Data Collection Residential Belgian Real Estate - Guidelines
(Update 12 April 2023)

1. **GENERAL GUIDELINES AND REPORTING REQUIREMENTS**
2. **SPECIFIC GUIDELINES FOR INDIVIDUAL TABLES AND DESCRIPTION OF GENERAL CONCEPTS AND INDICATORS**

1. GENERAL GUIDELINES AND REPORTING REQUIREMENTS

As from March 2021 (i.e. for the reporting at end-December 2020), the updated PHL reporting, described below, will apply on a compulsory basis to all PHL-respondents.

The table below provides an overview of the reporting .

Tables	Frequency	Comment
NN01 Exposures	H	
N02 Securitisation	H	
NN03 Interest rate type	H	
N04 Interest rate level	H	
N05 Credit risk mitigation	H	
NN06 Type	H	
NN07 Loan to value at origination	H	
NN08 Current loan to value	H	
NN09 Maturities at origination	H	
NN10 Debt service to income at origination	H	
NN11 Loan service to income at origination	H	
NN12 Loan to income at origination	H	
NN13 Debt to income at origination	H	
NN14A Additional information Buy to let	H	Best effort-basis until further notice
NN14B Additional information Owner occupied	H	
NN15A Focus loan-to-value at origination – IRB	Y	For IRB portfolios
NN15B Focus loan-to-value at origination - STA	Y	For STA portfolios
NN16A - Joint distribution vintage - LSTI-O	H	
NN16B - Joint distribution vintage - DTI-O	H	
NN17 - Credit Cost	H	
NN18A - Capital Requirements - IRB	Y	For IRB portfolios
NN18B - Capital Requirements - STA	Y	For STA portfolios
NN19A- EPC scores	H	Best-effort basis for H1 2021; compulsory as from H2 2021
NN19B - Joint distribution vintage - EPC	H	Best-effort basis for H1 2021; compulsory as from H2 2021

I. Preliminary points of attention

1. The tables have to be reported three months after the end of the reference period, i.e. by March 31 (for the situation as at end-December) and by September 30 (for the situation as at end-June).
2. Most data are to be reported for the situation as at end-June and end-December and some only for the situation as at end-December (see table-specific requirements below).
3. The National Bank of Belgium expects the institutions to correctly and fully report all the requested tables.

II. General

4. The PHL-scope is somewhat broader than the ESRB RRE loan definition mentioned in the ESRB recommendation on closing real estate data gaps. The PHL is reported in line with the new Mortgage Credit Directive concept covering loans secured by immovable property regardless of the purpose of the credit and to loans which are used to purchase an immovable property regardless of the collateral provided. However, the scope of the ESRB recommendation is somewhat different, as it only includes “loans to a private household secured by a RRE property independent of the purpose of the loans”.
5. The perimeter of exposures the National Bank of Belgium wants to investigate with this data collection includes securitised loans if they are still on the balance-sheet (i.e. no capital relief). This means that, except for table 2 (as the exposures reported in line 2200 should not be included in table 1, line 100 neither in all the other tables), all the other tables should be reported for this same perimeter of exposures.
6. The Bank draws the attention of respondents to the fact that when references are made in the guidelines to the Schéma A, FINREP or COREP reporting, they should only be interpreted as a reference to the definition of the value we expect you to report (and not to the amount of exposures as such).
7. The data have to be reported on a solo basis, in EUR units, and in %[1] where required (up to 6 decimals).

III. Reporting requirements

Reporting has to take fully into account the general concepts and indicators defined below.

Data as at end-June refer:

- For outstanding amounts, to the stock as was on 30 June
- For vintages, to the production of the first six months.

Data as at end-December refer:

- For outstanding amounts, to the stock as was on 31 December
- For vintages, to the production of the full year.

As regards the data to be reported, not all the columns, neither all the lines, neither all combinations of columns and lines, have to be reported for every table. The hatched cells highlight this. Moreover, if exposures are not treated under the STA approach for the capital requirement by the situation to which the date should be reported, no data are expected in the columns referring to STA exposures. The same applies to the exposures treated under the IRB approach.

The different columns are shown below. Please note that not all columns are included in all tables.

- the outstanding amounts;
- the vintage amounts (+ number of loans);
- the vintage amounts (+ number of loans) for first-time buyers:
- the vintage amounts (+ number of loans) for buy-to-let[2];

[1] E.g. "15,9432 %" should be reported as "0.159432". "15 basis points" should be reported as "0.0015".

