Creditreform Covered Bond Rating

Coöperatieve Rabobank U.A.
Mortgage Covered Bond Program

Creditreform Rating

Rating Object	Rating Information	
Coöperatieve Rabobank U.A., Mortgage Covered Bond Program	Rating / Outlook : **AAA / Watch Negative**	Type: Initial Rating (unsolicited)
Type of Issuance : Mortgage Covered Bond under Dutch law Issuer: Coöperatieve Rabobank U.A. LT Issuer Rating: A+ (Rabobank) ST Issuer Rating: L2 Outlook Issuer: Watch Negative	Rating Date : 10 August 2020 Rating Renewal until: Withdrawal of the rating Maximum Validity: 01 January 2050 Rating Methodology : CRA „Covered Bond Ratings"	

Program Overview

Bond Nominal value	EUR 11,060 m.	WAL maturity covered bonds	10.63 Years
Cover pool value	EUR 13,360 m.	WAL maturity cover pool	20.45 Years
Cover pool asset class	Mortgages	Overcollateralization (nominal/committed)	20.80%/ 0.00%
Repayment method	Soft Bullet	Min. overcollateralization	5.00%
Legal framework	Dutch covered bonds legislation	Covered bonds coupon type	Fix (100.00%), Floating (0.00%)

Cut-off date Cover Pool information: 30 June 2020.

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Summary

This rating report covers our analysis of the mortgage covered bond program issued under Dutch law by Coöperatieve Rabobank U.A. („Rabobank"). The total covered bond issuance at the cut-off date (30 June 2020) had a nominal value of EUR 11,060.00 m, backed by a cover pool with a current value of EUR 13,360.00 m. This corresponds to a nominal overcollateralization of 20.80%. The cover assets include Dutch mortgages obligations in the Netherlands.

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. However, the rating qualifier has been set at 'watch negative' due to the currently not foreseeable impacts of corona crisis on the issuer rating and the cover pool assessment. The AAA rating represents the highest level of credit quality and the lowest investment risk.

Key Rating Findings

+	Covered Bonds are subject to strict legal requirements, and full recourse of the covered bond holders to the issuer.
+	Current high overcollateralization (OC) of 20.80% as of 30 June 2020
+	Covered bonds are backed by the appropriate cover asset class
+/-	Covid-19 can lead to sustained changes in the cover pool or the issue rating
-	Higher maturity mismatches between covered bonds and cover assets

Table1: Overview results

Risk Factor	Result
Issuer rating	A+ (rating as of 06 November 2019)
+ Legal and regulatory framework	+4 Notches
+ Liquidity and refinancing risk	+1 Notch
= Rating after 1st uplift	AAA
Cover pool & cash flow analysis	BB
+ 2nd rating uplift	+/-0 Notch
= Rating covered bond program	**AAA**

Issuer Risk

Issuer

Our rating of Coöperatieve Rabobank U.A. Mortgage Covered Bond Program is reflected by our issuer rating opinion of its parent company Coöperatieve Rabobank U.A. due to its group structure. The Dutch Cooperative Bank Coöperatieve Rabobank U.A. (Rabobank) has a history that began more than 115 years ago. The Rabobank was founded with the merger of the two head organizations Coöperatieve Centrale Raiffeisen-Bank in Utrecht and the Coöperatieve Centrale Boerenleenbank in Eindhoven in 1972. Today the Rabobank Group is the second largest bank in the Netherlands (status: 2016) as measured by the total assets. As an international financial services provider the bank operates in more than 40 countries in the business lines retail banking, corporate and wholesale banking, private banking, leasing and real estate services. Rabobank is one of the world's leading banks in the food and agricultural sector and funds its lending business mainly via deposits, which are largely sourced through its branch network.

Rabobank increased its net profit continuously since 2016. Especially with consistently reducing its personnel costs, the high level of investments in digitalization and automation will enable further staff reductions. However, the ambitious target of cost income ratio of 53-54% by the end of 2020 will not be reached under current market conditions. As a result of the higher net profit, Rabobank's income ratios are above average in the peer group comparison. ROA and RORWA also benefit from a reduction in the bank securities business and lower total assets. Ongoing restructuring efforts will stabilize the net profit in the next years.

CRA has upgraded the Long-Term issuer rating of Coöperatieve Rabobank U.A. from A to A+ in a Rating Update dated 06 November 2019. Subsequently, the issuer rating was set at A+ with a qualifier of 'watch negative' during a monitoring dated 24 March 2020. Responsible for this decision was the potential high uncertainty for all market actors due to the ongoing corona crisis. For a more detailed overview of the issuer rating, please refer to the issuer rating report published on the webpage of Creditreform Rating AG.

