

# Creditreform Covered Bond Rating

Erste Group Bank AG  
Mortgage Covered Bond Program

**Creditreform Rating**

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| Rating Object  | Rating Information   |                                       |
|--|--|---------------------------------------|
| <b>Erste Group Bank AG, Mortgage Covered Bond Program</b><br><br>Type of Issuance : Mortgage Covered Bond under Austrian law<br>Issuer : Erste Group Bank<br><br>LT Issuer Rating: A- (Erste Group Bank)<br>ST Issuer Rating: L2<br>Outlook Issuer: Stable | Rating / Outlook :<br><b>AAA / Stable</b>  | Type:<br>Initial Rating (unsolicited) |
|  | Rating Date : 11.01.2019<br>Monitoring until : Withdrawal of the rating<br><br>Rating Methodology : CRA „Covered Bond Ratings” |                                       |

| Program Overview       |                      |   |                                 |
|------------------------|----------------------|---|---------------------------------|
| Nominal value          | EUR 11.215 m.        | WAL maturity covered bonds                | 5,93 (Years)                    |
| Cover pool value       | EUR 14.077 m.        | WAL maturity cover pool                   | 8,95 (Years)                    |
| Cover pool asset class | Mortgages            | Overcollateralization (nominal/committed) | 25,52%/ 2,00%                   |
| Repayment method       | Hard Bullet          | Min. overcollateralization                | 2%                              |
| Legal framework        | Hypothekbankengesetz | Covered bonds coupon type                 | Fix (77,93%), Floating (22,07%) |

Cut-off date Cover Pool information: 30.09.2018.

## Summary

|   |    |
|---|----|
| <b>Content</b>                              |    |
| <b>Summary</b> .....                        | 1  |
| <b>Issuer Risk</b> .....                    | 2  |
| <b>Structural Risk</b> .....                | 2  |
| <b>Liquidity- and Refinancing Risk</b> .... | 5  |
| <b>Credit and Portfolio Risk</b> .....      | 7  |
| <b>Cash-Flow Analysis</b> .....             | 10 |
| <b>Counterparty Risk</b> .....              | 11 |
| <b>Appendix</b> .....                       | 13 |

This rating report covers our analysis of the mortgages covered bond program issued under Austrian law by the Erste Group Bank AG („Erste Group Bank “). The total covered bond issuance at the cut-off date (30.09.2018) had a nominal value of EUR 11.215,03 m, backed by a cover pool with a current value of EUR 14.077,25 m. This corresponds to a nominal overcollateralization of 25,52%. The cover assets mainly include Austrian mortgages obligations in Austria.

Taking into consideration the issuer rating, our analysis of the regulatory framework, liquidity- and refinancing risks, as well as our cover pool assessment and results of the cash flow analysis, Creditreform Rating AG (“Creditreform Rating” or “CRA”) has assigned the covered bond program an AAA rating. The AAA rating represents the highest level of credit quality and the lowest investment risk.

## Key Rating Findings

|   |   |   |
|---|---|---|
| Analysts<br><br>Edsson Rodriguez<br>Lead Analyst<br>e.rodiguez@creditreform-rating.de<br>+49 2131 109 1203<br><br>AFM Kamruzzaman<br>Analyst<br>a.kamruzzaman@creditreform-rating.de<br>+49 2131 109 1948<br><br>Neuss, Germany | + | Covered Bonds are subject to strict legal requirements (HypoBG)   |
|   | + | Covered bonds are backed by the appropriate cover asset class   |
|   | + | Covered bond holders have recourse to the issuer  |
|   | - | In comparison to the peer-group, higher RWA resulted in below average regulatory capital for the issuer |

Table1: Overview results

| Risk Factor                           | Result                       |
|---------------------------------------|------------------------------|
| Issuer rating                         | A- (rating as of 24.08.2018) |
| + Legal and regulatory framework      | +4 Notches                   |
| + Liquidity and refinancing risk      | +1 Notch                     |
| = Rating after 1 <sup>st</sup> uplift | AA+                          |
| Cover pool & cash flow analysis       | AAA                          |
| + 2 <sup>nd</sup> rating uplift       | +1                           |
| = Rating covered bond program         | <b>AAA</b>                   |

## Issuer Risk

### Issuer

Erste Group Bank AG (hereinafter: Erste Group) was founded in 1819 when wealthy citizens of Vienna donated a fund to found a savings bank. The Austrian savings bank group consists of 48 institutes: 46 savings banks in the federal states as well as Erste Bank Austria and Zweite Sparkasse. Erste Group Bank AG acts as the holding company and central institution of the savings banks in Austria. Erste Bank and Sparkassen are represented nationwide in Austria and are subject to a de facto regional principle, whose areas are determined by a joint liability agreement.

All savings banks in Austria are members of a group of credit institutions whose parent institution is Erste Group Bank AG. As a result, all institutions are part of an "institutional guarantee system" in accordance with CRR and thus part of the IFRS scope of consolidation of Erste Group Bank AG. The consolidation takes place on the basis of the joint liability agreement, although Erste Group Bank AG holds no or only a minority share. Erste Bank Österreich and its subsidiaries include only those savings banks that are wholly or majority owned by the Erste Group. The Savings Banks segment comprises those savings banks that are members of the joint liability agreement of the Austrian savings banks sector and in which Erste Group does not hold a majority interest but exercises control under IFRS. Erste Group Bank AG is the holding company and central institution responsible for the strategic business alignment of all subsidiary banks in Austria and abroad. In the following section, the name of Erste Group Bank AG always refers to the consolidated group, not to the holding company. The banking business of Erste Group Bank AG focuses on Austria and the eastern part of the European Union, in particular the neighboring countries. Erste Group is a diversified bank with the aim of being the leading bank for private and corporate clients. In seven core markets, the bank manages 16 million customers, of which 4.7 million in the Czech Republic and 3.5 million in Austria.