[2] Note that the sum of buy-to-let loans and owner-occupied loans must be equal to the total vintage amount.

- the vintage amounts (+ number of loans) for owner-occupied[8];
- the vintage amounts for renegotiated loans;
- the vintage amounts for loans in foreign currency;
- the vintage amounts for loans with full capital amortisation;
- the vintage amounts for loans with partial capital amortisation;
- the vintage amounts for loans with no capital amortisation;
- the RWA IRB on non-defaulted[3] exposures;
- the RWA IRB on defaulted exposures;
- the EAD-weighted PD; (to be reported in %)
- the EAD-weighted floored LGD (with regulatory floor); (to be reported in %)
- the EAD-weighted un-floored LGD (without regulatory floor); (to be reported in %)
- the expected loss (EL) with the regulatory LGD floor on non-defaulted exposures;
- the expected loss (EL) without regulatory LGD floor on non-defaulted exposures;
- the expected loss (EL) with the regulatory LGD floor on defaulted exposures;
- the expected loss (EL) without regulatory LGD floor on defaulted exposures;
- the RWA STA on non-defaulted exposures;
- the RWA STA on defaulted exposures.

While the reporting should include defaulted assets (except for tables 15A and 15B), it is asked to exclude regulatory defaulted assets when computing data related to the following columns:

- the EAD-weighted PD; (to be reported in %)
- the EAD-weighted floored LGD (with regulatory floor); (to be reported in %)
- the EAD-weighted un-floored LGD (without regulatory floor); (to be reported in %)

Reported RWA should not include the RWA related to the implementation of macroprudential measures and should hence only reflect microprudential RWA.

Not all tables, neither all columns, have to be reported for all periods. This is specified hereunder in the section describing the different tables.

[3] (non-)defaulted according to the capital requirements regulation.

2. SPECIFIC GUIDELINES FOR INDIVIDUAL TABLES AND DESCRIPTION OF GENERAL CONCEPTS AND INDICATORS

1. Specific guidelines for individual tables

Table 1: exposures

- Line 100: Line 100 corresponds to the perimeter of exposure the reporting focuses on through all the other tables. We remind that the securitized exposures with capital relief should not be included here in table 1 (only in line 2200 in Table 2).
- The sum of lines 110 (residential only) and 120 (mix residential/other) is equal to line 100. Lines 130 and 140 apply to both residential and mix residential/other loans.
- Periods:
  - col.05-14: for the situation as at end-June and end-December;
  - col.15-65: for the situation as at end-December.

Table 2: securitization

- Line 2200: as previously mentioned, the securitized exposures with capital relief should not be included in the other tables.
- Periods:
  - col.05: for the situation as at end-June and end-December;
  - col.15-65: for the situation as at end-December.

Table 3: interest rate - according to the next repricing date

- Regarding the vintages, the 'next repricing date' should be interpreted as the 'first repricing date' after conclusion of the contract.
- Periods:
  - col.05-14: for the situation as at end-June and end-December;
  - col.15-65: for the situation as at end-December.

Table 4: interest rate - according to the current prevailing interest rate

- The current prevailing interest rate should be interpreted as the yearly nominal interest rate charged to the borrower as it was at the end of the reference period.
- Outstanding (stock) amounts have to be reported here.
- Period:
  - col.05-40: for the situation as at end-June and end-December.

Table 5: credit risk mitigation

- All contractual obligations financing one and same real estate property should here be considered as one and same exposure[4].
- Lines 310-320: regarding the vintage column, as far as the exposures covered by both mortgages and mandates are concerned, we ask you to report separately the amounts of the provided coverage at origination.
- As the NBB observed different practices between banks when reporting lines 310-320, specific guidelines are added for these specific lines. These guidelines have to be applied on a best-effort basis for the reporting covering the situation as at end-June 2023 and end-December 2023 and on a compulsory basis as from the reporting covering the situation as at end-June 2024.
  - Only drawn amounts should be reported in lines 300/310/320, except when drawn amount is unknown at the time of reporting the credit amount in PHL (e.g. in case of a renovation or a new construction), then the requested credit amount can be reported.

[4] E.g. a borrower might have been granted 2 credit lines to buy its house. This should be considered as 1 credit exposure.

