

Creditreform Covered Bond Rating

ING Bank N.V.

Mortgage Covered Bond Program



Rating Object

Country Issuer	The Netherlands	Repayment method	Hard & Soft Bullet
Cover pool asset class	Mortgage		Min (5,00%)
Legal framework	Dutch Covered Bond Legislation	Overcollateralization	Current (22,71%)
Nominal value	EUR 21.288,70 m.		Committed (2,89%)
Cover pool value	EUR 26.124,03 m.		Fix (92,77%)
WAL maturity covered bonds	5,59 (Years)	Covered bonds coupon type	Floating (7,23%)
WAL maturity cover pool	15,63 (Years)		Other (0,00%)
Cut-off date Covered Pool Information:	30.09.2019		

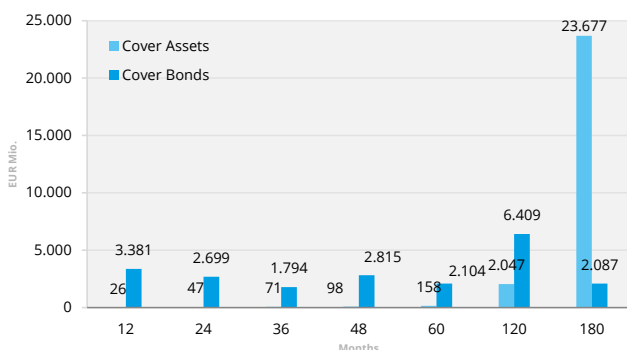
Rating Overview

Rating Summary		Credit Risk Metrics	
Issuer	ING Bank N.V.	Metrics date	18.02.2019
LT Issuer Rating	A	Rating Case Default Rate	9,09%
ST Issuer Rating	L2	Rating Case Recovery Rate	78,56%
+Legal and regulatory framework analysis	+4 Notches	Expected Loss	1,95%
+Liquidity and refinancing risk	+1 Notch	Rating Case Breakeven OC	24,66%
= Rating after 1st uplift	AAA	Program Key Counterparties	
Cover Pool & cash flow analysis	BBB-	Servicer	ING Bank N.V.
+ 2nd rating uplift	+/-0 Notch	Account Bank	ING Bank N.V.
Rating covered bond program / Outlook	AAA / Stable	Sponsor	NA

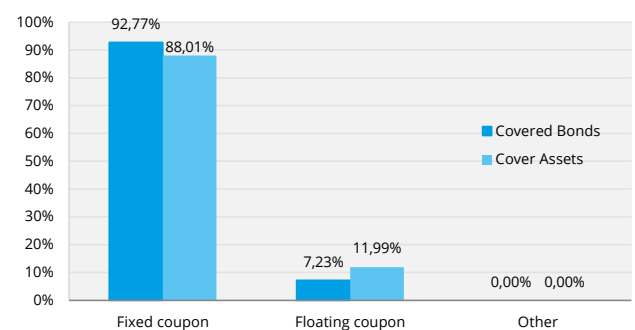
Cover Assets Composition

General Information		Property Type	
Cover Pool Balance	EUR 26.124,03 m.	Residential	EUR 26.124,03 m.
Average Seasoning	154,92 Months	Commercial	EUR 0,00 m.
Total number of exposures	157.570	Other	EUR 0,00 m.
Distribution by type of asset		Distribution by Loan size	
Mortgages	EUR 26.124,03 m.	Number of Commercial Loans	NA
Public Sector	EUR 0,00 m.	Number of Residential Loans	157.570
Shipping	EUR 0,00 m.	Average Size Commercial Loans (000s)	NA
Substitute Assets	EUR 0,00 m.	Average Size Residential Loans (000s)	87
Other	EUR 0,00 m.		

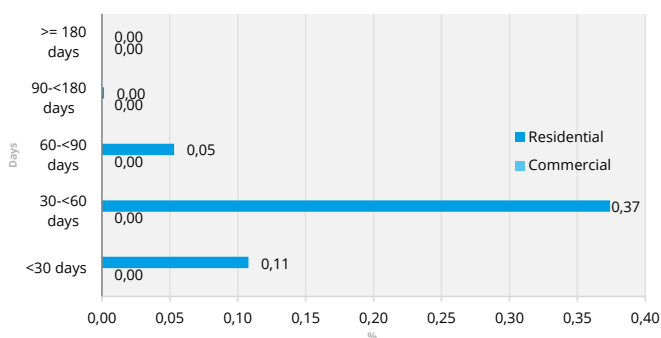
Asset-liability Profile



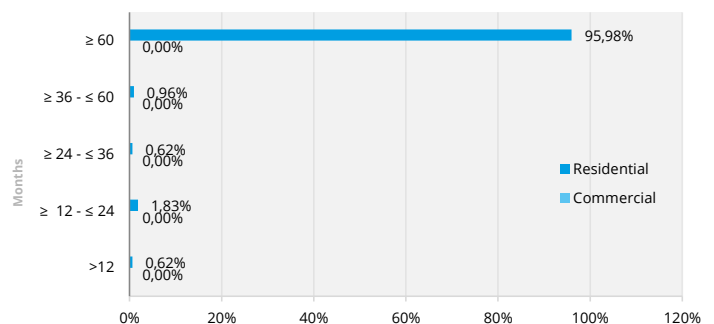
Interest Rate



Arrears Distribution



Seasoning Distribution



Creditreform Covered Bond Rating

ING Bank N.V.