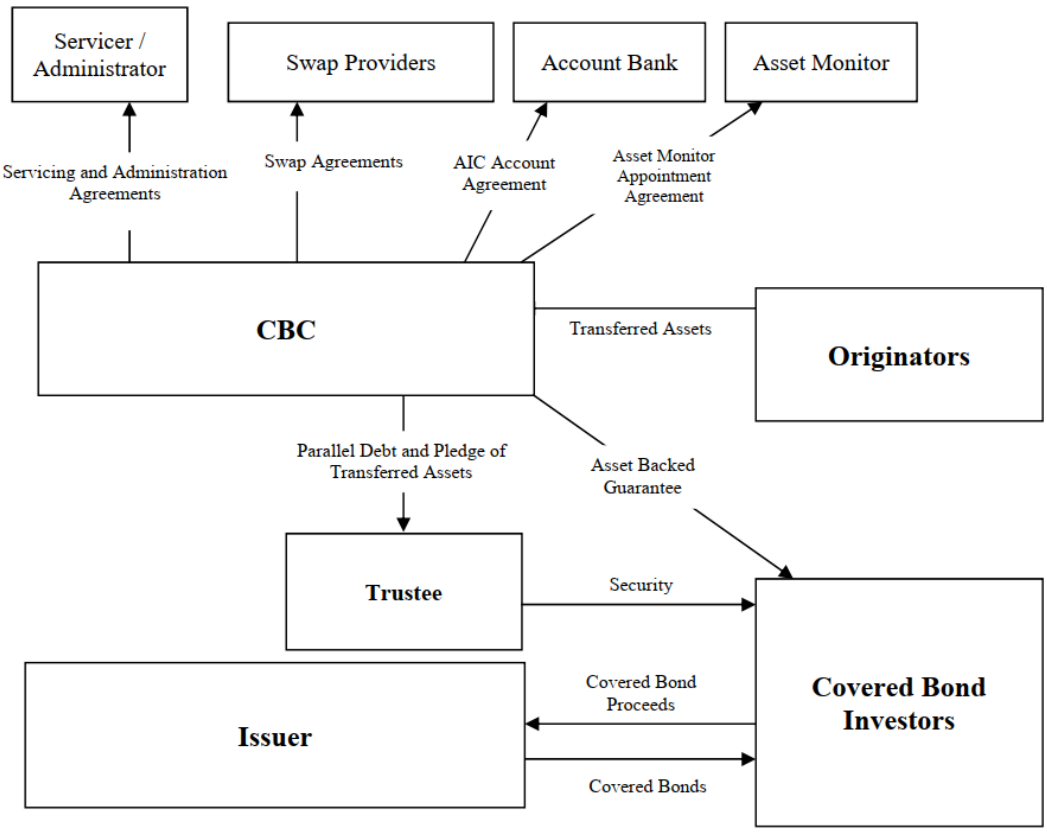
Structural Risk

Transaction structure

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

Role	Name
Issuer	Coöperatieve Rabobank U.A.
Guarantor	Rabo Covered Bond Company B.V.
Trustee	Stichting Security Trustee Rabo Covered Bond Company
Cover pool administrator	Coöperatieve Rabobank U.A.

Figure1: Overview of Covered Bond emission | Source: Rabobank Mortgage Covered Bond Program Prospectus



Legal and Regulatory Framework

In the Netherlands, the covered bond legislation was passed on 7/1/2008, which was amended in 2014 and implemented into national law. Any universal bank based in the Netherlands with a special license can issue Dutch covered bonds. The Dutch Central Bank, which grants the license, registers the issuing credit institution and the class of covered bonds in a public register. Prior to registration, the issuing credit institution has to submit a detailed report on the planned covered bond program to the Dutch Central Bank and confirm that all regulatory and legal requirements are satisfied. After the registration, the Dutch Central Bank is in charge of the regulatory monitoring of covered bond programs in line with Article 129 CRR, both off-site as well as

on-site. On a regular basis, the Dutch Central Bank checks the overcollateralization ratios and examines the compliance with relevant eligibility criteria and their documentation. Furthermore, the Dutch Central Bank monitors market risks, liquidity risks, as well as the healthy ratio[1] of the issuer. In case of any violation with respect to regulatory and legal requirements, the Dutch Central Bank can impose a penalty, deregister an existing issuer and proscribe the issuer from issuing new covered bonds, or deny a new issuer its registration.

The Dutch legal framework accords with the claims of the UCITS Directive 52(4) and with Article 129 CRR, which results in a 10% risk-weighting of Dutch covered bonds. Dutch covered bonds are eligible in repo transactions with the Dutch Central Bank and are compliant with Solvency II and the ECBC Label.

Regarding the implementation of the BRRD, which features resolution authorities with several particular resolution tools and deals with the failure of financial institutions, the Netherlands have translated the directive - including the bail-in tool - into national law on 11/26/2015.

Insolvency Remoteness and Asset Segregation

In the Netherlands, the issuer has to guarantee that the cover assets will be transferred and sold to a separate, non-affiliated, independent legal entity -- the Covered Bond Company (CBC). In case of issuer default, the CBC ensures the payment of both interest and principal to the covered bond holders (covered bond guarantee). The CBC is set up for one single covered bond program and is usually managed by a Security Trustee. The CBC can provide a right of retention of the cover assets to the Security Trustee. Furthermore, the CBC can negotiate about the organization and management of cover assets with the different involved parties, like derivative counter-parties, the servicer of the asset monitor and so on. However, the CBC has no banking licence and is not allowed to handle claims that rank *pari passu* or senior to covered bond holders, except it affects management, risk management, liquidity, payment and treatment of corresponding covered bonds and eligible cover assets.