In any case, it should be ensured that the amount reported in row 300 is not smaller than the sum of rows 310 and 320.
    - The amount of the mortgage inscription should always be fully reported in row 320 (mortgage) and
        - if "credit amount - mortgage inscription – mandate" <= 0 ", then "credit amount - mortgage inscription" must be reported in row 310 (mandate) so as to reflect the part of the loan effectively covered by a mandate
        - if "credit amount - mortgage inscription – mandate" > 0 (i.e. part of the credit amount is not collateralized by real estate collateral), then the « mandate amount » must be reported in row 310 (mandate) → only in such a case can the amount reported in row 300 be higher than the sum of rows 310 and 320.
    - If the mortgage and/or mandate also serve as collateral for another loan, then the sum of the amount of the new loan ("new credit amount" here below) and the outstanding amount of the old loan(s) has to be considered as "total credit amount" here below, so as to equally allocate the collateral to each loan:
        - if "total credit amount - mortgage inscription – mandate" <= 0 ", then the following must be reported in row 320 (mortgage) : " (mortgage inscription / total credit amount) * new credit amount". The difference between row 300 and row 320 must then be reported in row 310 (mandate).
        - if "total credit amount - mortgage inscription – mandate" > 0 (i.e. part of the total credit amount is not collateralized by real estate collateral), then the following must be reported in row 320 (mortgage) : " (mortgage inscription / total credit amount) * new credit amount". The following must be reported in row 310 (mandate) : "(mandate / total credit amount) * new credit amount". In this case, the amount reported in row 300 will be higher than the sum of rows 310 and 320.
- Periods:
    - col.05-10: for the situation as at end-June and end-December;
    - col.15-65: for the situation as at end-December.

Table 6: type

- Line 100: only credits with a 100% fixed or 100% variable amortization plan should be reported here.
- Line 300: Any credits with a reimbursement formula based <u>both</u> on a capital amortization plan and any other reimbursement type (e.g. bullet credit) should be reported here.
- Periods:
    - col.05-14: for the situation as at end-June and end-December;
    - col.15-65: for the situation as at end-December.

Table 7: loan-to-value at origination

- The concepts of full or partial amortisation are defined under Table 6.
- Loans for which the LTV is unknown or for which no LTV can be computed have to be reported on row 500. Of those loans, loans for which no LTV can be computed due to the fact than no real estate collateral is provided have to be reported on row 600.
- A weighted average Loan-to-value at origination must be reported on row 700. This average must be weighted taking into account the amount of the new loans.
- Periods:
    - col.05-20: for the situation as at end-June and end-December;
    - col.21-65: for the situation as at end-December.

Table 8: current loan-to-value

- Loans for which the LTV is unknown or for which no LTV can be computed have to be reported on row 500. Of those loans, loans for which no LTV can be computed due to the fact than no real estate collateral is provided have to be reported on row 600.
- A weighted average current loan-to-value must be reported on row 700. This average must be weighted taking into account the outstanding (capital) amount of the loans.
- Periods:

- col.01-06: for the situation as at end-June and end-December;
- col.15-65: for the situation as at end-December.

Table 9: maturities at origination

- A weighted average maturity at origination must be reported on row 1000. This average must be weighted taking into account the amount of the new loans.
- Periods:
  - col.05-16: for the situation as at end-June and end-December;
  - col.19-65: for the situation as at end-December.

Table 10: debt service ratio at origination

- A weighted average debt service ratio at origination must be reported on row 900. This average must be weighted taking into account the amount of the new loans.
- Periods:
  - col.05-16: for the situation as at end-June and end-December;
  - col.19-65: for the situation as at end-December.

Table 11: loan-service-to-income at origination

- A weighted average loan-service-to-income at origination must be reported on row 900. This average must be weighted taking into account the amount of the new loans.
- Periods:
  - col.07-20: for the situation as at end-June and end-December.