Mortgage Covered Bond Program

Creditreform
Rating

LTV Distribution Commercial Loans			LTV Distribution Residential Loans		
LTV	Nominal	% Loans	LTV	Nominal	% Loans
>0 - <=40 %	NA	NA	>0 - <=40 %	4.738,13	18,14%
>40 - <=50 %	NA	NA	>40 - <=50 %	3.171,36	12,14%
>50 - <=60 %	NA	NA	>50 - <=60 %	3.992,66	15,28%
>60 - <=70 %	NA	NA	>60 - <=70 %	4.542,79	17,39%
>70 - <=80 %	NA	NA	>70 - <=80 %	4.463,99	17,09%
>80 - <=90 %	NA	NA	>80 - <=90 %	3.466,57	13,27%
>90 - <=100 %	NA	NA	>90 - <=100 %	1.510,22	5,78%
>100%	NA	NA	>100%	238,31	0,91%

Currency Distribution			Loan Distribution by Regions (as % of total Mortgages)		
Currency	Covered Bonds	Cover Assets	Region	% Residential Loans	% Commercial Loans
EUR	21.288,70 m.	26.124,03 m.	Groningen	2,54%	NA
AUD	0,00 m.	0,00 m.	Friesland	2,73%	NA
BRL	0,00 m.	0,00 m.	Drenthe	2,72%	NA
CAD	0,00 m.	0,00 m.	Overijssel	6,08%	NA
CHF	0,00 m.	0,00 m.	Gelderland	12,29%	NA
CZK	0,00 m.	0,00 m.	Noord-Holland	20,49%	NA
DKK	0,00 m.	0,00 m.	Zuid-Holland	22,67%	NA
GBP	0,00 m.	0,00 m.	Zeeland	1,44%	NA
HKD	0,00 m.	0,00 m.	Brabant	12,59%	NA
JPY	0,00 m.	0,00 m.	Utrecht	9,50%	NA
KRW	0,00 m.	0,00 m.	Limburg	3,35%	NA
NOK	0,00 m.	0,00 m.	Flevoland	3,60%	NA
PLN	0,00 m.	0,00 m.			
SEK	0,00 m.	0,00 m.			
SGD	0,00 m.	0,00 m.			
USD	0,00 m.	0,00 m.			
Other	0,00 m.	0,00 m.			

Swap Counterparties

Name	Type of arrangement	LEI
ING Bank N.V.	FX	3TK20IVIUJ8J3ZU0QE75
ING Bank N.V.	IRS	3TK20IVIUJ8J3ZU0QE75
ING Bank N.V.	TRS	3TK20IVIUJ8J3ZU0QE75

Swap Agreements

Interest Rate Swap	Intra-group
Currency Swap	Intra-group

ISIN Lists

Issuer	ISIN	Coupon Type	Coupon Rate (%)	Issue date	Maturity date
ING Bank N.V.	XS0479696204	Fix	4,00	18.01.2010	17.01.2020
ING Bank N.V.	XS1938391262	Fix	1,56	22.01.2019	22.01.2039
ING Bank N.V.	XS1884009140	Fix	1,39	25.09.2018	25.09.2034
ING Bank N.V.	XS1053594385	Floating	EIEUR6M + 1.6102	04.04.2014	04.04.2024
ING Bank N.V.	XS1936919437	Fix	1,56	17.01.2019	17.01.2039
ING Bank N.V.	XS1940195560	Fix	1,55	25.01.2019	23.06.2039
ING Bank N.V.	XS1952576475	Fix	0,75	18.02.2019	18.02.2029
ING Bank N.V.	XS0820867223	Fix	2,00	28.08.2012	28.08.2020
ING Bank N.V.	XS0728783373	Fix	3,38	10.01.2012	10.01.2022
ING Bank N.V.	XS0935034651	Fix	1,88	22.05.2013	22.05.2023
ING Bank N.V.	XS1937717186	Fix	1,56	21.01.2019	21.01.2039
ING Bank N.V.	XS1805257265	Fix	0,88	11.04.2018	11.04.2028
ING Bank N.V.	XS0873155252	Fix	2,03	11.01.2013	11.01.2023
ING Bank N.V.	XS0671362506	Fix	3,63	31.08.2011	31.08.2021

Data Definitions

The data is presented with a cut-off date. Following the clarification regarding the source of information:
 Issuer: Issuer source of information are all available public information, i.e. Investor Reports, Harmonised Transparency Templates "HTT", National Transparency Templates "NTT", Prospectus etc. Not reported or non available information will be labeled as "NA".