In 2017 Erste Group was able to take up to the successful financial year 2016, the net profit increased again. Despite the low interest environment in Europe, Erste Group assets oneself with very robust credit and deposit growth. At the same time, the cost and income structure continued to develop negatively. Notwithstanding a very good result, due among other things to the still very low risk costs, the ratios of regulatory capital could not improve. The subsidiaries and participations in Southern and Eastern Europe continue to provide additional earnings and growth potential.

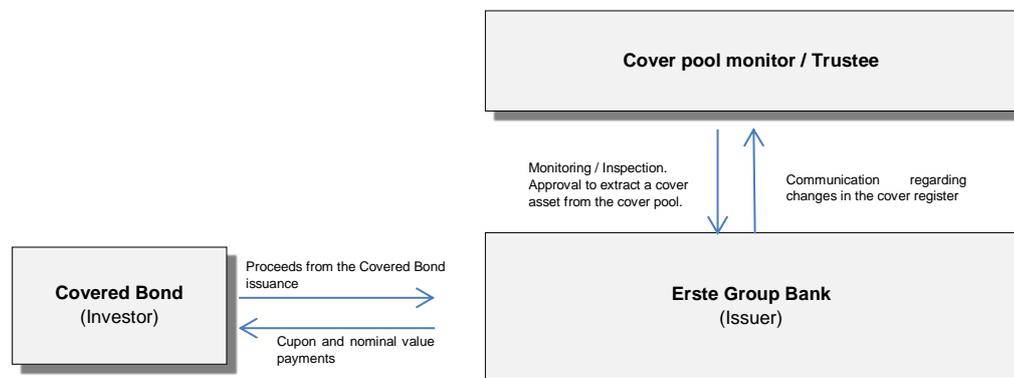
## Structural Risk

### Transaction structure

Table 2: Overview of all transaction's parties | Source: CRA

| Role                         | Name   |
|------------------------------|--|
| Issuer                       | Erste Group Bank, Austria                                      |
| Cover pool monitor / Trustee | Appointed by the Federal Minister for Finance                  |
| Cover pool administrator     | Appointed by the bankruptcy court in case of issuer insolvency |

Figure1: Overview of Covered Bond emission | Source: CRA



## Legal and Regulatory Framework

The legal basis for covered bond issuances in Austria is provided by Pfandbrief Law (Pfandbriefgesetz, „PfandBG“), the Mortgage Banking Act (Hypothekendarlehenbankgesetz, „HypoBG“) and the Covered Bond Act (Gesetz über Fundierte Bankschuldverschreibungen, „CBA“). While issuers must fulfill special requirements for issues under the PfandBG and HypoBG, covered bonds may be issued by any licensed lending institution in accordance with the CBA framework. The three national regulatory frameworks do not require program approval by the FMA, nor do they define specific obligations and powers with regard to ongoing oversight or in the event of a default by the issuer. As a result, they do not meet the recommendations of the European Banking Authority („EBA Best Practices“) and are considered to be only partially aligned. A harmonization of the legal frameworks was planned for 2018, but has not taken place. The Draft law has been announced to come out in 2019<sup>1</sup>.

All three frameworks meet the criteria of Article 129 of the EU Capital Requirements Directive (CRD IV package) and the criteria of Article 52 (4) of the UCITS Directive. Thus, banks can use low risk weights and the requirements for repo transactions with the national central bank are met.

With regard to the implementation of the EU BRRD Directive which provides resolution authorities with various resolution tools, Austria has transposed the Directive into national law by adopting the Law on the Recovery and Resolution of Banks (Gesetz über die Sanierung und Abwicklung von Banken, „BaSaG“) in January 2015. This framework guarantees that covered bonds will not be used as bail-in capital in the event of an issuer's insolvency. Not only did Austria transpose this directive very early, but it is also one of the few countries that has already applied the law in practice. While the bail-in instrument was applied to senior unsecured liabilities of the former Hypo Alpe Adria Bank AG, issued covered bonds were excluded from bail-in under a moratorium bank institution (Heta Asset Resolution AG).

## Bankruptcy Remoteness and Asset Segregation

Cover assets remain on the consolidated balance sheet of the issuer and are not transferred to an independent legal representative ("in-balance" transaction). They must be registered with and entered into the cover register. In the event of an issuer default, the cover assets and any existing overcollateralization combined will be identified and separated from the remaining assets of the

<sup>1</sup> <https://www.wko.at/branchen/bank-versicherung/pfandbriefpaket.html>

issuer. This segregation of cover assets fully complies with EBA Best Practices for structuring and harmonizing national covered bond legislation.

In the event of a default of the issuer, the registered cover assets are marked as non-insolvent part of the issuer estate and isolated from the bankruptcy estate; they form the insolvency-remote assets of the issuer and will not be affected by insolvency proceedings. If the cover pool is insufficient to fully service the claims of the covered bond creditors, the bond holders have recourse to the bank's aggregate bankruptcy estate in a *pari passu* relationship with other unsecured bond creditors. If the cover assets are not required in full to meet interest and principal payments, they are transferred to the issuer's bankruptcy estate.

There is no automatic sale or acceleration of repayment in the event of default. Austria continues to maintain the issuance of hard bullet covered bonds which only accelerate if the cover assets are insufficient to meet the requirements of and obligations towards covered bond holders. Nevertheless, Austrian Anadi Bank has also established a conditional pass-through structure which is used for repo transactions. With regard to insolvency, Austrian legislation fully complies with EBA Best Practice and provides structural features that ensure a separation of covered bond assets from the issuer's insolvency and a preferential treatment of covered bond holders in terms of cover assets.