Table 12: Loan-to-income at origination

- A weighted average loan-to-income at origination must be reported on row 1000. This average must be weighted taking into account the amount of the new loans.
- Periods:
  - col.07-16: for the situation as at end-June and end-December;

Table 13: debt-to-income at origination

- A weighted average debt-to-income at origination must be reported on row 1200. This average must be weighted taking into account the amount of the new loans.
- Periods:
  - col.07-16: for the situation as at end-June and end-December;

Table 14A: Additional information Buy-to-let

- Weighted average ICR and LTR ratios must be reported on rows 1200 and 2150. These averages must be weighted taking into account the amount of the new loans.
- Loans for which the ICR is unknown or for which no ICR can be computed have to be reported on row 1160. Of those loans, loans for which no ICR can be computed due to the fact the identified purpose is Buy-to-sell have to be reported on row 1170.
- Loans for which the LTR is unknown or for which no LTR can be computed have to be reported on row 2150. Of those loans, loans for which no LTR can be computed due to the fact the identified purpose is Buy-to-sell have to be reported on row 2160.
- Periods:
  - col.05-10: for the situation as at end-June and end-December;
- This table is to be reported on a best-effort basis until further notice.

Table 14A: Additional information Owner-occupied

- Weighted averages must be weighted taking into account the amount of the new loans.
- Periods:
  - col.05: for the situation as at end-June and end-December;

- This table is to be reported on a best-effort basis until further notice.

Table 15A: focus LTV IRB

- If the institution treats part of its exposures under IRB and other ones under STA, both table 15A and 15B have to be reported.
- The perimeter of exposures is here still the same, but excluding defaulted[5] exposures.
- This table investigates some parameters (outstanding, RWA, PD, LGD and EL) along a tri-dimensional view of loan-to-value, debt-service ratios and maturities, all at origination.
- Outstanding (stock) amounts have to be reported here.
- Periods:
    - col.05-20:for the situation as at end-December.

Table 15B: focus LTV STA

- If the institution treats part of its exposures under IRB and other ones under STA, both table 15A and 15B have to be reported.
- The perimeter of exposures is here still the same, but excluding defaulted[6] exposures.
- This table investigates some parameters (outstanding and RWA) along a tri-dimensional view of loan-to-value, debt-service ratios and maturities, all at origination.
- Outstanding (stock) amounts have to be reported here.
- Periods:
    - col. 05-20: for the situation as at end-December.

Table 16A: Joint distribution vintage - LSTI-O

- This table investigates the breakdown of new production along a multi-dimensional view of loan-to-value, loan-service-to income ratios, maturities and initial interest rate fixation period, all at origination.
- Vintage (production) amounts have to be reported here.
- Periods:
    - col.10-45: for the situation as at end-June and end-December;

Table 16A: Joint distribution vintage - DTI-O

- This table investigates the breakdown of new production along a multi-dimensional view of loan-to-value and debt-to income ratios.
- Vintage (production) amounts have to be reported here.
- Periods:
    - col.50-85: for the situation as at end-June and end-December;

---

[5] Defaulted according to the capital requirements regulation.

[6] Defaulted according to the capital requirements regulation.

Table 17: credit cost

- Stock values have to be reported in col. 05 and 10. Column 05 shows the provisions, impairments and expected losses values, while column 10 shows the assets to which the provisions, impairments and expected losses refer.
- The FINREP-like data only have to be reported by consolidating entities, while Schéma A-like and COREP-like data have to be reported by all institutions.
- Periods:
  - col. 05-10: for the situation as at end-June and end-December;
- For the definition of the different values to be reported, we refer hereunder to the Schéma A / FINREP / COREP nomenclature. However, the references here below do not refer to the perimeter of exposures, but only to the definition of the values that should be reported.

	Provisions / Impairments / Expected loss	Past due / Impaired / Defaulted Assets
Schéma A		
Unrecoverable and doubtful	SchémaA 50.11/199/29	SchémaA 50.10/199/29
o/w individually assessed	SchémaA 50.11/199/005+015	SchémaA 50.10/199/005
o/w collectively assessed	SchémaA 50.11/199/010+020	SchémaA 50.10/199/010
With an uncertain future	SchémaA 50.13/199/29	SchémaA 50.12/199/29
o/w individually assessed	SchémaA 50.13/199/005+015	SchémaA 50.12/199/005
o/w collectively assessed	SchémaA 50.13/199/010+020	SchémaA 50.12/199/010
FINREP		
Stage 1 and stage 2 loans	F04.04.1, col 015 (stage 1) F04.04.1, col 030 (stage 2)	F04.04.1, col 050 (stage 1) F04.04.1, col 060 (stage 2)
Not past due or past due ≤ 30d		
Past due > 30d ≤ 90d		
Past due > 90d		
o/w individually assessed		F12.01.a, row 170 (stage 1) F12.01.a, row 340 (stage 2)
o/w collectively assessed		F12.01.a, row 160 (stage 1) F12.01.a, row 330 (stage 2)
Stage 3 loans	F04.04.1, col 040 (stage 3)	F04.04.1, col 070 (stage 3)
Not past due or past due ≤ 90d		
Past due > 90d ≤ 180d		
Past due > 180d ≤ 1y		
Past due > 1y		
o/w individually assessed		F12.01.a, row 510 (stage 3)
o/w collectively assessed		F12.01.a, row 500 (stage 3)
COREP		
STA		
Provisions and value adjustments	C07.00, col 030	
Defaulted assets		C07.00, col 010, row 015
IRB		
Provisions and value adjustments	C08.01, col 290	
EL non-defaulted assets	C08.01, col 280 partim	
EL defaulted assets	C08.01, col 280 partim	
Defaulted assets		Defaults under C08.01, col 020