Field Name	Source	Definition
Cover pool asset class	Issuer	The asset type in the cover pool (public sector assets or mortgage assets)
Legal framework	CRA	The set of legislative and regulatory rules of the respective jurisdiction that regulates the covered bonds (CB) program
Nominal value	Issuer	The total amount of outstanding covered bonds as of cut-off date expressed in millions
Cover pool value	Issuer	Aggregate value of all assets in the cover pool as of cut-off date expressed in millions
WAL maturity covered bonds	Issuer	The weighted average remaining maturity of all outstanding covered bonds in years
WAL maturity cover pool	Issuer	The weighted average remaining maturity of all outstanding covered assets in years
Repayment method	Issuer	Hard Bullet: Covered bonds are repaid on the maturity date which cannot be extended Soft Bullet: The maturity date of the covered bonds can be extended by a fixed period Conditional pass-through (CPT): Covered bonds with a scheduled maturity date, and an extension mechanism defined by certain conditions
Overcollateralization	Issuer	Current OC: The proportion of cover assets that exceeds the proportion of currently outstanding covered bonds, calculated as $(\text{Cover pool value} / \text{outstanding covered bonds} - 1) * 100$ Min OC: The OC level that the issuer must maintain according to the respective CB legislation Committed OC: The minimum OC level that the issuer has committed to maintain
Covered bonds coupon type	Issuer	Type of interest rate paid on covered bonds, expressed as a percentage of bond's face value
LT Issuer Rating	CRA	Long-term ratings assess the default risks for each category of a bank's financial instruments with a residual term-to-maturity of more than one year
ST Issuer Rating	CRA	Short-term ratings assess the default risks for each category of a bank's financial instruments with a residual term-to-maturity of less than one year
Legal and regulatory framework analysis	CRA	A qualitative assessment of legislative and regulatory rules of the covered bonds program
Liquidity and refinancing risk	CRA	A qualitative assessment of regulatory requirements for liquidity and refinancing risk of the covered bonds program
First rating uplift	CRA	The rating after adding up the notches from Legal and regulatory framework analysis and Liquidity and refinancing risk with LT Issuer rating
Cover pool and cash flow analysis	CRA	The quantitative assessment of the cover assets and covered bonds at different rating-level stressed scenarios
Second rating uplift	CRA	The rating after adding up the notches from cash-flow analysis with 1st rating uplift (only effective if the rating from cash-flow analysis is higher than the 1st rating uplift)
Metrics date	CRA	The date on which CRA assigned the initial / follow-up rating of the covered bond program
Rating Case Default Rate (RDR)	CRA	Stressed default rate of the cover assets represented by the base case stressed scenario
Rating Case Recovery Rate (RRR)	CRA	Stressed recovery rate of the defaulted assets represented by the base case stressed scenario
Expected Loss	CRA	Stressed loss rate of the cover assets represented by the base case stressed scenario. The expected loss rate has been calculated as $[\text{RDR} * (1 - \text{RRR})]$ [%]
Rating Case Breakeven OC	CRA	The required stressed OC level compatible with the base case rating
Average Seasoning	Issuer	Average length of the loans from the origination date to the cut-off date in months
Loan Size	Issuer	Average size of the loans (i.e. Total value of cover assets / Number of loans)
LTV	Issuer	The loan-to-value (LTV) is the ratio of a loan to the value of the property securing the loan
LEI	CRA	Legal Entity Identifier (LEI) enables unique identification of legal entities in financial transactions
Arrears Distribution	Issuer	The distribution of arrears of the cover assets with respect to each asset class
Seasoning Distribution	Issuer	The distribution of seasoning of the cover assets with respect to each asset class
Asset liability Profile	CRA	The maturity structure of the cover assets and liabilities
% Residential Loans	Issuer	Outstanding value of loans that are secured by the residential property expressed as % of total outstanding loans in the cover pool
% Commercial Loans	Issuer	Outstanding value of loans that are secured by the commercial property expressed as % of total outstanding loans in the cover pool
Fixed Coupon	Issuer	All assets and liabilities in the covered bond program that yield a fixed interest rate
Floating Coupon	Issuer	All assets and liabilities in the covered bond program that have variable interest rates
EIEURxM	Reuters	Euro x Month EURIBOR
EURSWExY	Reuters	Euro x Year Interest Rate Swap Fixing

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