Consequently, covered bond holders have both an ordinary, unsecured claim against the issuer, which is guaranteed by the CBC, and a claim against the CBC secured by the right of pledge on the cover assets. In case of issuer default, the Security Trustee can, if commissioned by the covered bond holders, accelerate the covered bonds against the issuer after an issuer default, but not against the CBC. Revenues from the outstanding debts will be added to the cover pool and used by the CBC to ensure the interest and principal payments to the covered bond holders in a timely manner.

[1] The ratio between the nominal size of the outstanding covered bond program and the consolidated balance sheet of the issuing credit institution. The healthy ratio is constituted individually between the Dutch Central Bank and the corresponding issuer. In case of violation of the healthy ratio, no new covered bond can be issued under the current covered bond program.

Trustee

In the Netherlands, the issuer has to ascertain that all requirements are achieved and has to report it to the Dutch Central Bank on a quarterly basis. Furthermore, the issuer has to guarantee and report once a year that it disposes consistent and efficient measures and strategies, so that unencumbered cover assets suffice under various stress scenarios. Besides, the issuer has to hand in the annual report and the annual financial statements of the CBC to the Dutch Central Bank once a year. Regarding investor information, it is obligatory to quarterly disclose information on credit risk, market risk, exchange rate risk, interest rate risk and liquidity risk concerning the underlying covered bond program. Furthermore, the issuer has to publish the nominal value of the issued covered bonds, the amount and structure of cover assets, the various coverage ratios, the ratio with respect to the liquidity buffer, the retention period of covered bonds and the cover pools, the amount of non-performing cover assets and derivative counterparties. Moreover, Dutch covered bond issuers disclose each month investor reports including the result of the asset coverage test and the structure of the cover pool on their website, while they also have elaborated the Harmonized Transparency Template.

Special Administrator

In case of issuer default or any other crisis with respect to covered bonds, the ongoing management of the cover pool is guaranteed by the Security Trustee and the CBC. The Netherlands fully comply with EBA's best practice regarding the administration of the covered bond program post the issuer's insolvency or resolution.

Eligibility Criteria

Eligible cover assets are residential mortgage loans with a maximum LTV of 80%, commercial mortgage loans with a maximum LTV of 60%, or ship loans with a maximum LTV of 60%. Claims owed or guaranteed by the public sector, central banks, multilateral development banks or international organisations in line with Article 129 CRR are also eligible cover assets. Furthermore, assets that can be made eligible under a Ministerial Regulation can be included in the cover pool, as well. Overall, substitution assets are permitted up to a limit of 20% of the issued covered bonds. Substitution assets are for instance, exposures to the public sector and to institutions in line with Article 129 CRR, as well as assets that are specifically allowed by the Dutch Central Bank. ABS and MBS as well as impaired loans in line with Article 178 CRR are not eligible cover assets. Furthermore, assets with a particular claim displacing the ownership entitlement of the owner of the assets and exposures of owners of cover assets to the issuing credit institutions or affiliates are also not eligible cover assets.

The geographical scope of legitimate cover assets is confined to EEA countries and to jurisdictions, where the regulatory arrangements and provisions are leastwise comparable to those in the EU.

Overall, primary asset classes in the cover pool are residential mortgages, commercial mortgages, public sector loans and ship loans. However, merely residential and commercial mortgages can be included in one covered bond program, i.e. mixing asset cover pools in one single covered bond program is only allowed with respect to these two asset classes, while the limits considering the predefined composition need to be adhered throughout the program's whole lifetime.

Since 2013, new Dutch mortgages have to obey stringent Loan-to-Income limits at origination. While the hard LTV cap which makes the entire loan ineligible to be included in the cover pool lies beyond 100% for mortgages originated prior to 2018, the hard LTV limit of the original loan lies at 100% since 2018. Once the loan is put in the cover pool, there exists no cap that induces the elimination of the loan from the cover pool. Thus, exceeding the LTV cap does not make the whole loan ineligible for the cover pool, i.e. the limits are soft limits and only the fraction of the loan up to the limit will be considered as eligible cover and included in the asset cover test. The fraction that exceeds the limit will provide an additional credit enhancement.

Systemic Relevance and External Support

According to the ECBC[2], covered bonds outstanding increased significantly in the Netherlands over the past years. While the overall amount was EUR 27.66bn in 2009, it more than tripled to EUR 94.80bn in 2018. This increase is solely reflected in mortgage covered bonds outstanding, as the Netherlands have only issued mortgage covered bonds until now. The high outstanding amount is mainly caused by the boosted issuance of mortgage covered bonds in the aftermath of the financial crisis but also due to the implementation of the covered bond legislation in 2008, which more than doubled from around EUR 5.36bn in 2008 to EUR 14.14bn in 2011[3]. In 2018, the issuance volume amounted to approximately EUR 28.71bn.

With a market share of approximately 7% outstanding covered bonds in relation to the entire covered bonds segment as of 2018, Rabobank is one of the largest covered bonds issuer in the Netherlands.

Summary Structural Risk

In general, the Dutch covered bond legislation defines the legal basis for covered bond programs in the Netherlands, it defines clear rules to mitigate risks in particular regarding: insolvency remoteness, asset segregation, investor's special claim vis-à-vis other creditors, the roll and appointment of a special administrator, among other provisions.