## Trustee

The assets in the cover pool are monitored by a trustee or, in the case of the CBA, the so-called "Regierungskommissär". The trustee is appointed by the Minister of Finance and must ensure that the cover assets are available at all times and that they are duly recorded in the cover register. The trustee is liable under the Austrian Civil Code and must consent to the deletion of assets from the cover pool. In the event of a dispute between the trustee and the issuer, the FMA must intervene in a conflict-resolving manner. In addition, if the rights of a covered bond holder are infringed, a so-called "Kurator", who is a joint special representative, must be appointed by the court.

## Special Administrator

If an issuer defaults, the cover assets are managed by a special administrator selected by the bankruptcy court and the FMA authority. The special administrator can sell assets or take out loans to increase liquidity and manages the covered bond program. The administrator is required to find a credit institution to which the covered bonds can be transferred together with their cover assets. If such disposition does not occur, the administrator must ensure the management of the assets in the cover pool and the servicing of the outstanding covered bonds until the final payment. In addition, the trustee must dispose of the cover assets in accordance with the contractual maturities and may influence the level of overcollateralization which enters into the general insolvency estate of the issuer once not required.

## Eligibility Criteria

Eligible cover assets are mainly loans secured by senior mortgages ("Hypothekendarlehen") and public sector debt ("Öffentliche Pfandbriefe"). According to the HypoBG and the PfandBG, the separation between mortgage and public covered bonds is obligatory. On the other hand, according to the CBA framework, a mixture of public loans, mortgages and certain local bonds or Austrian covered bonds which are regarded as safe ("mündelssicher") securities can take place in a single cover pool. Although there are no regulatory restrictions on the formation of the cover pool, issuers may establish separate reserve funds for public sector covered bonds and for other covered bonds. Typically, issuers provide discrete cover pools of mortgage and public assets, each covering a single class of covered bonds.

The geographical scope of eligible mortgage loans and public assets is limited to the EU / EEA countries and Switzerland, while assets from the US, Canada and Japan are not permitted.

Under the regulatory frameworks, derivatives are only permitted if they are used to hedge risks. The amount of derivatives in the cover pool is not limited. The early termination of derivative contracts in the cover pool in the event of a bankruptcy of the issuer is not permitted under supervisory law, which corresponds to the proposals of the EBA Best Practices.

Substitute assets such as cash, bank balances and bonds issued by public issuers from EEA countries and Switzerland may be included in the cover pool but may not exceed the limit of 15% of the outstanding covered bonds. Asset Backed Securities and Mortgage Backed Securities may not be part of the cover pool. These regulations are fully in line with EBA Best Practices.

Covered bonds issued under the HypoBG have a fixed ("hard") LTV limit of 60%, whereas in the case of public sector covered bonds and covered bonds issued under CBA there are no LTV limits.

Municipal cover pools consist mainly of credit claims or bonds issued by Austrian public law bodies or other member states of the European Economic Area or Switzerland or their regional governments or local authorities (for which the competent authorities under Art. 43 (1) (b) (5) of Directive 2000 / 12 / EC have set a weighting of not more than 20% or against the assumption of the guarantee by one of the aforementioned bodies) issued or guaranteed.

### Systemic Relevance and External Support

According to the ECBC<sup>2</sup>, the total amount of covered bonds outstanding has remained stable at around EUR 43bn to EUR 48bn over the past five years. In 2017, total outstanding covered bonds amounted to EUR 49,5bn, with EUR 31,9bn secured by mortgages and EUR 17,6bn by public sector loans. Over the years, there has been a shift from public sector to more mortgage-backed securities. However, mortgage covered bond issuance fell drastically from 7bn in 2016 to 3bn in 2017. Public sector covered bond issuance increased from 2,3bn to 3bn at the same period.

With a market share of approx. 44% outstanding covered bonds in the mortgage covered bond segment as of 2017, Erste Group Bank is considered a major covered bonds issuer in Austria. Likewise, the positioning of Erste Group Bank in the Austrian banking sector is also classified as systemically important.

### Summary Structural Risk

In general, HypoBG provides clear rules on public supervision, insolvency and segregation of cover assets, the priority of creditors' claims in the event of insolvency, the relevant eligibility criteria for cover pool assets, and the rules for its fiduciary management, which provide adequate structural support for the covered bond programs in Austria.

We considered the structural framework in Austria under the legal framework (HypoBG) as positive. Furthermore, we contemplate the importance of the Erste Group Bank in the Austrian covered bond market in our analysis. Due to those reasons we have set a rating uplift of four (+4) notches

## Liquidity- and Refinancing Risk

### Minimum Overcollateralization

According to HypoBG and PfandBG, issuers must maintain a minimum level of overcollateralization (OC) of 2% of the nominal value of the outstanding covered bonds in the form of liquid funds. According to CBA, on the other hand, there is no obligation to provide a certain level of overcollateralization. The supervisory authorities, however, are aiming for the introduction of a general minimum OC level. In order to ensure an internationally comparable standard, issuers may maintain OC on a present value basis and, in order to comply with rating requirements and stress tests, may also provide higher OC level at their discretion.

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<sup>2</sup> EMF-ECBC (2018), ECBC: European Covered Bond Fact Book 2018, EMF-ECBC

## Short-term Liquidity Coverage

All three legal frameworks invoke the “natural” matching principle whereby the total amount of assets in the cover pool must be at least equal to the total nominal amount of outstanding covered bonds, including interest on the outstanding covered bonds and any operational costs in the event of default issuers. In addition, a matching formula restricts the issuance of covered bonds with a significantly longer maturity than the term of the cover pool assets.