Table 18A: capital requirements IRB

- This table is mainly based on COREP C08.01 concepts. The only exceptions being the column 20 and the defined distribution over the different PD pools.
- Periods:
  - col. 05-40: for the situation as at end-December.
- For the definition of the different values to be reported, we refer hereunder to the COREP nomenclature:

PD[7] ASSIGNED TO THE OBLIGOR GRADE OR POOL	ORIGINAL EXPOSURE PRE CCF[8]	EAD	EAD-WEIGHTED AVERAGE floored LGD	EAD-WEIGHTED AVERAGE un-floored LGD	EAD-WEIGHTED AVERAGE MATURITY VALUE (DAYS)	RWA	EL	(-) VALUE ADJUSTMENTS AND PROVISIONS
	[005]	[010]	[015]	[020]	[025]	[030]	[035]	[040]
C08.01, col 010	**C08.01, col 020**	**C08.01, col 110**	**C08.01, col 230**	-	**C08.01, col 250**	**C08.01, col 260**	**C08.01, col 280**	**C08.01, col 290**
	[EUR]	**[EUR]**	**[%]**	**[%]**	**[days]**	**[EUR]**	**[EUR]**	**[EUR]**

Table 18B: capital requirements STA

- This table is mainly based on COREP C07.00 concepts.
- Lines: exposures should be distributed along the different risk-weights being applied for the calculation of the capital requirements.
- Periods:
  - col. 05-25: for the situation as at end-December.
- For the definition of the different values to be reported, we refer hereunder to the COREP nomenclature:

Columns

ORIGINAL EXP PRE CONVERSION FACTORS	(-) VALUE ADJ AND PROVISIONS ASSOCIATED WITH ORIGINAL EXP	EXP NET OF VALUE ADJ AND PROVISIONS	EXPOSURE VALUE	RISK WEIGHTED EXPOSURE AMOUNT
C07.00, col 010	**C07.00, col 030**	**C07.00, col 040**	**C07.00, col 200**	**C07.00, col 220**

Lines

35%	**C07.00, line 190**
50%	**C07.00, line 200**
75%	**C07.00, line 220**
100%	**C07.00, line 230**
150% (past due)	**C07.00, line 240**
Other risk weights	-

Table 19A : EPC scores

- Periods:
  - col.10-45: for the situation as at end-June and end-December.
- For the specific guidelines regarding this table, it is referred to NBB circular NBB_2020_45 and the related Q&A.

Table 19B : Joint distribution vintage - EPC

- Periods:
  - col.10-45: for the situation as at end-June and end-December.

[7] Line 'Total': exposure-weighted PD
[8] Pre CRM as well.

- For the specific guidelines regarding this table, it is referred to NBB circular NBB_2020_45 and the related Q&A.

2. General concepts

2.1. Buy-to-let (BTL)

'Buy-to-let housing or property' means any RRE directly owned by a private household primarily for letting to tenants.

'Buy-to-let loan' means the sum of all loans or loan tranches used by the borrower for the acquisition, renovation etc… of a buy-to-let property at the moment of loan origination.

In line with what is stated above, the ESRB definition is broadened to include loans used to purchase an immovable residential property even though not secured by the property.

The category "buy-to-let" covers "buy-to-sell" as well.

All non-owner occupied loans (see below) should be considered as buy-to-let loans.

2.2. Owner occupied (OO)

'Owner occupied loan' means the sum of all RRE loans or loan tranches used by the borrower for the acquisition, renovation etc… of an owner occupied RRE property at the moment of loan origination (incl. second residence and student accommodation for own use).