We consider the structural framework in the Netherlands as positive, accomplishing an adequate set of rules for Dutch covered bonds. Due to those reasons, we set a rating uplift of (+4) notches.

Liquidity and Refinancing Risk

Minimum Overcollateralization

The Dutch legal framework stipulates that the minimum mandatory overcollateralization ratio has to be always 5% of the registered covered bonds outstanding on a nominal value basis when the actual outstanding loan amount of the cover assets is considered. In contrast, when the CRR LTV cut-off percentages of the cover assets are regarded, the sum of all cover assets has to be at least as high as the nominal value of the registered outstanding covered bonds, i.e. an overcollateralization ratio of 0%. Voluntary overcollateralization will be safeguarded.

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[2] Source: EMF-ECBC (2019), ECBC: European Covered Bond Fact Book 2019, EMF-ECBC

[3] Source: EMF-ECBC (2018), ECBC: European Covered Bond Fact Book 2018, EMF-ECBC

Short-term Liquidity Coverage

On a monthly basis, asset coverage tests have to be conducted to control whether the amount of cover assets exceeds the amount of outstanding covered bonds by the adequate magnitude. For the calculation of the coverage tests, cover assets are included at their nominal value and substitution assets at their market value. In case of a violation of the coverage tests, a one month grace period will be conceded, while the program will be stopped if the coverage tests cannot be fulfilled within this period, i.e. the issuer will neither be allowed to sell cover assets nor to issue new covered bonds.

Since 1/1/2015, in order to sustain liquidity, the issuer has to guarantee by law that the CBC can pay any coupon and redemption obligations (interest and principal coverage) on the covered bonds and any claim of other involved parties that rank senior to covered bond holders within the next 6 months. Considering soft-bullet or conditional pass-through covered bonds with a maturity extension of more than six months, the liquidity buffer has not to be employed for principal payments.

Furthermore, Dutch issuing credit institutions guarantee to mitigate liquidity risks by means of contractual requirements. For instance, issuers of hard-bullet covered bonds conduct with respect to repayments a pre-maturity test 6 or 12 months or less prior to maturity in case of a rating downgrade below P-1/F1+/A-1+ of their short-term rating and implement a pre-maturity liquidity facility, while issuers of soft-bullet covered bonds or conditional pass-through covered bonds use a maturity prolongation. To ensure interest payments within the next three months, covered bond issuers, establish depending on their contractual arrangements, a reserve fund or a reserve accounts.

Stress Tests and Matching

While the Dutch law does not explicitly demand for risk mitigating provisions or instruments regarding market risks, the legal framework stipulates prescriptions to conduct dynamic stress tests on a regular basis, at least annually according to the Dutch Association of Covered Bond Issuers, and to present it to the Dutch Central Bank. It is obligatory to do stress tests to maintain the healthy ratio and to anticipate credit risk, interest rate risk, currency risk and liquidity risk, while derivative instruments have to be included to hedge these risks. Overall, EBA's guidelines regarding stress testing are satisfied.

Asset-Liability Mismatch

Asset-liability mismatches ("ALM") arise with different maturities of cover assets and covered bonds. Depending on the issuer and currency of issuance, natural matching - i.e. the congruence of present values – forms the essential approach to reduce ALM risk. In addition, the statutory liquidity coverage requirement for 180 days is a safeguard mechanism to ensure the servicing of pending principal and interest payments.

Repayment Method

In case of an issuer default, covered bonds will continue to exist and they will be reimbursed at the time of their original contractual arrangements, while the CBC will be responsible for interest and principal payments. Failure to pay does not automatically cause a covered bond default. The Netherlands issue hard-bullet covered bonds without any extension period, soft-bullet cov-

ered bonds with an extension period up to 24 months to grant additional time to pay back principal and interest payments of covered bonds, as well as covered bonds that go into pass-through in case of non-payment. If the covered bond holders commission the Security Trustee, he or she can induce an acceleration of the covered bonds against the issuer after an issuer default, but not against the CBC. Acceleration against the issuer does not inevitably cause acceleration against the CBC. To guarantee the CBC's insolvency remoteness, neither the issuer nor any affiliate credit institution is permitted to have a stake in or to take the management of the CBC. However, if the CBC goes bankrupt and cannot wipe off the covered bond holders' receivables, an acceleration of the covered bonds will take place in case of hard- and soft-bullet covered bonds or they go into pass-through mode in case of conditional pass-through covered bonds.

Refinancing Costs

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 is adjusted following an analysis of relevant market data and will be used in our cash flow analysis.

Other liquidity Risks

Issuing banks are allowed to use derivative instruments in the cover pool to hedge market risks, like interest rate and currency risks, and to facilitate risk management. In case of issuer default, derivative contracts in the cover pool cannot be cancelled upon the issuer’s bankruptcy and continue to exist. Besides, counterparties have to allocate enough collateral, or have to be substituted, if their credit assessment no longer conforms to necessary requisites. Derivative instruments, like cover pool swaps, rank senior to covered bond holders, while covered bond series swaps rank *pari passu* to covered bond holders and payments of termination amounts of insolvent or downgraded derivative counterparties rank subordinated to covered bond holders.

