benefit from specific regulatory oversight. However, we recognise the framework's lack of clarity on liquidity or risk management for covered bonds.

The Austrian covered bond framework currently just meets the minimum standards under our methodology. We believe ongoing industry efforts will improve and consolidate the three existing frameworks, reinforced by the upcoming European covered bond directive that we expect will reduce complexity and improve credit protection for covered bond investors.

For a more comprehensive assessment of the fundamental support factors relevant for Austrian covered bonds, see the related research.<sup>1</sup>

##### 3.1.2. Resolution regime and systemic importance

Wüstenrot's covered bonds benefit from an additional two-notch uplift that reflects general benefits provided by the resolution regime. Issuer-specific aspects or the relevance of the Austrian covered bond market does not justify an additional uplift.

In the resolution framework assessment, we analyse how likely a regulatory intervention in the issuer will preserve the credit quality of a covered bond and assess whether:

1. Austrian covered bonds comply with regulatory definitions to benefit from the preferential status;
2. The issuer is bail-inable and regulators would use available tools to preserve the covered bond issuer;
3. Mortgage-covered bonds in general and the issuer's covered bonds are systemically important in the domestic context; and
4. An active domestic stakeholder group (issuers, regulators and investors) is working together to maintain confidence in and a high credit quality of the covered bonds.

One notch of uplift reflects that, in line with the Bank Recovery and Resolution Directive, Austrian covered bonds are excluded from bail-in in the hypothetical scenario of regulatory intervention in the bank.

<sup>1</sup> Covered Bond Framework Analysis – Analytical Considerations: Austria.

Another notch of uplift reflects our view on the resolvability and likely maintenance of Wüstenrot in a resolution scenario. The issuer's high level of bail-inable liabilities also allows the use of available resolution tools if needed.

Furthermore, Wüstenrot is one of the few independent providers of Bausparkasse products in Austria. This reflects the strong footing of building societies in Austria and the existing oligopoly. We expect this would classify Wüstenrot as serving a critical function comparable to standard retail banking in the 'overbanked' Austrian retail market.

We have not provided additional, resolution-framework-based support to Wüstenrot's covered bonds. Austria's covered bond 'intensity' is not high, demonstrated by the two largest issuers comprising 48% of total outstanding benchmark issuance. Wüstenrot's issuance volumes and representation in domestic and international investment portfolios to date (including planned issuances) do not, in our view, create an additional covered bond-driven incentive for market stakeholders to support the bank.

Weak proactive communication by regulators and lack of support by stakeholders was evidenced during the prolonged uncertainty on the credit quality of covered bonds for two banks in workout (HETA and Kommunalkredit). Both banks were supervised closely by regulators, placed under moratorium, or split into a 'good' and 'bad' bank. Yet covered bond investors were not regularly updated on the impact on outstanding covered bonds. Such uncertainty on credit quality is, in our view, not commensurate with additional fundamental support for Austrian covered bonds.

Our fundamental-resolution-based uplift is constrained to two notches. Austria's low (but increasing) covered bond intensity, coupled with less predictable support from stakeholders and regulators, makes its resolution framework fundamentally weaker from a credit standpoint than that in countries with more active issuance and support history.

### **3.2. Cover pool analysis**

The cover pool substantially enhances the covered bonds' credit quality, translating into an additional uplift of three notches above the four-notch rating floor provided by fundamental factors.

Since the last review in 2017, the minimum overcollateralisation to support the bond rating has increased from 7.5% to 21%, reflecting the rating upgrade to AAA from AA+ as well as increased maturity mismatches. While the cover pool's duration remained stable at around 12.4 years, the duration of the covered bonds increased to 14.3 years from 6.9 years as of end-December 2016. This is making the programme vulnerable to high prepayments we assume for the assets and hence to negative carry.

Our covered bond methodology limits the cover pool benefit to three notches above that from fundamental factors. This reflects the dynamic nature of cover pools and the potential for overcollateralisation to be significantly and swiftly reduced by new issuances, despite the generous overcollateralisation currently available to Wüstenrot's covered bonds.

Cover pool provides additional three-notch uplift, supporting the highest achievable rating

**Figure 2: Key cover pool characteristics**

Reporting date	28 December 2016	31 March 2018
Total cover pool / eligible assets (EUR m)	304.07 / 254.12	490.60 / 410.09
Covered bonds outstanding (EUR m)	2	132
Current overcollateralisation	>15,000%	271.66%
Minimum regulatory collateral	2%	2%
Duration/WAM (cover pool)	12.43 / 14.49	12.44 / 14.58
Duration/WAM (covered bonds)	6.93 / 7.92	14.29 / 16.43
Mismatch	NM	-1.84 / -1.84
OC to support rating	7.50%	21.00%
OC to support rating upon one-notch issuer downgrade	7.75%	20.00%
Main cover pool asset type	Residential mortgages	Residential mortgages
Number of loans	2,672	4,076
Avg. loan size (EUR '000)	113.74	117.87
Avg. whole loan LTV / eligible loan LTV	71.04% / 53.38%	70.30% / 52.86%
Top-10 exposure share	1.82%	1.20%
Top-20 exposure share	3.03%	2.01%

Source: Wüstenrot and Scope

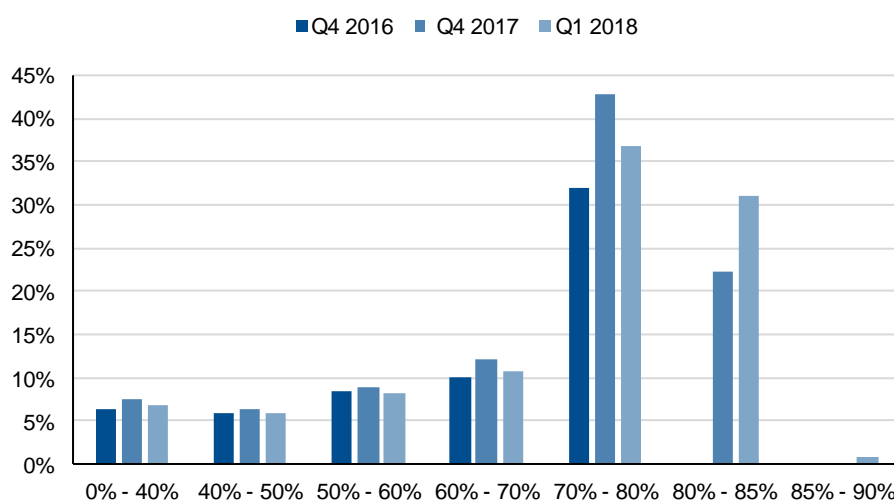
### 3.2.1. Cover pool composition

The cover pool is granular and purely domestic. It comprises only residential mortgage loans, which have an average size of EUR 117,870. The cover pool has a weighted average whole loan loan-to-value (LTV) of 70.3% and a corresponding eligible loan LTV of 52.86%. This indicates high protection against credit losses in case of borrower default.

The Austrian Pfandbriefe-act does not stipulate a maximum LTV for cover pool assets. However, Wüstenrot voluntarily limits its eligible LTV by a maximum of 60%. Accordingly, if a mortgage loan with a higher LTV is granted, the whole loan becomes part of the cover pool and the LTV limit effectively establishes the issuance limit.

Wüstenrot applies the same prudent underwriting criteria for mortgage loans granted for the cover pool as for those granted in the course of its Bausparkasse business.

**Figure 3: Cover pool by loan-to-value**



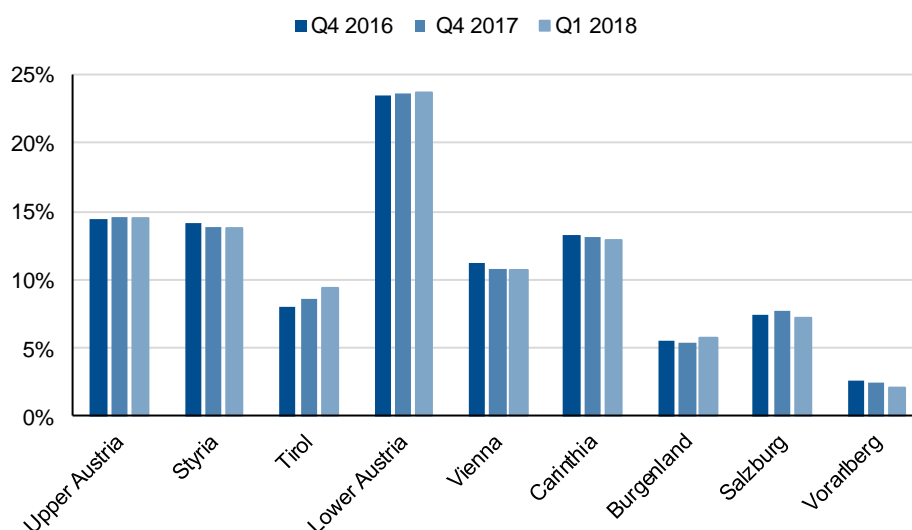
Source: Wüstenrot and Scope

Purely Austrian cover pool, with moderate whole loan LTV of 70.3%, secured with residential properties

The weighted average seasoning of the pool at two years is relatively low because the issuer only received its covered bond issuance licence at the end of 2013, at which point it started to document valuations in line with requirements.

The cover pool is well distributed across Austria and concentrations have not materially changed since the last review.