However, under the current legal frameworks, issuers are not required to hold a time-based liquidity buffer to cover outflows from liabilities (interest and principal) or derivative transactions over a certain future period of time.

## Stress Tests

Issuers may conduct voluntary stress tests to monitor the cover pool for interest rate-, currency- and other risks; however, there are no regulatory obligations that require issuers to perform specific stress tests on their covered bond programs. This also applies to the review of LTV ratios and valuations in the case of mortgage backed mortgages, for which there is no regulation in terms of type and frequency of review. This is in marked departure from EBA Best Practices and has been considered in the CRA legal and regulatory framework assessment.

## Asset-Liability Mismatch

An asset-liability mismatch (“ALM”) arises in the case of different maturities between cover assets and covered bonds. Current legislation in Austria uses natural matching as the essential approach to reduce ALM risks. On the other hand, there is no statutory requirement for liquidity reserves as a further protective mechanism to ensure the servicing of pending capital and interest payments.

### *Repayment Method*

The present covered bond program issues covered bonds with hard bullet maturity, i.e. repayment at the legal final maturity without extension optionality at the end of the term. Maturity mismatches between cover assets and liabilities arising from maturing covered bonds thus cannot be mitigated by an extension of the legal final maturity. This feature of the covered bond program has been considered qualitatively and within our cash flow analysis.

### *Refinancing costs*

In the event of a bankruptcy of the issuer, the legal frameworks provide that the special administrator may sell assets of the cover pool or use them as a guarantee for liquidity operations when liquidity shortfalls are foreseeable.

CRA's analysis assumes that refinancing gaps due to ALM will be closed by a sale of assets from the cover pool. In doing so, we take into account related costs in the form of a discount to the nominal value. The quantification of this discount takes place following an analysis of relevant market data and enters into the cash flow analysis.

## Other liquidity risks

Derivatives can be an additional measure to hedge interest rate and currency risks. However, the legal framework does not provide for regular stress tests to be conducted on interest rate- and foreign exchange risks.

## Summary Liquidity- and Refinancing Risks

In comparison to other jurisdictions, the regulatory requirements for liquidity and risk management are relatively weak and barely in line with the requirements of EBA Best Practices. Overall, sufficient structural safeguards are not established due to the absence of compulsory liquidity buffers and no obligation to conduct stress tests for interest rate and currency risks, and the minimum coverage tests (for example, the revaluation of LTV ratios). These also applies for HypoBG, in particular the absence of a prescribed minimum coverage. In addition, Refinancing risks, cannot be structurally reduced due to the hard bullet repayment structure, which can only be cushioned by

sufficiently high overcollateralization, short-term cash availability, or other liquid funds to bridge the asset-liability mismatches in the portfolio.

Nevertheless, we assess the overall legal provisions on liquidity management for covered bonds programs under the HypoBG and set a rating uplift of only one (+1) notch.

## Credit and Portfolio Risk

### Cover pool analysis

The analysis of the cover pool is based on public information which has been made available by the Issuer, in particular the Austrian Transparency Template („ATT“) as per regulatory requirements. This information was sufficient according to CRA’s rating methodology “Covered Bond Ratings”.

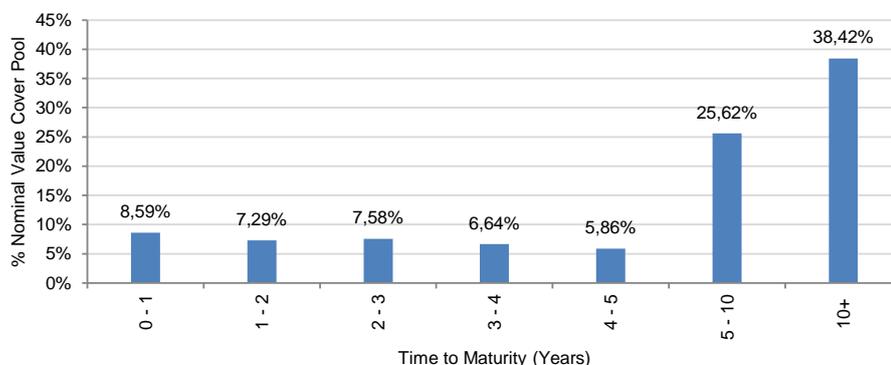
At the cut-off-date 30.09.2018, the pool of cover assets consisted of 88.897,00 debt receivables, of which 97,57% are domiciled in Austria. The total cover pool volume amounted to EUR 14.077,25 m in residential (64,12%), commercial (35,88%) and others (0,00%). The ten largest debtors of the portfolio total to 3,66%. Table 3 displays additional characteristics of the cover pool:

Table 3: Cover pool characteristics | Source: Erste Group Bank

| Characteristics                   | Value         |
|-----------------------------------|---------------|
| Cover assets                      | EUR 14.077 m. |
| Covered bonds outstanding         | EUR 11.215 m. |
| Substitute assets                 | EUR 65,00 m.  |
| Cover pool composition            |               |
| <i>Mortgages</i>                  | 98,37%        |
| <i>Substitute assets</i>          | 0,46%         |
| <i>Other / Derivative</i>         | 1,17%         |
| Number of debtors                 | NA            |
| Mortgages Composition             |               |
| <i>Residential</i>                | 64,12%        |
| <i>Commercial</i>                 | 35,88%        |
| <i>Other</i>                      | 0,00%         |
| Average asset value (Residential) | EUR 116 k.    |
| Average asset value (Commercial)  | EUR 401 k.    |
| Non-performing loans              | 0,0%          |
| 10 biggest debtors                | 3,66%         |
| WA seasoning                      | NA            |
| WA maturity cover pool (WAL)      | 8,95 Years    |
| WA maturity covered bonds (WAL)   | 5,93 Years    |