Summary Liquidity and Refinancing Risk

Compared to other jurisdictions, the Dutch covered bonds legislation and the stipulated risk management processes for liquidity risks constitute a comparatively strict framework by which they can be effectively reduced.

Refinancing risks, however, cannot be structurally reduced under the hard bullet repayment structure, which can only be cushioned by sufficiently high overcollateralization or 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 the Dutch covered bond programs as positive which ensured a rating uplift of one (+1) notch. However, we have set a rating uplift of zero (+/-0) notch as the maximum possible rating for this program has already been achieved.

The European Commission on November 2019 has also adopted the legislative package to provide for enhanced harmonisation of the EU covered bond market. Each of the Member States shall implement the Covered Bond Directive by 8 July 2021 and the national measures shall be applied at the latest from 8 July 2022. Once fully implemented, the directive might have a potential impact on the legal and regulatory framework for the issuer and the covered bonds of each EU member states.

ESG Criteria

CRA generally takes ESG-relevant factors (environmental, social and governance) into account when assessing Covered Bond ratings. Overall, ESG factors have a significant impact on the current rating of this Covered Bond program. CRA identifies governance factors, in particular, to have a highly significant impact on Covered Bond ratings. Since Covered Bonds are subject to strict legal requirements, regulatory risk plays an important role in assessing the credit rating. The Dutch covered bond legislation defines clear rules to mitigate risks in particular regarding: insolvency remoteness, asset segregation, investor's special claim vis-à-vis other creditors, the roll and appointment of a special administrator, among other provisions. Additionally, Risk management and internal controls as well as the macroeconomic factors such as hedging strategies, interest rates and yield curve are considered to have a highly significant impact on the assessment of the credit rating. Other individual factors with a potential key rating influence were not identified, and therefore did not affect the final rating.

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 Harmonised Transparency Template („HTT“) as per regulatory requirements. This information was sufficient according to CRA´s rating methodology “Covered Bond Ratings”.

At the cut-off-date 30 June 2020, the pool of cover assets consisted of 66,481 debt receivables of which 100.00% are domiciled in the Netherlands. The total cover pool volume amounted to EUR 13,360.00 m in residential (100.00%), commercial (0.00%) and others (0.00%).

The residential cover pool consists of 66,481 mortgage loans having an Unindexed weighted average LTV of 73.56%. The cover pool doesn’t have any non-residential loans. The ten largest debtors of the portfolio total to 0.10%. Table 3 displays additional characteristics of the cover pool:

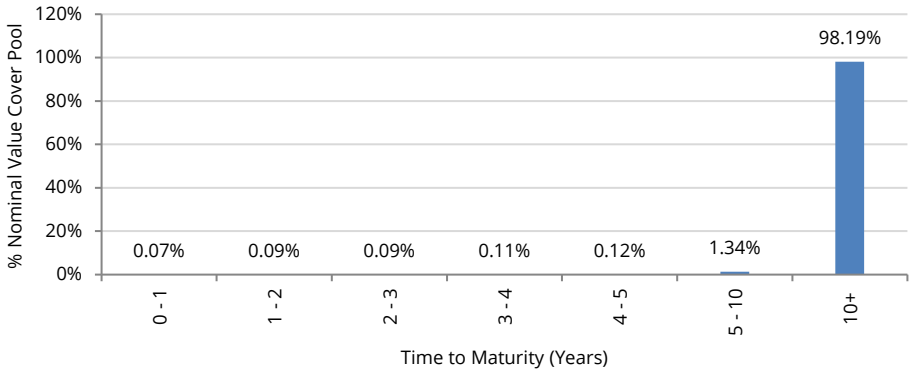
Table 3: Cover pool characteristics | Source: Rabobank

Characteristics	Value
Cover assets	EUR 13,360 m.
Covered bonds outstanding	EUR 11,060 m.
Substitute assets	EUR 0.00 m.
Cover pool composition	
Mortgages	100.00%
Substitute assets	0.00%
Other / Derivative	0.00%
Number of debtors	NA
Mortgages Composition	
Residential	100.00%
Commercial	0.00%
Other	0.00%

Average asset value (Residential)	EUR 200.96 k.
Average asset value (Commercial)	EUR 0.00 k.
Non-performing loans	0.00%
10 biggest debtors	0.10%
WA seasoning	48.54 Months
WA maturity cover pool (WAL)	20.45 Years
WA maturity covered bonds (WAL)	10.63 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 June 2020 (see figure 2):