**Figure 4: Regional distribution**



Source: Wüstenrot and Scope

### Moderate credit risk...

### 3.3. Credit risk assessment

We assess credit risk in the covered bond programme to be moderate, given the bank's prudent underwriting and the current weighted average whole loan LTV of 70.3%.

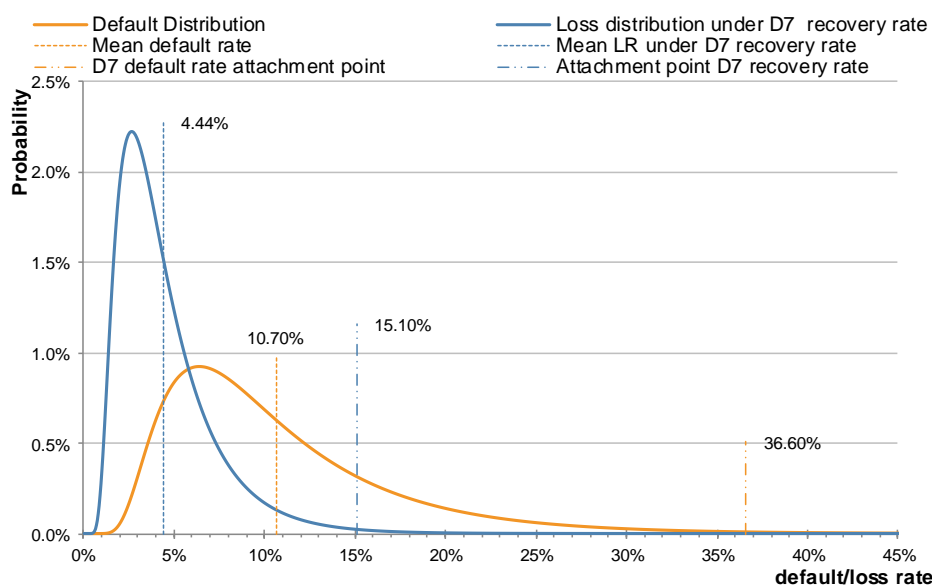
Our projections of default in the cover pool use an inverse Gaussian distribution with a mean default rate of 10.7% and a coefficient of variation of 60%. The parameters for the default distribution were derived from internal loan-by-loan risk assessments from the bank.

We estimate a weighted average recovery rate of 79.5% under a base case scenario (D0) and 58.5% under the most stressful scenario (D7). This translates into a mean loss rate of 4.4% under the most stressful weighted average recovery rate, compared with a 2.2% mean loss rate under our base case recovery assumptions.

Refer to Appendix 2 for details on our recovery rate analysis.



**Figure 5: Default and loss distribution**



Source: Wüstenrot and Scope

...but market risks remain high, driven by high assumed prepayments

### 3.4. Market risks

During 2017, investor acceptance allowed the bank to lock in low-cost and long-term covered bond funding. This resulted in the liability duration more than doubling to 14.3 years from 6.9 years as of end-December 2016. This exposes the programme to maturity mismatches resulting into an asset duration which is two years shorter than that of the outstanding bonds.

In our rating analysis this mismatch further increases by testing the rating sensitivity against high prepayments. The rating supporting OC is predominantly driven by this high prepayment scenario as the cover pool needs to be able to support negative carry.

**Figure 6: Unstressed cash flow characteristics**

Date	Total assets EUR m	NPV EUR m	WAM Years	Duration Years	Fixed-rate %	Floating-rate %
28 December 2016	303.92	351.01	14.51	12.44	75.03%	24.97%
31 December 2017	263.18	316.01	14.11	12.01	74.43%	25.57%
31 March 2018	490.60	568.84	14.58	12.44	76.39%	23.61%

Date	Total liabilities EUR m	NPV EUR m	WAM Years	Duration Years	Fixed-rate %	Floating-rate %
28 December 2016	2	2.53	7.92	6.97	100.00%	0.00%
31 December 2017	97	99.97	15.41	13.62	100.00%	0.00%
31 March 2018	132.00	138.02	16.43	14.29	100.00%	0.00%

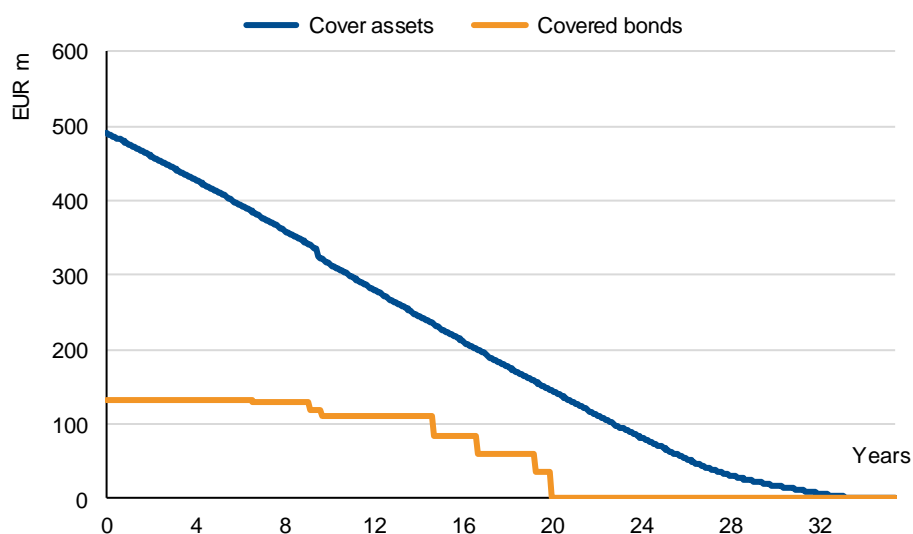
  

Current nominal OC	271.67%	Current WAM gap	-1.84
Current NPV OC	312.14%	Current duration gap	-1.84

Source: Wüstenrot and Scope



**Figure 7: Redemption profile**



Source: Wüstenrot and Scope

**Moderate Interest rate risk**

**3.4.1. Interest rate risk**

The majority of Wüstenrot’s mortgage loans are fixed rate, in contrast to the floating-rate mortgage loan that is typical in Austria. Most of the bank’s fixed-rate mortgage loans eventually convert to floating rates. Interest rate risk remains moderate as the loans are hedged via embedded interest rate caps and floors.

**Figure 8: Interest rate type**

Interest type	Q4 2016	Q4 2017	Q1 2018
Fixed rate	2.72%	2.64%	2.77%
Floating rate	24.97%	25.57%	23.61%
Fixed rate over a term	72.30%	71.79%	73.62%

Source: Wüstenrot and Scope

We have tested the resilience of the covered bond structure against adverse interest rate developments using a set of scenarios with rising and falling interest rates (starting at different times) and complemented the stresses with a lower-for-longer interest rate scenario in which negative market rates persist. The latter scenario is the most stressful for the cover pool.

Substitute assets currently registered in the cover pool do not add credit risk and provide the cover pool with the ability to swiftly mitigate short-term liquidity needs.

**3.4.2. Foreign exchange risk**

**No FX risk**

There is no foreign exchange risk as both assets and liabilities are denominated in euro. Wüstenrot currently has no plans for foreign currency-denominated issuances.

**3.4.3. Overcollateralisation**

Wüstenrot’s covered bond ratings are cover pool-supported and therefore hinge on the issuer’s ability and willingness to provide overcollateralisation above the legal minimum.

Our credit view of Wüstenrot allows us to fully consider available overcollateralisation for the analysis. Upon a two-notch issuer downgrade, we would identify whether the Wüstenrot’s capital market communication on its intended overcollateralisation is

sufficiently robust to continue taking into account available overcollateralisation. In the absence of this, we would establish a sustainable overcollateralisation level, against which we would compare the rating-supporting overcollateralisation to determine whether we can maintain the ratings.

Because of the still small size of Wüstenrot's covered bond programme we expect supporting overcollateralisation to remain more volatile than other programmes. Increasing issuance volumes and increasing the seasoning of the cash flow profile will temper this sensitivity over time.

We are not aware of plans that would significantly change the risk profile or reduce available overcollateralisation to levels that would no longer support the current rating uplift.

### **3.5. Counterparty risk**

The rated bonds are exposed to Wüstenrot's roles as originator, servicer, bank account provider and paying agent. There are no documented replacement mechanisms that would automatically shield the covered bonds from a credit deterioration of, for instance, the counterparties providing bank accounts. However, in such a scenario we believe the strong alignment of interests between the bank and covered bond holders would prevent negative impacts before a regulator intervenes. As part of the risk management process, the bank regularly monitors its accounts to ensure it can enter into remedial actions early on. We also take a positive view that most collections are done via direct debit, allowing for a relatively swift redirection of payments if needed.

In addition, we expect that a regulatory intervention in Wüstenrot would involve the use of available resolution tools with the aim of maintaining the issuer. We do not expect the active management and servicing of the cover pool to be severely impacted in such a scenario.

## **4. Rating stability**

Scope also checks for rating stability depending on the current overcollateralisation, the issuer's credit migration and planned issuances.

### **4.1. Changes to the issuer assessment**

An issuer downgrade or negative change in its Outlook would result in commensurate changes for its covered bond ratings. This reflects, that the covered bond programme benefits from the maximum uplift available to covered bonds issued by Wüstenrot.

In the case of an issuer upgrade, the covered bond rating would not change but minimum overcollateralisation to support the current rating could reduce, reflecting the issuer's improved ability to shield the covered bonds from higher losses.