We have listed an extended view of the composition of the cover pool in the appendix section “Cover pool details”, with, for example, a detailed regional distribution. The following chart displays the maturity profile of the cover assets at the cut-off date 30.09.2018 (see figure 2):

Figure 2: Distribution by remaining time to maturity | Source: Erste Group Bank



## Maturity profile

The following charts present the cash flow profile of the Issuer (see figure 3 and figure 4):

Figure 3: Cover asset congruence | Source: Erste Group Bank

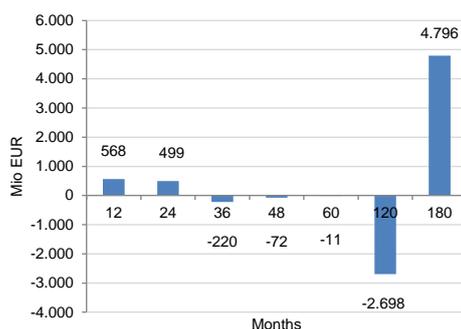
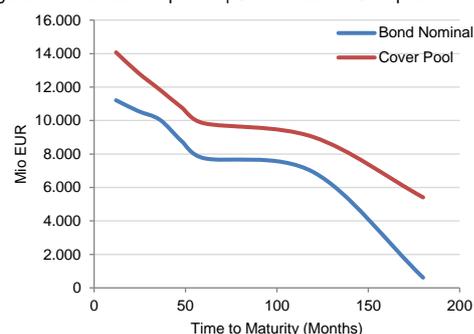


Figure 4: Amortization profile | Source: Erste Group Bank



During its cash flow modelling, CRA has taken into consideration the maturity structure of cover assets and liabilities. This structure was an integral part of the cash flow analysis.

## Interest rate and currency risk

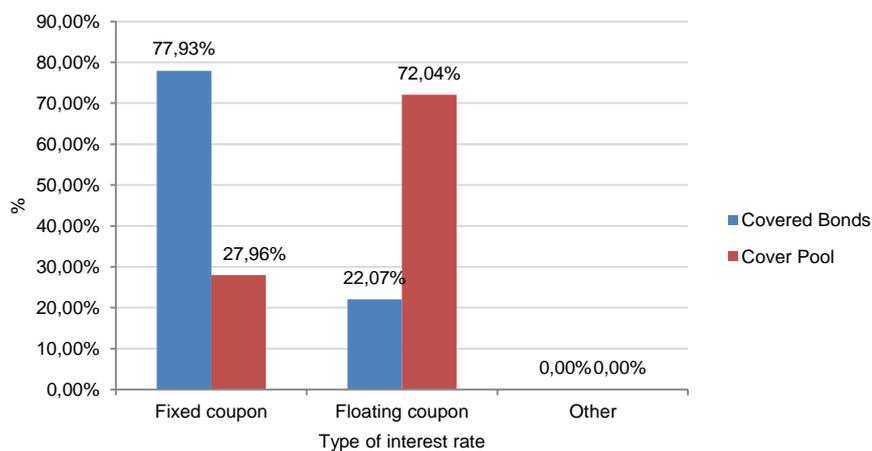
This covered bond program does not use derivatives to hedge interest rate- and currency risk. However, the legal framework provides for weekly stress tests to be conducted on interest rate- and currency risks to maintain the mandatory OC. Therefore, interest rate risk could be mitigated by the 2% OC requirement. Currency risk, on the other hand, is also limited for this program as 92,74% of the cover pool assets and 98,42% of the cover bonds are denominated in euro. Nevertheless, we have applied interest rate and foreign exchange stresses on the cash flows for each rating level according to our methodology. The overall rating impact of interest rate and currency mismatches was negligible for this program, which has been presented in our 'Overcollateralization Break-Even Analysis' segment.

Table 4: Program distribution by currency | Source: Erste Group Bank

| Currency            | Volume    | Share (%) |
|---------------------|-----------|-----------|
| <i>Cover Pool</i>   |           |           |
| EUR                 | 13.055 m. | 92,74%    |
| CHF                 | 1.022 m.  | 7,26%     |
| <i>Covered Bond</i> |           |           |
| EUR                 | 11.038 m. | 98,42%    |
| CHF                 | 177 m.    | 1,58%     |

Figure 5 shows the types of interest rate used in this program

Figure 5: Type of interest rate | Source: Erste Group Bank



## Credit Risk

The credit risk assessment for Mortgage Covered Bond have been determined in accordance with CRA rating methodology for Covered Bonds by means of historical data and particular parameters from the Covered Bonds.

Due to the high granularity of mortgage pools we have characterized these portfolios as big enough and with a homogeneous composition i.e. ("Large Homogeneous Portfolio", LHP). Furthermore under that premise we have assumed that it is possible to derive a loss distribution. CRA has used the historical issuer's NPL ratio to derivate a conservative default rate proxy for the approximation through the LHP distribution. For the Erste Group Bank it has been assumed an expected default rate of 3,06% for the LHP. Furthermore CRA has considered a 15,00% correlation to define the LHP distribution. Table 5 disclosed the expected default rate for each relevant rating level.

In order to derive recovery and loss-severity base case assumption CRA has used historical data from mortgage price indexes. To determine loan-level recovery assumptions the resulting stressed recoveries assumptions were compared with the portfolio's existing loan-to-value ratios (LTVs).