Figure 2: Distribution by remaining time to maturity I Source: Rabobank



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: Rabobank

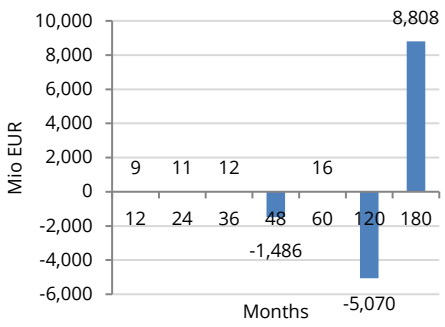
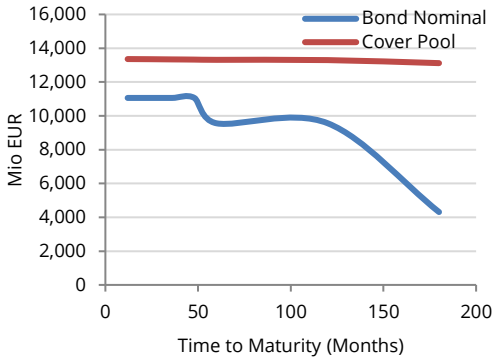


Figure 4: Amortization profile | Source: Rabobank



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

In Netherlands, issuing banks are allowed to use derivative instruments in the cover pool to hedge interest rate and currency risks. However, it is our understanding that this covered bond program does not use derivatives to hedge interest rate- and currency risk.

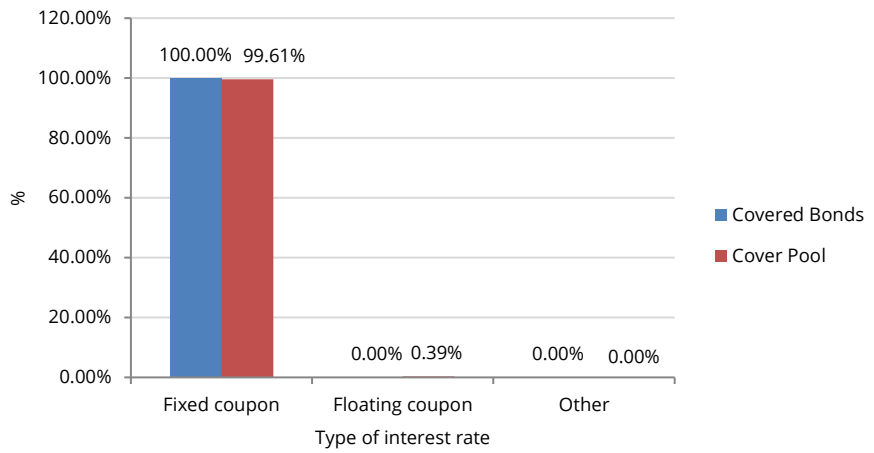
However, the legal framework provides for regular stress tests to be conducted on interest rate- and currency risks to maintain the mandatory OC. Therefore, interest rate risk could be mitigated by the 5.00% OC requirement. Currency risk, regardless that is limited for this program as the cover pool assets and cover bonds are denominated in euros. Nevertheless, we have applied interest rate 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 'Breakeven Analysis' segment.

Table 4: Program distribution by currency | Source: Rabobank

Currency	Volume	Share (%)
Cover Pool		
EUR	13,360 m.	100.00%
Covered Bond		
EUR	11,060 m.	100.00%

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

Figure 5: Type of interest rate | Source: Rabobank



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 Rabobank it has been assumed an expected default rate of 2.88% 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 (%)
BBB	42.88%	55.34%	19.15%
BBB-	41.43%	58.02%	17.39%
BB+	39.10%	62.67%	14.60%
BB	**36.51%**	**68.22%**	**11.60%**
BB-	33.60%	74.80%	8.47%
B+	31.11%	80.52%	6.06%
B	28.78%	86.09%	4.00%

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.

This program issues covered bonds with soft bullet maturity structure, i.e. a 12 months maturity extension upon the final legal maturity. This characteristic of the covered bonds has been taken into account during our cash-flow analysis.

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
BBB	41.38%	1.15%
BBB-	38.42%	1.17%
BB+	35.23%	1.19%
BB	**31.70%**	**1.21%**
BB-	28.06%	1.23%
B+	24.55%	1.25%
B	20.89%	1.27%

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 a **BB** 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 June 2020, could be sufficient to repay bond nominal capital notwithstanding the occurrence of the presented stressed scenarios. On this basis, the rating of the cover pool within our covered bond program rating has been set at BB.

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
- 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	Break-Even OC
BBB	30.76%
BBB-	26.82%
BB+	21.62%
BB	**16.29%**
BB-	11.06%
B+	6.90%
B	5.00%

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 a single debtor. 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. Based on the base case, there is a sensitivity of rating in terms of decreased recovery rates and increased defaults. In the worst-case scenario, i.e. a 50% decrease in the base case assumptions leads to a reduction in the base-case rating by 4 notches (see Table 8):

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

Recovery / Defaults	Base Case	-25%	-50%
Base Case	**BB**	BB-	B
+25%	BB	B+	B-
+50%	BB-	B	B-

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 BB. This, however did not ensure any secondary rating uplift was set at zero (+0) notch.

Counterparty Risk

Transaction parties

Table 9: Participant counterparties | Source: Rabobank

Role	Name	Legal Entity Identifier
Issuer	Coöperatieve Rabobank U.A.	DG3RU1DBUFHT4ZF9WN62
Servicer	Coöperatieve Rabobank U.A.	DG3RU1DBUFHT4ZF9WN62
Account Bank	Coöperatieve Rabobank U.A.	DG3RU1DBUFHT4ZF9WN62
Sponsor	Non available information at rating time	Non available information at rating time

Derivatives

It is our understanding that this covered bond program does not use derivatives in the form of swaps to hedge interest rate- and currency risk.