### **4.2. Changes to overcollateralisation**

The rating is based on the cover pool, thus relying on overcollateralisation. Current covered bond issuance is restricted to 10% of the balance sheet, which, combined with the bank's covered bond issuance strategy, does not indicate that the rating-supporting overcollateralisation will constrain the rating. This assumption also reflects that the issuer's underwriting criteria have remained stable and that the credit quality of the current cover pool is not materially different from additional available eligible assets or the bank's mortgage book.

We believe the issuer has sufficient capacity to support a three-notch cover pool uplift.

**Changes in our assessment of the bank will directly translate into cover pool rating changes**

Detailed cover pool and performance data provided by the bank

### 5. Sovereign risk

Sovereign risk does not limit the ratings of Wüstenrot's mortgage-covered bonds. We believe the risks of an institutional framework meltdown, legal insecurity or currency-convertibility problems are currently remote.

### 6. Data adequacy

We consider the data quality as adequate in light of the cover pool's high granularity.

Wüstenrot has provided us with both public and confidential information on the cover pool composition, including asset performance data and information that allows us to establish a cash flow profile. We have received detailed loan-level data with the relevant credit characteristics of the mortgage segment.

If detailed information on some credit aspects was unavailable, we benchmarked the bank's information with market data and made conservative assumptions. We ensured as far as possible that sources were reliable before drawing upon them but did not verify each item of information independently.

Scope analysts visited Wüstenrot and interviewed key personnel to understand the bank's origination, monitoring and workout processes. We also discussed key trends relevant for the development of the cash flow profile, including issuance plans.

### 7. Monitoring

We will monitor the transaction using information regularly provided by the issuer. The ratings will be monitored and reviewed at least once a year, or earlier if warranted by events.

### 8. Applied methodology

To analyse the mortgage-covered bonds, we applied Scope's [Covered Bond Rating Methodology](#), published 31 July 2018, and the principles of the [General Structured Finance Rating Methodology](#), dated 28 August 2017, for the asset and cash flow analysis. To establish our credit view on the issuer, the principles of the [Bank Rating Methodology](#) were also applied. All rating methodologies are available on Scope's website at [www.scoperatings.com](http://www.scoperatings.com).

## Appendix I: Issuer rating rationale

### Highlights

- ✓ Bausparkasse Wüstenrot AG is the oldest and the only independent Bausparkasse (building society) in Austria – unlike its three national peers, which are associated with larger banking groups, namely Erste Bank, Raiffeisen group and BAWAG. Wüstenrot benefits from a wide range of clients across Austria, serviced via a nationwide network of Wüstenrot service centres and a larger number of full-time financial advisors. The building society also partners up with correspondent banks, as well as brokers for the distribution of its products.
- ✓ Of the total population of 8.7m in Austria, around 4.5m individuals hold a so-called Bauspar contract, a Bausparkasse savings plan. As of December 2017, the market of outstanding mortgage loans (Bauspardarlehen), bridging loans (Zwischendarlehen) and other loans by Austrian Bausparkassen had a total size of around EUR 19bn. Within this financing segment, Wüstenrot ranks third behind Raiffeisenbausparkasse and S-Bausparkasse, although with a strong share of 26%. Nevertheless, the overall market share for Bausparkassen with regard to house financing loans in Austria<sup>2</sup> and among all financial institutions is lower, at around 13%, within Wüstenrot holds around 3.2%.
- ✓ The Bausparkassen sector in Austria is experiencing challenges, mainly due to the low-for-longer interest rate environment and related dwindling profitability. In addition, client preferences and behaviours are changing, forcing banks to innovate product offerings within their means and focus on increasing efficiencies. Because Bausparkassen are bound by a specialised law and defined business models, we believe that these institutions may potentially lack the flexibility of other banking models to adjust services. Nevertheless, Wüstenrot has been able to increase lending over the past years, in line with its very conservative risk strategy. The bank has a safe and well-diversified asset base, which has enabled it to operate profitably over the past decade, albeit at lower and partly stronger-fluctuating levels.
- ✓ Besides this, Wüstenrot benefits also from its set up within a financial conglomerate; the Wüstenrot group focuses on retail services and next to the Bausparkassen business (the largest entity within the group) comprises a large insurance business. The main business focus of the group is on the Austrian market (c. 86% of deposits and c. 87% of loans), although both the Bausparkasse and the insurance company have established subsidiaries in CEE countries. Wüstenrot has recently updated its strategy and restructured the group to better exploit intra-group efficiencies: as of YE2017 the first positive results linked to these measures were visible.
- ✓ Generally, Bausparkassen are considered niche players in a legally constraint, monoline segment. This, in our view, may make these institutions more vulnerable to adverse and/or sudden market developments, due to the lack of activities that can provide offsetting and alternative income sources. In the case of Wüstenrot, the bank might currently benefit from the integration within a larger group, however, while all entities are profitable, the group structure exhibits, in our view, some vulnerability to financial contagion, which could arise from other business areas.

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<sup>2</sup> As of December 2017, the market for house financing loans in Austria had a total volume of around EUR 125bn.

### Rating drivers (summary)

#### The rating drivers, in decreasing order of importance in the rating assignment, are:

- Longstanding history and brand as a specialised housing-finance lender in Austria. Foreign subsidiaries and insurance business provide complementary brand value.
- Prudent and conservative management of capital and liquidity is rooted in the bank's independent position; these metrics provide some challenges for Wüstenrot's competitiveness.
- Low-risk profile should provide resilience during periods of low profitability.
- Currently lower-for-longer interest environment and changing client behaviour create some challenges for business model.

### Rating-change drivers



Successful implementation of cost-saving programme, with visible improvement in profitability and flexibility



Any strategic partnership with larger financial institutions that could strengthen and further stabilise prudential metrics



Changing risk profile and weaker credit



Any risks arising from subsidiaries (insurance or foreign-based)



A decreasing market share and/or diminishing profitability, as well as reduced capital market access

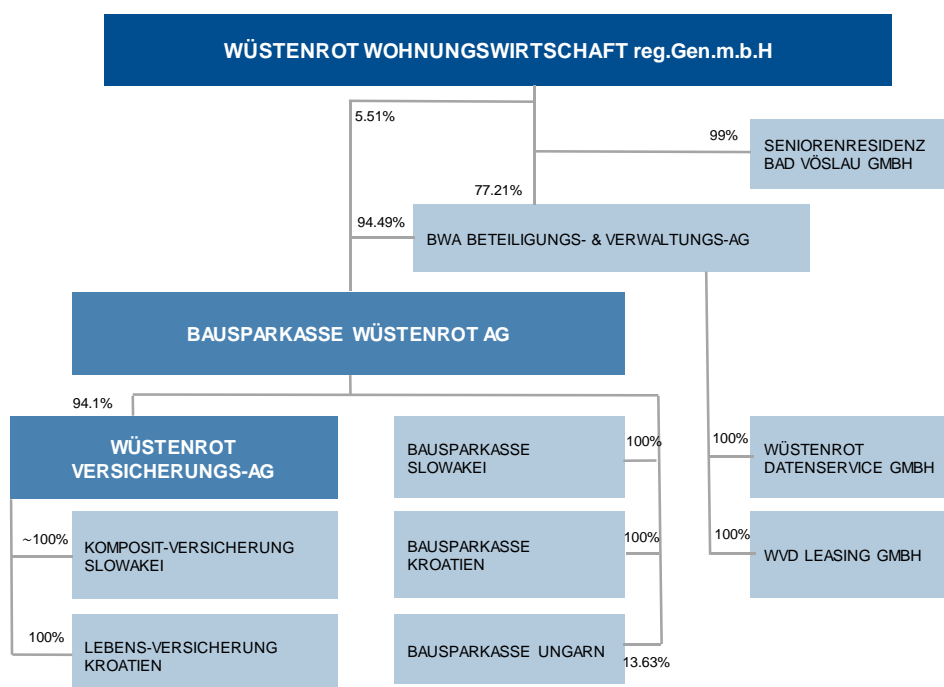
### Overview of Wüstenrot group structure

Wüstenrot is a financial services group headquartered in Salzburg, Austria. Its main institutions are a Bausparkasse (Bausparkasse Wüstenrot AG) and a retail-focused insurance company (Wüstenrot Versicherungs-AG). The group's other entities include three building societies and two insurance companies, all based in central and eastern Europe (Figure 1).

The group offers residential housing finance, financial precautionary savings, life and non-life insurance products (including health and mobility), and general insurance-based investment products. The products complement each other and target retail clients. The group also benefits from strong cross-selling opportunities via its own distribution network.

As of December 2017, Bausparkasse Wüstenrot had 488 employees in Austria and the insurance arm had 1,066 employees.

**Figure 9: Wüstenrot group structure**



Source: Company Data, Scope Ratings

The bank's majority shareholder, Wüstenrot Wohnungswirtschaft reg.Gen.m.b.H., is a cooperative institution, which was founded to promote and develop the housing industry by providing affordable housing. The majority shareholder has a direct interest in the Bausparkasse of 5.51% and an additional overall indirect share of around 73% via the BWA Beteiligungs- und Verwaltungs-AG, a holding company (Figure 1 and Table 1).

The remaining shareholders (via BWA Beteiligungs- & Verwaltungs-AG) are various commercial banks in Austria, with which Wüstenrot partly has distribution agreements for its products.