Based on the default rates and taking into account the recovery assumptions, the following loss assumptions were determined for the current cover pool (see Table 5)

Table 5: Cover Pool Base case assumptions | Source: CRA

| Rating     | Default Rate (%) | Recoveries (%) | Expected Loss (%) |
|------------|------------------|----------------|-------------------|
| <b>AAA</b> | <b>55,53%</b>    | <b>80,04%</b>  | <b>11,09%</b>     |
| AA+        | 52,68%           | 81,22%         | 9,89%             |
| AA         | 47,41%           | 83,04%         | 8,04%             |
| AA-        | 43,04%           | 84,47%         | 6,69%             |
| A+         | 41,18%           | 85,08%         | 6,14%             |
| A          | 41,16%           | 85,09%         | 6,14%             |
| A-         | 40,02%           | 85,47%         | 5,82%             |

## Cash-Flow Analysis

### Model Assumptions

Based on public information and using the base case loss assumptions, we implement a scenario-based cash flow model. This model aims to test the ability of the structure to service all covered bonds according to their payment profile in diverse stress scenarios. The CRA cash flow analysis assumes that the Issuer has defaulted, i.e. all obligations will be met using cash flows from the cover pool assets only. We also assume that no additional assets will be added to the cover pool during the wind-down phase.

#### *Asset-Sale Discount*

In our model, short-term liquidity needs and liquidity needs due to asset-liability mismatches will be met with a sale of cover assets available for monetization. Based on secondary market data, CRA assumes a rating-level haircut on the asset value („Asset-Sale Discount“) which represents additional costs of disposal and market risks during the sale of cover assets. (see Table 6).

#### *Yield Spread*

Since cover assets often have a positive yield spread against the covered bonds issued, CRA uses available public information (i.e. issuers' annual accounts) to size this assumed spread („Yield Spread“) (see table 6):

Table 6: Cash-Flow Model assumptions | Source: CRA

| Rating level | Asset-Sale Discount | Yield Spread |
|--------------|---------------------|--------------|
| <b>AAA</b>   | <b>69,06%</b>       | <b>1,74%</b> |
| AA+          | 63,51%              | 1,77%        |
| AA           | 59,93%              | 1,79%        |
| AA-          | 56,52%              | 1,81%        |
| A+           | 53,90%              | 1,83%        |
| A            | 51,75%              | 1,84%        |
| A-           | 48,95%              | 1,86%        |

### Rating Scenarios

Scenarios that have been tested in our cash flow model rely on the variation of several central input parameters, such as:

- Portfolio composition (diversification, concentration, granularity)
- Probability of default of cover assets
- Correlations of cover assets and systematic risk factors
- Recoveries
- Maturity profile of covered bonds and cover assets (ALM)

Within an **AAA** rating scenario, the cash flow model showed that obligations can be paid fully and in a timely manner. In total, the cash flow analysis revealed that the portfolio, given all information available as of 30.09.2018, could be sufficient to repay bond nominal capital notwithstanding the occurrence of any extraordinary events. On this basis, the rating of the cover pool within our covered bond program rating has been set at AAA.

### Overcollateralization Break-Even Analysis

CRA also performed a break-even OC analysis. Such OC levels should bear the corresponding losses for a given rating scenario. Main drivers of the analysis are:

- ALM
- Loss level

# Creditreform Covered Bond Rating

Erste Group Bank AG

Mortgage Covered Bond Program

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- Interest rate spreads
- Foreign currency mismatches
- Recoveries.

Performing the break-even OC analysis, we took rating-level specific stressed outcomes into account. Based on these analyses, the maximum OC required for each relevant rating level during the whole period has been presented in table 7.

Table 7: Breakeven Analysis | Source: CRA

| Rating Level | Breakeven OC  |
|--------------|---------------|
| AAA          | <b>15,26%</b> |
| AA+          | 12,89%        |
| AA           | 10,11%        |
| AA-          | 7,98%         |
| A+           | 6,90%         |
| A            | 6,49%         |
| A-           | 5,62%         |

## Sensitivity Analysis

CRA also evaluates the sensitivity of the structure and program with respect to important input parameters. In particular, the following factors have been varied:

- Credit quality of cover assets
- Recoveries

The following table presents the rating impact of a decline in recoveries and an increase in the credit risk of single debtors. Starting from the best-case, which is represented by our base case assumptions, the analysis reveals the sensitivity of the rating with respect to recovery rates and credit risk. The worst-case scenario, in which we reduce recoveries by 50% and increase credit risk by 50%, the impact can be seen by a change in the implied rating by a change in the implied rating to BB (see Table 8):

Table 8: Covered Bond Program Sensitivity: Credit Quality und Recovery Rates | Source: CRA

| Defaults \ Recovery | Base Case  | -25% | -50% |
|---------------------|------------|------|------|
| Base Case           | <b>AAA</b> | AA   | BBB+ |
| +25%                | AAA        | AA-  | BB+  |
| +50%                | AAA        | A-   | BB   |

## Summary Cash-Flow Analysis

Based on public information and using the base case loss assumptions, the analysis showed that obligations can be paid in full and in a timely manner. Overall, the cash flow analysis revealed that the portfolio, given the used information, may ensure the repayment of bonds' nominal capital notwithstanding the occurrence of the presented stressed scenarios. Therefore, the rating of the cover pool within our covered bond program rating has been set at AAA. Consequently, the secondary rating uplift was set at one (+1) notch.