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 Dutch covered bonds legislation stipulates that the cover assets should be isolated from the general bankruptcy estate (insolvency-free assets) and the ongoing management of the cover pool will be guaranteed by the Security Trustee and the CBC. Under that mandate, the CBC will have the 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 the event of the Issuer's insolvency.

Appendix

Rating History

Event	Initial Rating
Result	AAA / Watch Negative
Rating Date	10 August 2020
Publication Date	13 August 2020

Details Cover Pool

Table 10: Characteristics of Cover Pool | Source: Rabobank

Characteristics	Value
Cover Pool Volume	EUR 13,360 m.
Covered Bonds Outstanding	EUR 11,060 m.
Substitute Assets	EUR 0 m.
Share Derivatives	0.00%
Share Other	100.00%
Substitute Assets breakdown by asset type	
Cash	0.00%
Guaranteed by Supranational/Sovereign agency	0.00%
Central bank	0.00%
Credit institutions	0.00%
Other	0.00%
Substitute Assets breakdown by country	
Issuer country	0.00%
Eurozone	0.00%
Rest European Union	0.00%
European Economic Area	0.00%
Switzerland	0.00%
Australia	0.00%
Brazil	0.00%
Canada	0.00%
Japan	0.00%
Korea	0.00%
New Zealand	0.00%
Singapore	0.00%
US	0.00%
Other	0.00%
Cover Pool Composition	
Mortgages	100.00%
Total Substitute Assets	0.00%
Other / Derivatives	0.00%
Number of Debtors	NA
Distribution by property use	

Residential	100.00%
Commercial	0.00%
Other	0.00%
Distribution by Residential type	
Occupied (main home)	100.00%
Second home	0.00%
Non-owner occupied	0.00%
Agricultural	0.00%
Multi family	0.00%
Other	0.00%
Distribution by Commercial type	
Retail	0.00%
Office	0.00%
Hotel	0.00%
Shopping center	0.00%
Industry	0.00%
Land	0.00%
Other	100.00%
Average asset value (Residential)	EUR 201 k.
Average asset value (Commercial)	EUR 0 k.
Share Non-Performing Loans	0.00%
Share of 10 biggest debtors	0.10%
WA Maturity (months)	354.75
WAL (months)	245.36
Distribution by Country (%)	
Netherlands	100.00%
Distribution by Region (%)	
Groningen	2.17%
Friesland	4.28%
Drenthe	2.72%
Overijssel	7.30%
Gelderland	12.53%
Flevoland	1.94%
Utrecht	8.64%
Noord-Holland	14.75%
Zuid-Holland	19.12%
Zeeland	2.83%
Noord-Brabant	17.91%
Limburg	5.79%