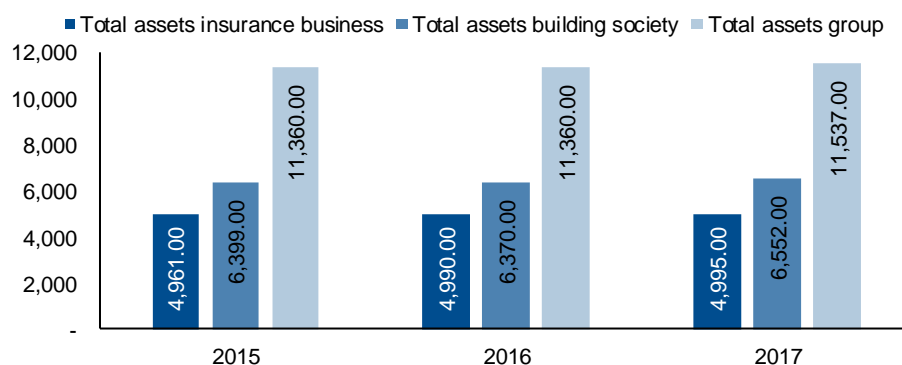
**Figure 10: Details on Wüstenrot shareholder structure – BWA Beteiligungs- und Verwaltungs-AG**

Shares in BWA Beteiligungs- und Verwaltungs-AG as of 31.12.2017	in %	in EUR
Wüstenrot Wohnungswirtschaft reg.Gen.m.b.H., Salzburg	77.21	165,573,034.14
UniCredit Bank Austria AG, Wien	12.63	27,083,340.30
BAWAG P.S.K. Bank für Arbeit und Wirtschaft und Österreichische Postsparkasse AG, Wien	3.88	8,316,743.21
Oberbank AG, Linz	2.6	5,576,638.34
Other minority shares	3.68	7,885,567.52
	<b>100</b>	<b>214,435,323.00</b>

Source: Company data, Scope Ratings

Wüstenrot Bausparkasse is the largest entity within the group, with total assets averaging around EUR 6.5bn over the past years. The overall group has total assets of around EUR 11.5bn (Figure 2).

**Figure 11: Development of total assets: Wüstenrot group (EUR m)**



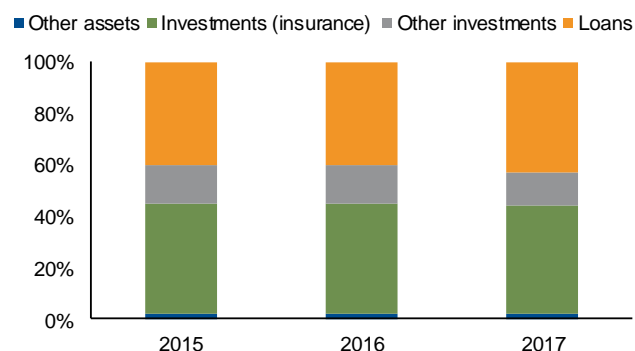
Source: Company data, Scope Ratings

Due to the dual business structure of the group (Bausparkasse savings and insurance), assets mainly comprise loans (banking) and investments (insurance), while liabilities depend strongly on deposits (banking) and provisions (insurance) (Figure 3).

The deposits and provisions are typically bound by contracts, providing the group with some stability regarding funding. To improve its funding profile, by diversifying and extending maturities, Wüstenrot started issuing covered bonds. Moreover, retail saving products with longer durations and derivatives are used to offset interest rate risks.

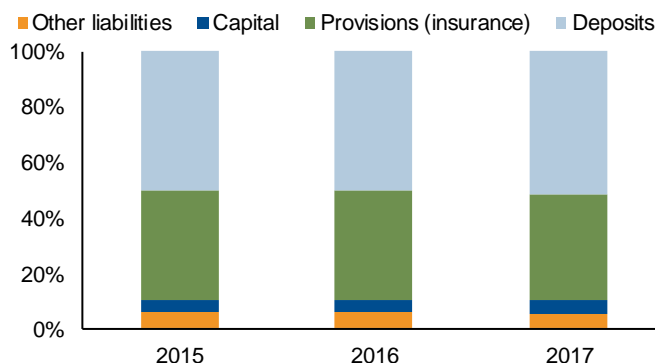
**Figure 12: Asset and liability structure Wüstenrot group**

### Assets



Source: Company data, Scope Ratings

### Liabilities



Source: Company data, Scope Ratings



### Wüstenrot Bausparkasse

Wüstenrot is an Austrian financial institution supervised nationally in Austria by the FMA and the Austrian National Bank (OeNB).

Austrian building societies are subject to a specialised law, the Bausparkassengesetz, which defines mortgage-lending principles. While the main function of building society loans is to finance residential housing, they can also be used to a certain degree for education and for the care of the elderly or other individuals.

There are two types of loans available via Wüstenrot Bausparkasse:

- Mortgage loans (c. EUR 4.3bn as of year-end 2017)
- Other loans – not backed by mortgages (c. EUR 375m as of year-end 2017)

To finance business activities, building societies can generally either bundle savings deposits, or issue covered bonds (currently max. 10% of total assets) or other securities.

Savings contracts via building societies appeal to Austrian retail clients due to additional government-sponsored premium payments. Bausparkasse savings loans are typically collateralised via their entry into the land registry or via other eligible collateral. Building society loans based on a savings contract are restricted to EUR 180,000 per person, with a maximum LTV of 80%.

Wüstenrot's main business is focused on retail clients (c. EUR 4.5bn), whereas major residential building finance (Großwohnbau) relate mainly to non-profit entities (c. 88%) and comprised only around EUR 377m of the overall lending portfolio in 2017.

To distribute its products, Wüstenrot does not rely on an extensive branch network, but rather uses various distribution centres across Austria, a network of full-time financial sales consultants, mortgage brokers, and commercial banks. We particularly regard the network of financial sales consultants as a competitive advantage as it provides a close connection to the bank's clients at a relatively low cost.

Wüstenrot was the first Bausparkasse to establish a network in central and eastern Europe, where its growth strategy mirrors that of its home market and is based on organic growth. The bank fully owns both Wüstenrot stambena stedionca d.d. in Croatia and Wüstenrot stavebna sportel'na a.s. in Slovakia. It has a minority share (13.6%) in Hungarian Fundamenta Lakaskassza AG.

These entities have been profitable over the past years. The current 'no dividend' policy for the Slovakian and Croatian entities has allowed the build-up of intrinsic capital positions (Figure 10).

**Figure 13: Key figures of CEE building society entities**

Country	Slovakia	Croatia	Hungary
Institution	Wüstenrot stavebná sporiteľňa, a.s., Bratislava	Wüstenrot stambena štedionica d.d., Zagreb	Fundamenta-Lakaskassza Bausparkasse Zrt. Budapest
As of	YE 2017		
Year of establishment	1993	1998	1997
Ownership share of Wüstenrot	100%	100%	13.63%
New savings contracts	14,889	19,130	200,662
Deposits (EUR m)	375	222	1,392
Loans (EUR m)	300	175	1,101
Employees	257	169	582
Earnings before tax (EUR m)	2	0.3	20
Total assets (EUR m)	400	231	1,563

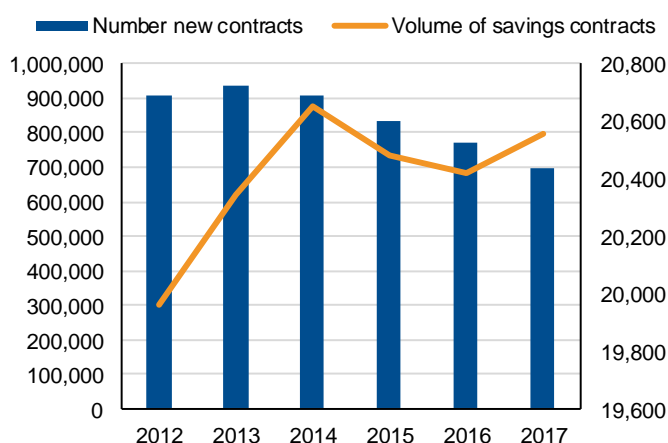
Source: Company data, Scope Ratings

### Recent events

#### Market for Bausparkasse savings is changing

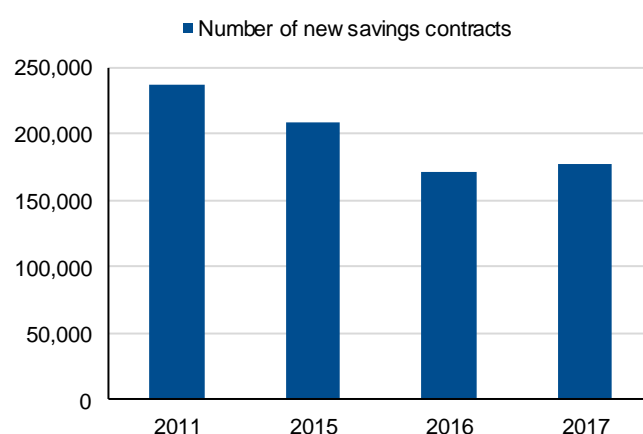
Since 2012, and as reported by the association for Austrian Bausparkassen (Arbeitsforum Österreichischer Bausparkassen), the Bausparkasse sector has experienced a near-continuous decrease in new contracts by roughly 23% (Figure 4).