In line with what is stated above, the ESRB definition is broadened to include loans used to purchase an immovable residential property even though not secured by the property.

2.3. First time buyer (FTB)

'First time buyer' is to be understood as "first time mortgage borrower" and means a borrower to whom no RRE loan has been advanced before; in case there is more than one borrower (the case of RRE loan cosignatories) and one or more of these borrowers has previously been advanced an RRE loan, none of these borrowers is considered to be a first-time buyer. The status remains "first time buyer" for loans financing the renovation of the same property or the construction of a property on a previously purchased ground as first-time buyer within a period of 5 years following the origination of the first loan.

If no other reliable information is available, the NBB agrees that CKP is used as the source for identifying first time mortgage borrowers.

2.4. Renegotiated loan/internal refinancing

The ESRB recommendation does not provide any definition of "renegotiated loan".

But the ESRB recommendation specified that 'flows of loans' means any new production of loans over the reporting period; renegotiated loans should be included in the new production if the lender considers them as new loan contracts.

In this regard, the NBB requests the following:

- By renegotiated loan, one should understand a loan either internally refinanced or either externally refinanced; this definition would hence be broader than the one currently used in the ad-hoc reporting on loans excluding internally refinanced loans; contract renegotiations have not to be reported if they do not lead to a new contract to be registered in CKP.
- Renegotiated loans should be included in the flow statistics (vintages), when they take the form of a new contract, as is the case in the current PHL reporting. However, one additional column will be added to collect information regarding those renegotiated loans. This will hence make the ad-hoc reporting on loans excluding internally refinanced loans redundant and this ad-hoc reporting will hence be terminated.

3. Indicators

The indicators' definitions are based on the ESRB concepts as defined in " Recommendation of the European Systemic Risk Board" of 31 October 2016 on closing real estate data gaps (ESRB/2016/14), available on the ESRB website:
https://www.esrb.europa.eu/pub/pdf/recommendations/2016/ESRB_2016_14.en.pdf
They have been amended where needed to reflect the specificities of the Belgian mortgage loan market, together with Febelfin.

3.1. LTV at origination (LTV-O)

1. LTV-O shall be defined as:

$$\boldsymbol{LTVO = \frac{L}{V}}$$

2. For the purpose of the calculation, "L":

(a) includes all loans or loan tranches falling under the MCD definition of mortgage loan, following an aggregation of loans "by borrower";
(b) is measured based on disbursed amounts and therefore does not include any undrawn amounts on credit lines. In the case of property under construction, "L" is the sum of all loan tranches disbursed up to the reporting date, and LTV-O is computed on the date of disbursement of any new loan tranche[9]; alternatively, also undrawn amounts of loans granted for the construction of a new property or for renovation, can be included in the "L" value, together with an adjusted value for the "V" (see below).
(c) includes all loans that the reporting credit provider considers as part and parcel of the housing loan financing transaction. For instance, bridge loans, even when not directly covered through a mortgage or a mandate, have to be considered as part of the financing transaction and must be taken into account in the computation of the LTV;
(d) is not adjusted for the presence of other credit risk mitigants;
(e) does not include costs and fees related to the mortgage loan;
(f) does not include loan subsidies.

Belgian perspective:
- Loans (partly) covered by mandates fall under the MCD definition (See Example 1 below).
- In case of a new loan to a client with a positive outstanding amount on another mortgage loan at the same bank secured by the same property, the sum of the amount of the new loans and the outstanding amount of the old loan has to be considered as "L" in the calculation of LTV-O (see Example 2 Casus A below).

3. For the purpose of the calculation, *"V":*

(a) is computed on the basis of the property's "market value", measured as the lower of:
   1. the transaction value, as registered in a notary deed or in the sale agreement or "compromis", taking into account architects' estimates and invoices in case of new property or renovation, and
   2. the value as assessed by an independent external or internal appraiser.

   If only one value is available, this value should be used.
   In case of renovation, the current (indexed) value of the property can be used (see Example 2 Casus A below)

[9] In case of property under construction, the methodology for the computation of the LTV-O at a given point in time *n* can be summarized as:

$$LTVO_n = \frac{\sum_{i=1}^{n} L_i}{V_0 + \sum_{i=1}^{n} \Delta V_{i,i-1}}$$

Where $i = 1, \ldots, n$ is the number of loan tranches disbursed until time *n*, V_0 is the initial value of the real estate collateral (e.g. land) and $\Delta V_{i,i-1}$ represents the change in the property's value occurred during the period up to the disbursements of the *n*-th loan tranche.