Figure 6: Arrears Distribution | Source: Rabobank

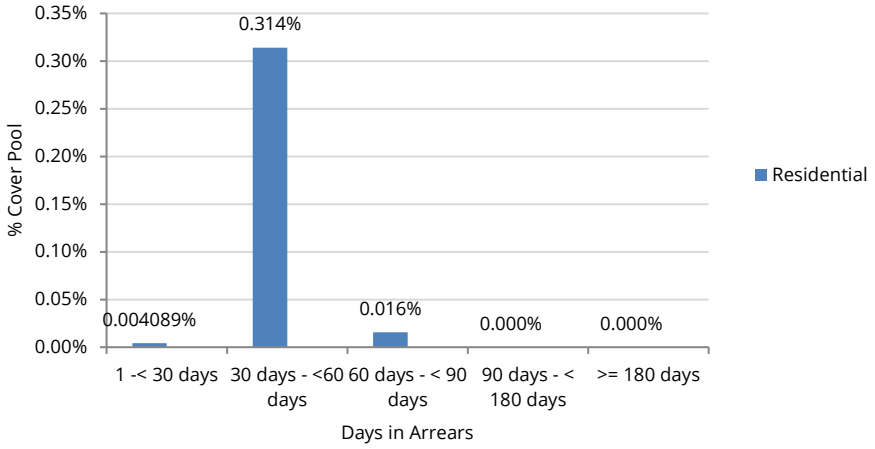


Figure 7: Program currency mismatches | Source: Rabobank

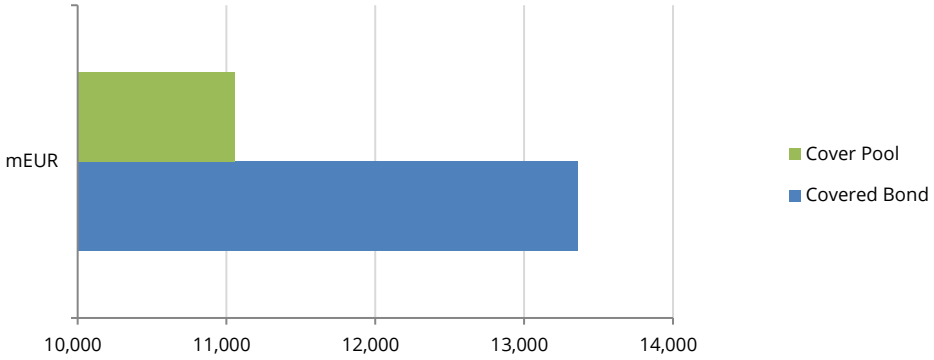
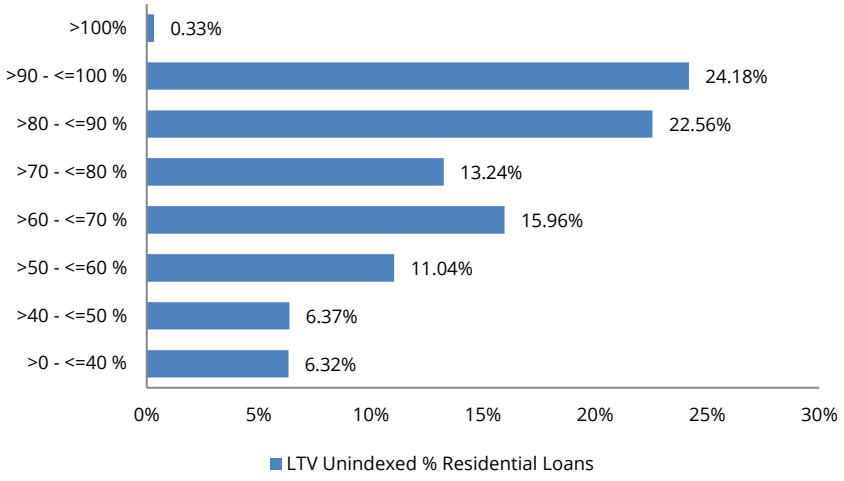


Figure 8: Unindexed LTV breakdown - residential pool | Source: Rabobank



Key Source of Information

Documents (Date: 30 June 2020)
Issuer ▪ Audited consolidated annual reports of Rabobank (Group) 2015-2018 ▪ Rating file 2020 ▪ Miscellaneous Investor Relations Information and Press releases ▪ Peergroup-Data and other data from the CRA/ eValueRate Database
Covered Bond and Cover Pool ▪ HTT Reporting from Rabobank (30 June 2020) ▪ Base Prospectus of Rabobank Mortgage Covered Bond Program dated 19 May 2019 ▪ Market data Mortgage Cover Bond Program

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Creditreform Rating AG was neither commissioned by the rating object nor by any other third parties for the rating. The analysis took place on a voluntary basis by Creditreform Rating AG and is to be described in the regulatory sense as an unsolicited rating. The rating was conducted on the basis of Creditreform Rating´s "Covered Bond Ratings" methodology (v1.0, July 2017) and "Technical Documentation Portfolio Loss Distributions" (v.1.0, July 2018) in conjunction with Creditreform`s basic document "Rating Criteria and Definitions" (v1.3, January 2018). On the subject of ESG (environment, social and governance), Creditreform Rating AG has published the basic document "The Impact of ESG Factors on Credit Ratings" (March 2020).

Unsolicited Credit Rating	
With Rated Entity or Related Third Party Participation	NO
With Access to Internal Documents	NO
With Access to Management	NO

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 eValueRate/CRA subject to a peer group analysis of 24 competing institutes. The cover pool's quantitative analysis for the rated Covered Bond Program was based on the "Harmonised Transparency Template" (HTT) published by the Rabobank.

Information on the meaning of a rating category, definition of default and sensitivity analysis of relevant key rating assumptions can be found at "Creditreform Rating AG, Rating Criteria and Definitions":

https://www.creditreform-rating.de/en/about-us/regulatory-requirements.html

This rating was carried out by analysts Philip Michaelis (Senior Analyst) und AFM Kamruzzaman (Analyst) both based in Neuss/Germany. On 10 August 2020, the rating was presented to the rating committee by the analysts and adopted in a resolution. The function of Person Approving Credit Ratings (PAC) was performed by Sardor Abdullaev (Analyst).

On 10 August 2020, the rating result was communicated to Rabobank, 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.

The rating is subject to one-year monitoring from the creation date (see cover sheet). Within this period, the rating can be updated. After one year at the latest, a follow-up is required to maintain the validity of the rating.

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To prepare this credit rating, CRA has used following substantially material sources:

1. Transaction structure and participants

2. Transaction documents

3. Issuing documents

4. Other rating relevant documentation

There are no other attributes and limitations of the credit rating or rating outlook other than displayed on the CRA website. Furthermore, CRA considers satisfactory the quality and extent of information available on the rated entity. In regard to the rated entity, Creditreform Rating AG regarded available historical data as sufficient.

Between the disclosure of the credit rating to the rated entity and the public disclosure no amendments were made to the credit rating.

The rating report and/or the press release indicate the principal methodology or version of methodology that was used in determining the rating, with a reference to its comprehensive description.

In cases where the credit rating is based on more than one methodology, or where reference only to the principal methodology might cause investors to overlook other important aspects of the credit rating, including any significant adjustments and deviations, Creditreform Rating AG explains this fact in the credit rating and indicates how the different methodologies and other

aspects are taken into account in the credit rating. This information is integrated in the credit rating report.

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 rating report and/or the press release 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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