**Figure 14: Number of new savings contracts with building societies (units) versus volume of outstanding savings contracts (EUR m)**



Source: Company Data, Arbeitsforum der Österreichischen Bausparkassen (AÖB)

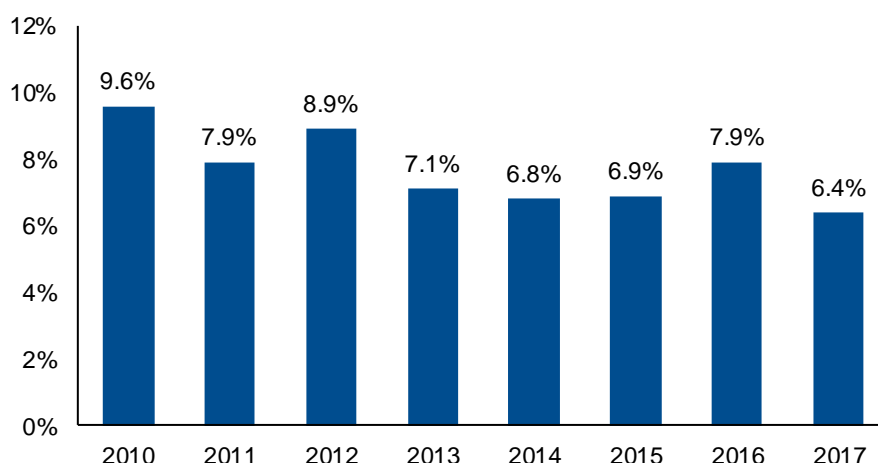
**Figure 15: Number of new savings contracts with Wüstenrot (units)**



Source: Company data, Scope Ratings

Part of the decrease can be potentially attributed to a changed environment with lower interest rates, which might have also led to lower household savings (Figure 6).

**Figure 16: Savings quota of private households in Austria (%)**



Source: Company data, Statistik Austria

More generally, we consider the 'traditional', monoline Bausparkasse business model to be under some pressure. New Bausparkasse savings contracts are less attractive for retail clients who intend to take out mortgage loans in the future, as alternatives exist in the form of direct, low-interest mortgage loans. In addition and to a degree, existing contracts are not converted into loans. This changed client/saver behaviour has sometimes led to asset-liability mismatches on Bausparkassen balance sheets.

However, we note a key difference between Austrian and German Bausparkassen markets. Whereas the Bauspar savings contract in Germany has been a traditional way to safeguard a cheaper interest rate for future mortgage loans with those institutions, Austrian Bauspar contracts do not afford such a benefit, but instead provide a state-backed premium based on savings. Given the latter, we understand that Bauspar savings contracts in Austria are not necessarily converted into mortgage loans.

Wüstenrot is also experiencing a special trend involving a decline in savers who deposit small, regular amounts while those depositing large, one-off sums increase. The latter are regarded as longer-term deposits, which should benefit and stabilise the bank's asset-liability management.

Due to the particular structure of the Austrian banking market, Wüstenrot still seems to benefit from a steady interest in the establishment and maintenance of new savings contracts. However, to save costs, Bausparkassen should focus on increasing savings contracts by volume, not in number. Wüstenrot already follows this approach, as discussed above.

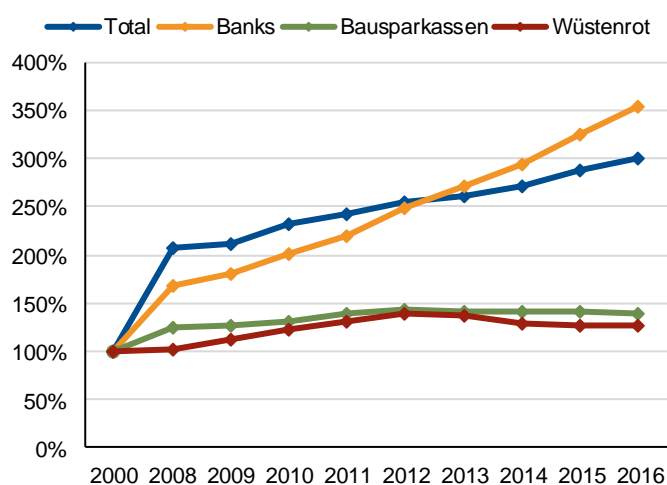
### Rating drivers (details)

**Longstanding history and brand as a specialised housing-finance lender in Austria; foreign subsidiaries and insurance business providing complementary brand value**

Despite years of falling interest rates, Bauspar contracts are still considered a classic investment and savings option for retail clients. This can be partly attributed to the attached government-sponsored premium for savers. Hence, Bausparkassen typically benefit from high deposit levels, which function as their main and often exclusive source of funding.

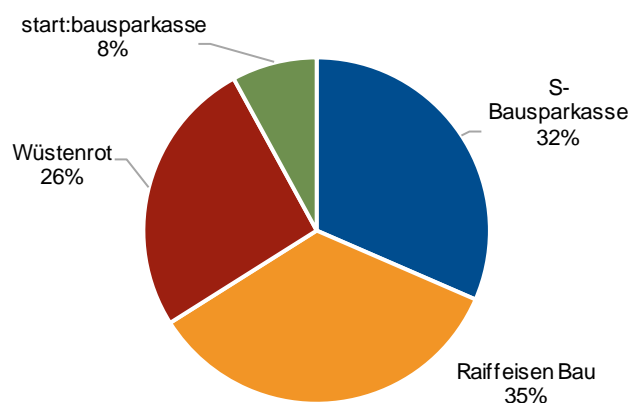
Wüstenrot is the oldest and only independent Bausparkasse in Austria. The bank has built a strong brand and pursues a consistent, prudent lending business in residential housing. Since 2000, the bank's business has grown both organically and sustainably, although more slowly than general growth rates in the market (Figure 7).

**Figure 17: Evolution of outstanding loans for house acquisition (based on amount borrowed; value in December 2000 = 100%)**



Source: Austrian National Bank, Scope Ratings

**Figure 18: Bausparkassen market shares for loans (mortgage loans, bridge-financing and other loans) as of December 2017 (%)**



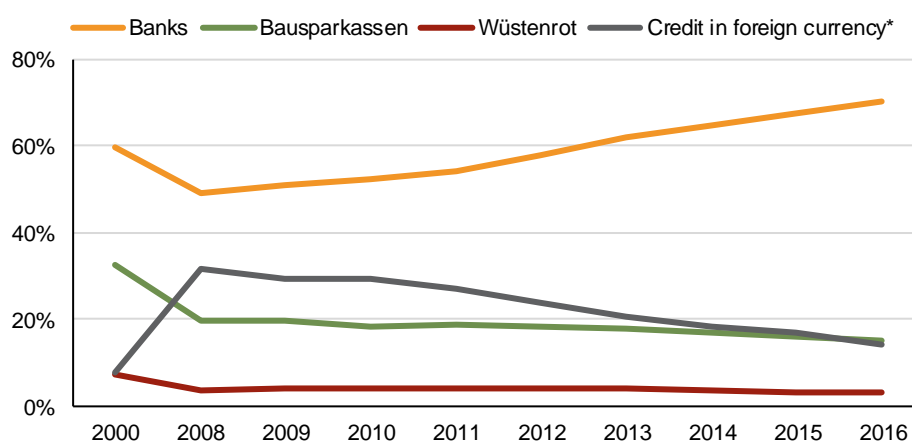
Source: Company data, Scope Ratings

Overall, Bausparkassen have lost market share in housing finance over the past years (Figure 9). However, Wüstenrot has been able to keep a relatively stable share, albeit on

a low scale. Within the Bausparkassen sector itself, Wüstenrot still holds a strong market share of around 26% (Figure 8).

This industry development is due to the steady encroachment of commercial banks in the housing finance market since the early 2000s. Certain developments have liberalised the sector, such as the introduction of mortgage loans denominated in Swiss francs and Japanese yen. The popularity of these FX loans have stemmed from the much lower interest rates in Switzerland and Japan. As Wüstenrot did not offer FX loans, its growth rates remained subdued compared to competitors offering the product. This was compounded by the bank's relatively late introduction of a wider variety of loans without attached savings contracts.

**Figure 19: Market shares based on stock of credit for housing acquisition in Austria (%)**



\* of the overall market , Source: Scope Ratings, Austrian National Bank

With no affiliation with a large banking group, Wüstenrot lacks its own branded network of retail banking branches like Bausparkassen peers. However, based on its distribution agreements with other banking groups, like with BAWAG and Bank Austria, Wüstenrot nevertheless has an extensive bank client reach domestically. An additional distribution channel consists of specialised sales consultants, which in the bank's view adds value and a competitive advantage due to a close connection with the client. According to the bank, this distribution channel has a market penetration of around 20% of the Austrian population.

Wüstenrot was the first bank to expand Bausparkasse operations to central and eastern Europe, which provides a relative competitive advantage and allows for organic growth.

### **Prudent and conservative management of capital and liquidity rooted in the bank's independent position, though provides some challenges for competitiveness**

Wüstenrot's common tier 1 equity (CET1) ratio of 14.7% as of year-end 2017 (2016: 14.5%) and total capital ratio of 18.6% (19.3%) are strong compared to national peers. We understand that Wüstenrot has a group-wide 'no dividend' policy, with all profits of each entity retained to strengthen members' capital positions. Capital retention is also positively impacting solvency ratio. Moreover, the bank's low-risk profile and strong collateralisation of its asset base are comforting aspects.