## Counterparty Risk

### Transaction parties

Table 9: Participant counterparties | Source: Erste Group Bank

| Role         | Name                                | Legal Entity Identifier             | CRA Assessment |
|--------------|-------------------------------------|-------------------------------------|----------------|
| Issuer       | Erste Group Bank                    | PQOH26KWDF7CG10L6792                | A- (LT Rating) |
| Servicer     | Not applicable for the jurisdiction | Not applicable for the jurisdiction |                |
| Account Bank | Not applicable for the jurisdiction | Not applicable for the jurisdiction |                |
| Sponsor      | Not applicable for the jurisdiction | Not applicable for the jurisdiction |                |

### Derivatives

No derivatives in use at present.

### Commingling

Incoming cash flows generated from the cover pool will normally be transferred to the Issuer and will be forwarded to the covered bond holders according to the payment terms and conditions. Should the issuer become bankrupt, there is a risk ("commingling risk") that funds may not be returned and commingled with the insolvency estate of the issuer. In order to avoid such risk, the HypoBG stipulates that the cover assets should be isolated from the general bankruptcy estate (insolvency-free assets) and a special cover pool administrator will be appointed to manage the cover pool. Under that mandate the cover pool administrator will have first priority on the up-coming cash flows from the cover pool assets. These cash flows in turn should be used to cover interest and principal payments of the covered bond holders in event of the Issuer's insolvency.

# Creditreform Covered Bond Rating

Erste Group Bank AG

Mortgage Covered Bond Program

**Creditreform Rating**

[www.creditreform-rating.de](http://www.creditreform-rating.de)

## Appendix

### Rating History

| Event            | Initial Rating |
|------------------|----------------|
| Result           | AAA            |
| Rating Date      | 11.01.2019     |
| Publication Date | 18.01.2019     |

### Details Cover Pool

Table 10: Characteristics of Cover Pool | Source: Erste Group Bank

| Characteristics                                     | Value           |
|---|-----------------|
| Cover Pool Volume                                   | 14.077 Mio. EUR |
| Covered Bond Outstanding                            | 11.215 Mio. EUR |
| Substitute Assets                                   | 65 Mio. EUR     |
| <i>Share Derivatives</i>                            | 0,00%           |
| <i>Share Other</i>                                  | 100,00%         |
| Substitute Assets breakdown by asset type           |                 |
| <i>Cash</i>   | 71,74%          |
| <i>Guaranteed by Supranational/Sovereign agency</i> | 28,26%          |
| <i>Central bank</i>                                 | 0,00%           |
| <i>Credit institutions</i>                          | 0,00%           |
| <i>Other</i>  | 0,00%           |
| Substitute Assets breakdown by country              |                 |
| <i>Issuer country</i>                               | 28,26%          |
| <i>Eurozone</i>                                     | 71,74%          |
| <i>Rest European Union</i>                          | 0,00%           |
| <i>European Economic Area</i>                       | 0,00%           |
| <i>Switzerland</i>                                  | 0,00%           |
| <i>Australia</i>                                    | 0,00%           |
| <i>Brazil</i>                                       | 0,00%           |
| <i>Canada</i>                                       | 0,00%           |
| <i>Japan</i>  | 0,00%           |
| <i>Korea</i>  | 0,00%           |
| <i>New Zealand</i>                                  | 0,00%           |
| <i>Singapore</i>                                    | 0,00%           |
| <i>US</i>   | 0,00%           |
| <i>Other</i>  | 0,00%           |
| Cover Pools' Composition                            |                 |
| <i>Mortgages</i>                                    | 98,37%          |
| <i>Total Substitution Assets</i>                    | 0,46%           |
| <i>Other / Derivatives</i>                          | 1,17%           |
| Number of Debtors                                   | NA              |

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|                                   |              |
|-----------------------------------|--------------|
| Distribution by property use      |              |
| <i>Residential</i>                | 64,12%       |
| <i>Commercial</i>                 | 35,88%       |
| <i>Other</i>                      | 0,00%        |
| Distribution by Residential type  |              |
| <i>Occupied (main home)</i>       | 0,00%        |
| <i>Second home</i>                | 0,00%        |
| <i>Non-owner occupied</i>         | 0,00%        |
| <i>Agricultural</i>               | 0,00%        |
| <i>Multi family</i>               | 0,00%        |
| <i>Other</i>                      | 100,00%      |
| Distribution by Commercial type   |              |
| <i>Retail</i>                     | 27,35%       |
| <i>Office</i>                     | 6,37%        |
| <i>Hotel</i>                      | 10,03%       |
| <i>Shopping center</i>            | 0,00%        |
| <i>Industry</i>                   | 3,35%        |
| <i>Land</i>                       | 4,56%        |
| <i>Other</i>                      | 48,34%       |
| Average asset value (Residential) | EUR 116,04 k |
| Average asset value (Commercial)  | EUR 401,19 k |
| Share Non-Performing Loans        | 0,00%        |
| Share of 10 biggest debtors       | 3,66%        |
| WA Maturity (months)              | NA           |
| WAL (months)                      | 107,36       |
| Distribution by Country (%)       |              |
| <i>Austria</i>                    | 97,57        |
| <i>Germany</i>                    | 2,43         |
| Distribution by Region (%)        |              |
| <i>Vienna</i>                     | 31,63        |
| <i>Lower Austria</i>              | 19,06        |
| <i>Upper Austria</i>              | 5,47         |
| <i>Salzburg</i>                   | 8,15         |
| <i>Tyrol</i>                      | 8,34         |
| <i>Styria</i>                     | 14,33        |
| <i>Carinthia</i>                  | 6,99         |
| <i>Burgenland</i>                 | 2,29         |
| <i>Vorarlberg</i>                 | 2,31         |

# Creditreform Covered Bond Rating

Erste Group Bank AG

Mortgage Covered Bond Program

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Figure 6: Arrears Distribution | Source: Erste Group Bank