Wüstenrot is funded mainly by retail deposits (c. 85% of total liabilities), with most linked to Bauspar contracts. This provides the bank with a relatively stable deposit base. Customers who cancel Bauspar contracts incur penalty fees, limiting the potential for early redemption.

Wüstenrot has updated its funding strategy, adding covered bonds as an alternative funding source. However, among Bausparkassen, the Austrian FMA allows a maximum of 10% of the total balance sheet to be diverted into this funding tool.

Wüstenrot's independent set-up is mainly challenged by its need to maintain a strong capital and liquidity profile, creating the pressure to strongly increase profitability. The bank's national competitors, on the other hand, benefit from the ability to revert back to group liquidity pools, outsource some administrative functions, and access group members' branch networks (which are especially extensive in the Raiffeisen and Sparkassen sectors). Wüstenrot is implementing a new strategy to make its group structure more efficient and increase cross-selling between the insurance and Bausparkasse businesses. Other major aims are to redevelop IT to broaden access to clients, make administrative processes leaner, and further improve risk management.

The bank's liquidity profile is adequate in our view; its security portfolio also contains central-bank-eligible assets, which can help offset large short-term liquidity needs.

#### **Low-risk profile, which can provide resilience during periods of low profitability**

We consider Wüstenrot's credit risk to be low due to its focus on residential mortgage lending.

The bank's loan portfolio (c. EUR 4.9bn as of year-end 2017) is composed of diversified residential mortgages in Austria. The majority of loans (c. EUR 3bn) are based on savings contracts (Bauspardarlehen), for which borrowers build up a deposit base before taking out a loan (which is optional). Such mortgage loans typically carry an LTV of between 60% and 80% and a maturity profile of 10-20 years. Wüstenrot's housing loans are typically worth around EUR 110,000 each.

Non-performing-loan levels have been consistently low over the past years, at around 0.7% in 2017 after peaking at 1.69% in 2009 (which was still low compared to commercial bank peers). Downside risk regarding interest rate changes is limited due to the fixed caps and floors applied to interest rate contracts.

Residential real estate prices in Austria have increased considerably in the past years, although from a comparatively low level. For example, the Stability Report 31 of the Austrian National Bank<sup>3</sup> states that in Vienna, where house prices have risen particularly strongly in recent years, only about 18% of households are owner-occupiers and only 6% of households have mortgage debt. A reason is that low home-ownership rates, alongside an established rental market with a high share of subsidised housing, discourages vulnerable households from owning homes; limiting in turn the associated systemic risks. The Stability Report<sup>4</sup> also highlights that real estate prices have not been driven by excessive mortgage lending: over the last decade, growth in the volume of residential mortgages has not correlated with residential house prices. Overall, aggregate household indebtedness to GDP as well as mortgage loan volume relative to household disposable income is comparatively low at c. 50%. For banks, residential real estate loans aggregated to 150% of Austrian banks' CET1 capital and remain below the European average at end-2017. Nevertheless, Bausparkassen would be at the forefront of any increased problems.

Wüstenrot holds an investment portfolio of around EUR 1.2bn as of 2017. The portfolio is geared towards Austrian exposures across sovereigns, financial institutions, corporates and money markets. However, the bank also has a strong exposure to US financial

<sup>3</sup> See: <https://www.oenb.at/en/Publications/Financial-Market/Financial-Stability-Report/2016/financial-stability-report-31.html>

<sup>4</sup> See: [https://www.oenb.at/dam/jcr:ea65d70a-52aa-420b-b609-715df1060a26/fsr\\_35.pdf](https://www.oenb.at/dam/jcr:ea65d70a-52aa-420b-b609-715df1060a26/fsr_35.pdf)

institutions. We understand the bank plans to downsize this portfolio and refocus on growing its loan business.

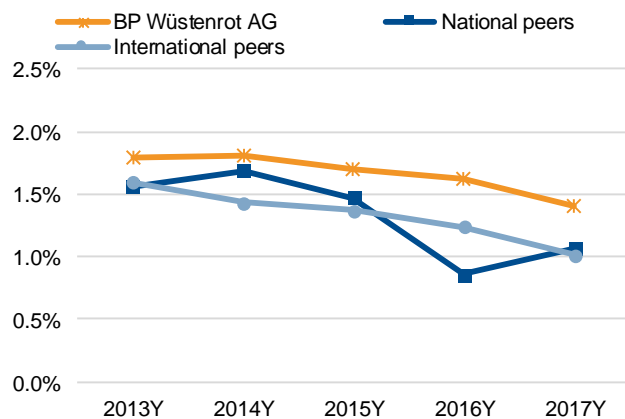
#### **Current low-for-longer interest rate environment and changing client behaviour putting business model under pressure**

Over the past years, the low-for-longer interest rate environment combined with a changing and more competitive mortgage lending market have put pressure on the profitability of Bausparkassen. Wüstenrot has been able to steadily grow its loan business; nevertheless increased low/negative interest-bearing cash positions and challenged retail deposit funding have to be met by greater flexibility in asset-liability management. Wüstenrot's strategy has shown resilience in responding to these challenges.

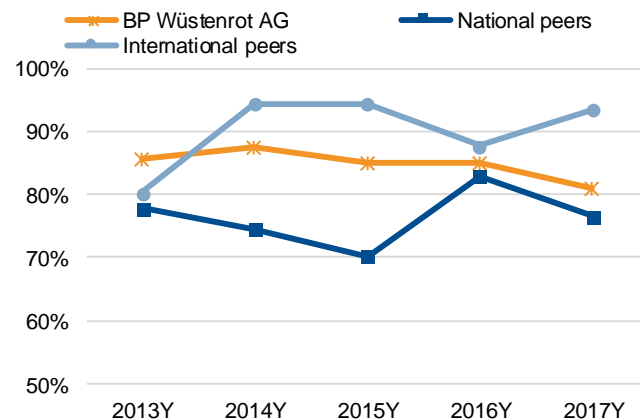
The bank is continuously adjusting and improving its product portfolio to meet new demands both in risk management and among clients. The bank's competitive advantage is its fixed-rate loan business. Most new loans are at a fixed interest rate with a long commitment of 10-20 years. This gives the bank a more stable planning horizon; for clients, it provides an attractive financing alternative. The large part of the fixed-rate loans is hedged by the bank, based on conservative interest-rate estimates. By contrast, in Austria, we understand that variable-rate loans represent most outstanding loans.

### Peer comparison – Bausparkasse Wüstenrot AG

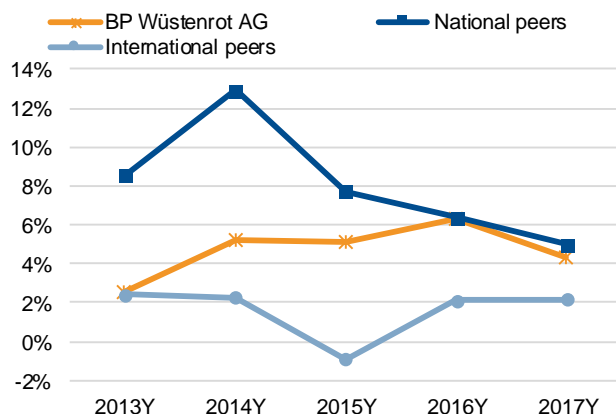
#### Net interest margin



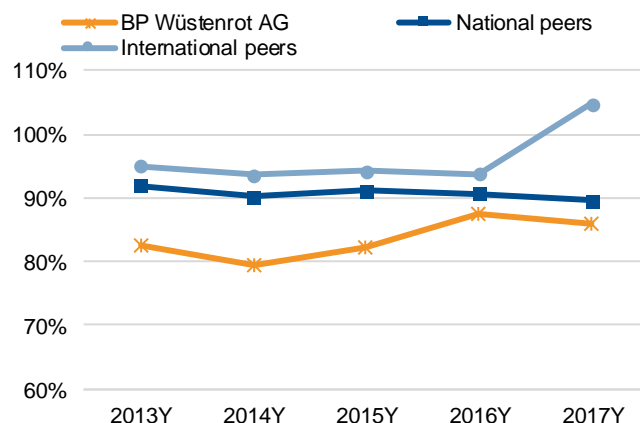
#### Cost-income ratio (%)



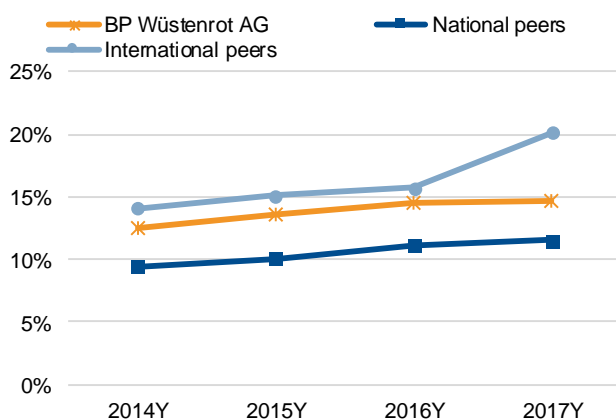
#### Return on average equity (%)



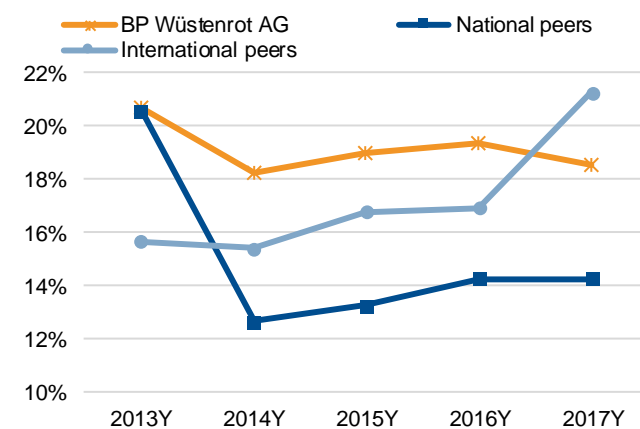
#### Loan-to-deposit ratio (%)



#### Common equity tier 1 ratio (transitional) (%)



#### Total capital ratio (transitional) (%)



Source: SNL, Scope Ratings

National peers: Raiffeisen Bausparkasse Gesellschaft mbH, Bausparkasse der österreichischen Sparkassen AG

\*\*Cross-border peers based on business model: Alte Leipziger Bausparkasse AG, BHW Bausparkasse AG, Debeka Bausparkasse AG, Deutsche Bausparkasse Badenia, Deutscher Ring Bausparkasse





Selected financial information – Bausparkasse Wüstenrot AG

	2013Y	2014Y	2015Y	2016Y	2017Y
<b>Balance sheet summary (EUR m)</b>					
<b>Assets</b>					
Cash and interbank assets	568	482	224	151	187
Total securities	739	945	1,112	924	934
of which, derivatives	NA	NA	NA	NA	NA
Net loans to customers	4,131	4,167	4,270	4,490	4,638
Other assets	502	527	490	496	522
<b>Total assets</b>	<b>5,940</b>	<b>6,120</b>	<b>6,097</b>	<b>6,062</b>	<b>6,280</b>
<b>Liabilities</b>					
Interbank liabilities	60	58	115	144	47
Senior debt	218	140	95	48	115
Derivatives	3	3	3	3	3
Deposits from customers	5,013	5,243	5,188	5,138	5,390
Subordinated debt	136	136	135	135	100
Other liabilities	95	102	101	104	112
<b>Total liabilities</b>	<b>5,524</b>	<b>5,682</b>	<b>5,636</b>	<b>5,571</b>	<b>5,767</b>
Ordinary equity	416	438	461	491	513
Equity hybrids	0	0	0	0	0
Minority interests	0	0	0	0	0
<b>Total liabilities and equity</b>	<b>5,940</b>	<b>6,120</b>	<b>6,097</b>	<b>6,062</b>	<b>6,280</b>
<i>Core tier 1/Common equity tier 1 capital</i>	NA	419	437	461	491
<b>Income statement summary (EUR m)</b>					
Net interest income	96	100	95	91	79
Net fee & commission income	13	13	15	13	10
Net trading income	NA	NA	NA	NA	NA
Other income	NA	NA	NA	NA	NA
<b>Operating income</b>	<b>132</b>	<b>144</b>	<b>143</b>	<b>140</b>	<b>133</b>
Operating expense	113	126	122	119	108
<b>Pre-provision income</b>	<b>19</b>	<b>18</b>	<b>22</b>	<b>21</b>	<b>25</b>
Credit and other financial impairments	0	-8	-4	-7	2
Other impairments	9	4	2	11	-1
Non-recurring items	NA	NA	NA	NA	NA
<b>Pre-tax profit</b>	<b>11</b>	<b>22</b>	<b>23</b>	<b>17</b>	<b>24</b>
Discontinued operations	0	0	0	0	0
Other after-tax items	0	0	0	-1	0
Income tax expense	0	0	0	-15	2
Net profit attributable to minority interests	0	0	0	0	0
<b>Net profit attributable to parent</b>	<b>11</b>	<b>22</b>	<b>23</b>	<b>30</b>	<b>22</b>

Source: SNL Financial



# Bausparkasse Wüstenrot AG

## Austrian Mortgage-Covered Bonds – Performance Update

### Ratios – Bausparkasse Wüstenrot AG

	2013Y	2014Y	2015Y	2016Y	2017Y
<b>Funding and liquidity</b>					
Net loans/deposits (%)	82.4%	79.5%	82.3%	87.4%	86.0%
Liquidity coverage ratio (%)	NA	NA	280.0%	250.9%	381.4%
Net stable funding ratio (%)	NA	NA	NA	NA	NA
<b>Asset mix, quality and growth</b>					
Net loans/assets (%)	69.5%	68.1%	70.0%	74.1%	73.8%
NPLs/Net Loans (%)	NA	NA	NA	NA	NA
Loan-loss reserves/NPLs (%)	NA	NA	NA	NA	NA
Net loan growth (%)	2.5%	0.9%	2.5%	5.2%	3.3%
NPLs/Tangible Equity and Reserves (%)	NA	NA	NA	NA	NA
Asset growth (%)	2.9%	3.0%	-0.4%	-0.6%	3.6%
<b>Earnings and profitability</b>					
Net interest margin (%)	1.8%	1.8%	1.7%	1.6%	1.4%
Net interest income/average RWAs (%)	3.4%	3.2%	2.9%	2.8%	2.4%
Net interest income/operating income (%)	72.8%	69.7%	66.5%	65.0%	59.5%
Net fees & commissions/operating income (%)	10.0%	9.3%	10.2%	9.1%	7.8%
Cost/income ratio (%)	85.7%	87.6%	85.0%	85.1%	80.9%
Operating expenses/average RWAs (%)	4.0%	4.1%	3.7%	3.7%	3.3%
Pre-impairment operating profit/average RWAs (%)	0.7%	0.6%	0.7%	0.6%	0.8%
Impairment on financial assets /pre-impairment income (%)	-1.8%	-46.6%	-17.8%	-32.3%	8.6%
Loan-loss provision charges/net loans (%)	0.0%	-0.2%	-0.1%	-0.1%	0.0%
Pre-tax profit/average RWAs (%)	0.4%	0.7%	0.7%	0.5%	0.7%
Return on average assets (%)	0.2%	0.4%	0.4%	0.5%	0.3%
Return on average RWAs (%)	0.4%	0.7%	0.7%	0.9%	0.7%
Return on average equity (%)	2.6%	5.2%	5.1%	6.3%	4.3%
<b>Capital and risk protection</b>					
Common equity tier 1 ratio (% , fully loaded)	NA	NA	NA	NA	NA
Common equity tier 1 ratio (% , transitional)	NA	12.6%	13.6%	14.5%	14.7%
Tier 1 capital ratio (% , transitional)	13.7%	12.6%	13.6%	14.5%	14.7%
Total capital ratio (% , transitional)	20.7%	18.2%	19.0%	19.3%	18.6%
Leverage ratio (%)	NA	NA	NA	6.9%	7.1%
Asset risk intensity (RWAs/total assets, %)	48.3%	54.5%	52.6%	52.5%	53.2%
<b>Market indicators</b>					
Price/book (x)	NA	NA	NA	NA	NA
Price/tangible book (x)	NA	NA	NA	NA	NA
Dividend payout ratio (%)	NA	NA	NA	NA	NA

Source: SNL Financial

## Appendix II: Quantitative analysis

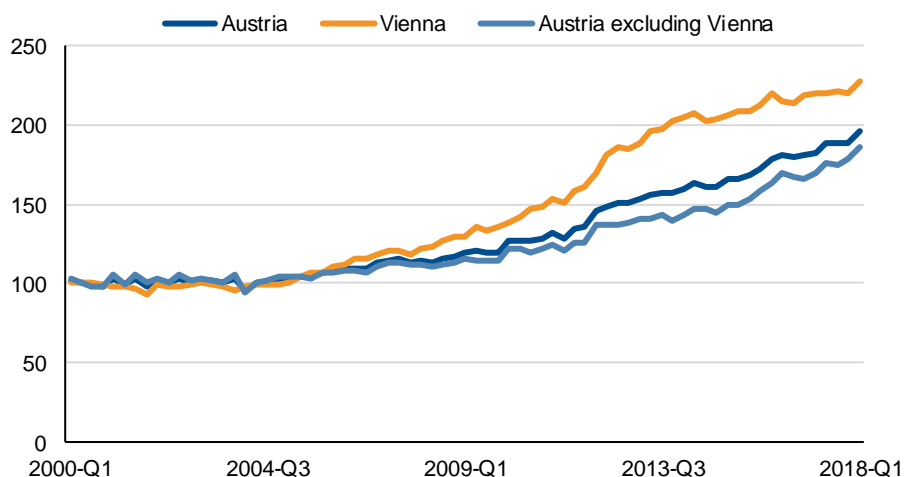
### Credit risk analysis

We have analysed Wüstenrot's granular mortgage pool using a standard default-probability distribution law (inverse Gaussian). This approach relies on i) a measure of mean default probability; and ii) a variance or correlation parameter. Our cash flow analysis also incorporated recovery rate assumptions on the pool.

We have used the issuer's internal rating system and back-testing information to establish lifetime default rate assumptions. In the absence of more detailed issuer-specific data we have used a default-rate coefficient of variation observed for granular pools of German and Austrian residential mortgage loans.

The recovery rates considered in the analysis reflect the outstanding notional of the loans as of closing. This approach is conservative because deleveraging reduces LTV and increases expected recovery rates over time.