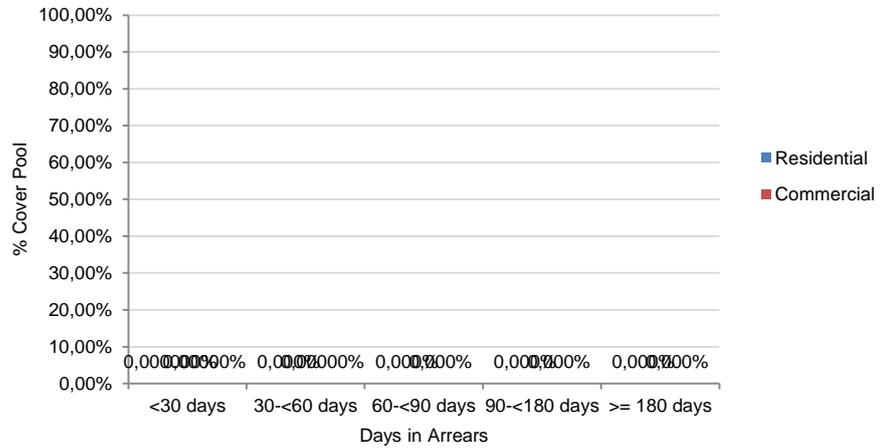


Figure 7: Program currency mismatches | Source: Erste Group Bank

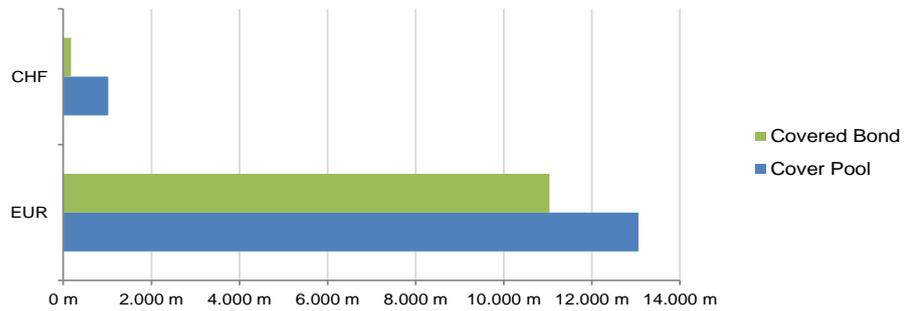


Figure 8: Unindexed LTV breakdown - residential pool | Source: Erste Group Bank

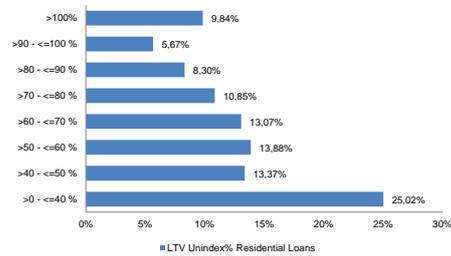
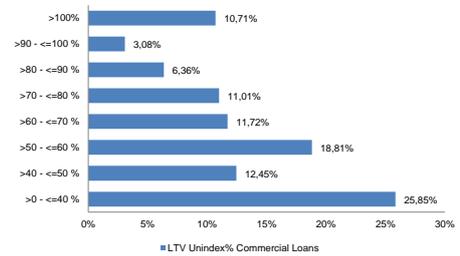


Figure 9: Unindexed LTV breakdown - commercial pool | Source: Erste Group Bank



## Key Source of Information

### Documents (Date: 30.09.2018)

#### Issuer

- Audited consolidated annual reports of the parent company Erste Group Bank AG (Group) 2014-2017
- Final Rating report as of 24.08.2018
- Rating file 2017
- Miscellaneous Investor Relations Information and Press releases
- Peergroup-Data and other data from the S&P Global Market Intelligence Database

#### Covered Bond and Cover Pool

- ATT Reporting from Erste Group Bank (30.09.2018)
- Market data Mortgage Cover Bond Program.

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The rating is based on publicly available information and internal evaluation methods for the rated bank and program. The issuer's quantitative analysis is based mainly on the latest annual accounts, interim reports, other information of the bank pertaining to investor relations, and key figures calculated by S&P Global Market Intelligence subject to a peer group analysis of 33 competing institutes. The cover pool's quantitative analysis for the rated Covered Bond Program was based on the "Austrian Transparency Template" (ATT) published by the Erste Group Bank.

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[www.creditreform-rating.de/en/regulatory-requirements/](http://www.creditreform-rating.de/en/regulatory-requirements/)

This rating was carried out by analysts Edsson Rodriguez und AFM Kamruzzaman both based in Neuss/Germany. On 11.01.2019, the rating was presented to the rating committee by the analysts and adopted in a resolution.

The rating result was communicated to Erste Group Bank, and the preliminary rating report was made available. The Issuer and all relevant parties examined the rating report prior to publication and were given at least one full working day to appeal the rating committee decision and provide additional information. The rating decision was not amended following this examination.

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The meaning of each rating category, the definition of default or recovery, and any appropriate risk warning, including a sensitivity analysis of the relevant key rating assumptions, such as mathematical or correlation assumptions, accompanied by worst-case scenario credit ratings as well as best-case scenario credit ratings, are explained.

The date at which the credit rating was released for distribution for the first time and when it was last updated including any rating outlooks, is indicated clearly and prominently in the "Basic data" card as a "Rating action"; first release is indicated as "initial rating", other updates are indicated as an "update", "upgrade or downgrade", "not rated", "confirmed", "selective default" or "default".

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Erste Group Bank AG

Mortgage Covered Bond Program

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