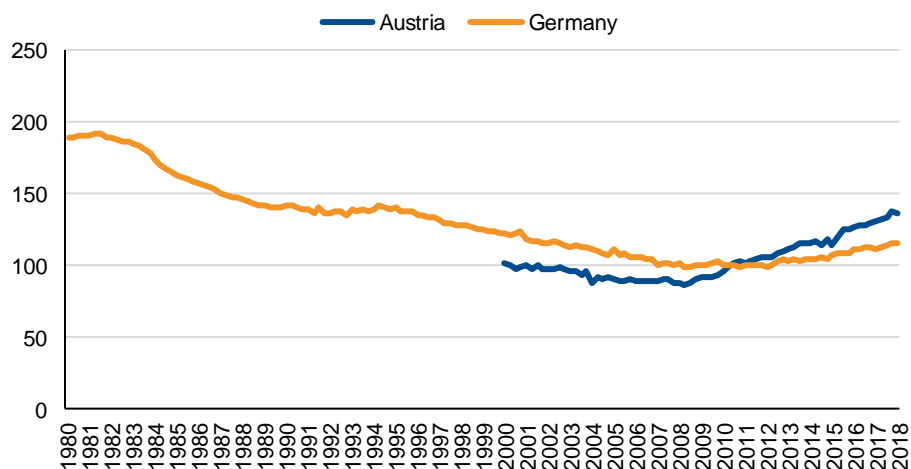
**Figure 20: House price development in Austria**



Source: Austrian National Bank

Our market-value-decline assumptions are based on our view of sustainable price levels and the observed volatility of the OECD's and the Austrian National Bank's affordability indices for Germany, Austria and Vienna. Our affordability analysis used a longer historical series for Germany because of the limited timeframe of the comparable index for Austria. This also reflects our view that fundamental risk factors for both countries are comparable.

**Figure 21: Affordability index (price-to-income index)**

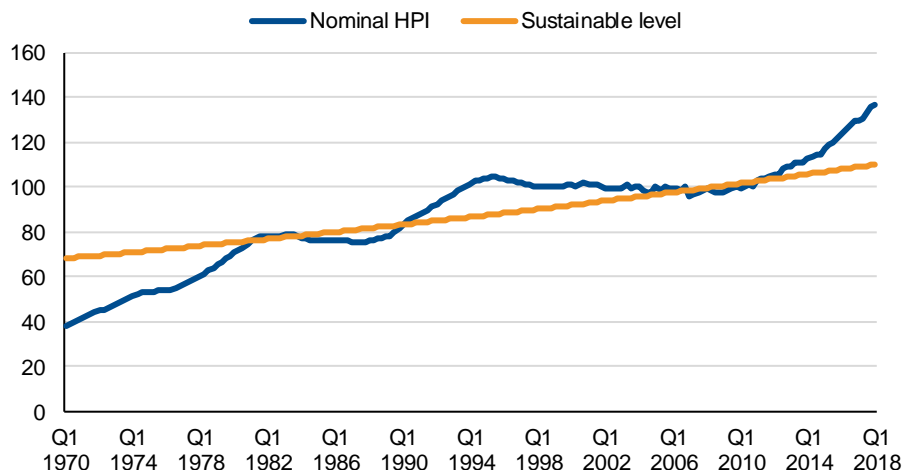


Source: OECD

We have used the affordability index as a proxy for the volatility of commercial and residential real estate.

In the scenario needed to support the maximum achievable uplift we have calculated a weighted average recovery rate of 58.5%, which compares to our base case recovery assumption of 79.5%.

**Figure 22: Scope's sustainable level**



Source: OECD

### Key modelling parameters

Our segment-specific recovery rates and the relevant average liquidity premium are based on the cover pool's composition. The highest stress assumptions only apply in the scenario which, if passed, allows the maximum credit differentiation between the issuer and its covered bonds.<sup>5</sup>

**Liquidity premium.** We have added an average 150bps liquidity discount to the Austrian residential mortgage assets, which we determined by analysing the historical trading spreads of other Austrian covered bonds.

<sup>5</sup> The maximum credit differentiation between the rating of the issuer and its covered bond is typically determined by our fundamental assessment of the legal and resolution framework. Per our methodology, the maximum credit differentiation can only be three notches higher than this fundamental uplift. For Wüstenrot, we have determined a fundamental support of four notches. According to our methodology, the maximum achievable uplift is seven notches (4+3).

**Market risk stresses.** Our cash flow model has assumed deterministic interest rate and foreign exchange stresses, which we established via a common framework. This allows us to establish stresses that equate to the maximum achievable rating uplift.

**Interest rate modelling.** We tested the covered bonds against several scenarios of rising and falling interest rates. The covered bonds are most vulnerable to a non-reverting negative interest rate scenario (Japanese scenario) as the covered bonds are fixed rate with relatively long maturities.

In the rising interest rate scenarios, interest rates increase to a stressed rate of 10% and after two years gradually revert back to a long-term mean. The corresponding falling interest rate stresses decrease after the first two years to a low of minus 1%. In contrast to the rising interest rate scenarios, we have modelled interest rate developments that revert back to the mean after two years as well as scenarios in which interest rates remain at those negative rates.

**Foreign-exchange risk modelling.** This is irrelevant for Wüstenrot's cover pool as all assets and liabilities are in euros.

**Prepayment rate assumption.** We have tested both 0% and 15% constant prepayment assumptions for all cover assets. The high prepayment scenario is the most stressful, reinforced by the high remaining term of the covered bonds. This results in a negative carry that drives the rating-supporting overcollateralisation.

**Servicing fee.** Our analysis applies country- and asset-type-specific servicing fees that the cover pool must pay annually should Wüstenrot default. An annual 25 bps servicing fee was applied to Wüstenrot's residential mortgage cover pool.



# Bausparkasse Wüstenrot AG

## Austrian Mortgage-Covered Bonds – Performance Update

### Appendix III: Summary of characteristics

Reporting date	28 December 2016	31 March 2018
Issuer name	Bausparkasse Wüstenrot AG	Bausparkasse Wüstenrot AG
Country	Austria	Austria
Covered bond name	Hypothekendarbrief Austrian mortgage-covered bonds issued under the Pfandbriefgesetz	Hypothekendarbrief Austrian mortgage-covered bonds issued under the Pfandbriefgesetz
Covered bond legal framework	Austrian legal covered bond framework	Austrian legal covered bond framework
Cover pool type	Residential mortgages	Residential mortgages
Composition	Residential = 100%	Residential = 100%
Issuer rating	not disclosed	not disclosed
Covered bond rating	AA+/Stable	AAA/Stable
Covered bond maturity type	Hard bullet	Hard bullet
Cover pool currency	EUR (100%)	EUR (100%)
Covered bond currency	EUR (100%)	EUR (100%)
Fundamental support (notches)	4	4
Max. achievable covered bond uplift (notches)	7	7
Potential covered bond rating buffer	0	0
Cover pool/ eligible assets (EUR m)	304.07 / 254.12	490.60 / 410.09
Covered bonds (EUR m)	2	132
Substitute assets (EUR m)	0.15	10.15
Current overcollateralisation (OC) / legal minimum OC	>15,000% / 2.0%	271.66% / 2.0%
OC to support current uplift	7.50%	21.00%
OC to support rating upon one-notch issuer downgrade	7.75%	n/a <sup>2</sup>
WA seasoning	1.19 years	2.12 years
Duration / WA maturity of assets	12.43 / 14.49	12.44 / 14.58
Duration / WA maturity of liabilities	6.93 / 7.92	14.29 / 16.43
Duration gap / WA maturity gap	NM	-1.85 / -1.85
Number of exposures	2,672	4,076
Average loan size (in EUR '000s)	113.74	117.87
Top-10 exposures	1.82%	1.20%
Top-20 exposures	3.03%	2.01%
Interest rate type – assets (fixed / floating / fixed over a term)	2.72% / 24.97% / 72.30%	2.77% / 23.61% / 73.62%
Interest rate type – liabilities (fixed / floating)	100% / 0%	100% / 0%
WA LTV (whole loan LTV / eligible LTV)	71.04% / 53.38%	70.30% / 52.86%
Geographic split (top 3)	Lower Austria (23.4%) Upper Austria (14.4%) Styria (14.2%)	Lower Austria (23.7%) Upper Austria (14.5%) Styria (13.8%)
Default measure	Inverse Gaussian	Inverse Gaussian
WA default rate	9.72%	10.70%
WA coefficient of variation	60.00%	60.00%
WA recovery assumption (D0 / D7) <sup>1</sup>	96.1% / 57.66%	79.5% / 58.5%
Current share of loans > 6 months in arrears	0.00%	0.00%
Interest rate stresses (max./min.; CCY dependent)	-1 to 10%	-1 to 10%
FX stresses (max./min.; CCY dependent)	N/A	N/A
D7 <sup>1</sup> liquidity premium	150 bps	150 bps
Servicing fee (mortgage)	25 bps	25 bps

<sup>1</sup>D0 or D7 denote the stresses commensurate with the rating distance between the issuer rating and the covered bond ratings.

<sup>2</sup>Upon a downgrade the AAA rating could not be achieved. Accordingly this sensitivity is not meaningful for covered bonds issued by Wüstenrot



## Bausparkasse Wüstenrot AG

Austrian Mortgage-Covered Bonds – Performance Update

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