(b) In the case of property under construction, “V” accounts for the total value of the property up to the reporting date (accounting for the increase in value due to the progress of the construction works).“V” is assessed upon disbursement of any new loan tranche, allowing for the computation of LTV-O. If the option is used to include undrawn amounts of loans granted for the construction of a new property or for renovation in the “L”, then V can also include the full value of planned renovation or construction works.
(c) is adjusted by the total amount of the debt, disbursed or not, that is secured under a mortgage through ‘prior’ liens on the property. In the case of more senior liens on the property, the full outstanding amount of the debt secured by these more senior liens needs to be deducted (cf. Example 2, Casus B, Option A below). In the case of ‘equal ranking liens’, an appropriate proportional adjustment should be made. If the outstanding amount of existing debts is not known, the amount of the mortgage inscription can be used (cf. Example 2, Casus B, Option B below).
(d) is not adjusted for the presence of other credit risk mitigants.
(e) does not include costs and fees related to the mortgage loan

Belgian perspective:
- Loans (partly) covered by mandates fall under the MCD definition (See Example 1 below).
- While costs related to the loan shall not be included in the “V” (e.g. file costs at the bank), VAT on renovation and construction works or VAT paid as part of the purchase of a new dwelling can be included in the “V”. On the contrary, registration rights and notary fees cannot be included in the “V”.
- Regarding the ranking of liens, mortgages are always to be considered as providing a more senior lien than mandates.
- The “V” shall not be adjusted for other credit risk mitigants. Financial collateral, in the form of e.g. securities portfolios or pledge of savings, shall hence not be taken into account. The LTV of loans which have no real estate collateral can hence not be calculated and has to be reported in a separate line of the relevant PHL tables (see Example 1 Casus D below).
- In case of new loan to a client with a positive outstanding amount on another loan at the same bank secured by the same property, the different values at the moment of the granting of the loan (e.g. in the case of a renovation, the sum of the current value of the property and of the planned works) have to be taken into account (see Example 2 Casus A below).

<u>3.2. Current-LTV (LTV-C)</u>

1. LTV-C is defined as:

$$\boldsymbol{LTVC = \frac{LC}{VC}}$$

2. For the purpose of the calculation, 'LC':

(a) is measured as the outstanding balance of the loan(s) —defined above as "L" (see section 3.1.) — at the reporting date, taking into account capital reimbursements, loan restructurings, new capital take-ups and, in the case of loans in foreign currencies, changes in the exchange rate.
(b) is adjusted to take account of the savings accumulated in an investment vehicle intended to reimburse the loan principal. The accumulated savings may be deducted from 'LC' only where the following conditions are satisfied:

1) the accumulated savings are unconditionally pledged to the creditor with the express purpose of reimbursing the loan principal at the contractually anticipated dates; and
2) an appropriate haircut is applied to reflect market and/or third-party risks associated with the underlying investments.

3. For the purpose of the calculation, 'VC':

(a) reflects the changes in the market value of 'V' (see section 3.1.), as defined above, since the most recent valuation of the property. The current value of the property should be assessed by an independent external or internal appraiser. If such assessment is not available, the current value of the property can be estimated using a granular real estate value index (e.g. based on transaction data). In case such real estate value index is also not available, a granular real estate price index can be used as alternative (to which an appropriate mark-down can be applied to account for depreciation). Any real estate value or price index should be sufficiently differentiated according to the geographical location of the property and the property type.
(b) is computed annually.

Belgian perspective:
- The indexation should be made according to property type while as regards geographical location, there is a need to balance accuracy with availability of sufficient number of transactions.
- Based on data from Statistics Belgium, the NBB considers the most detailed level of property price data which allows an indexation without compromising their representativeness as quarterly data broken down by type of dwellings (houses, villas and apartments) at the provincial level.

3.3. Loan to Income at origination (LTI-O)

'loan-to-income ratio at origination' (LTI-O) means the sum of all loans included in "L" (see section 3.1.) relative to the borrower's total annual disposable income at the moment of loan origination.

'disposable income' means the borrower's total yearly disposable income as registered by the credit provider at the moment of the mortgage loan origination, covering all sources of income minus taxes (net of tax rebates) and premiums (such as for health care, social security or medical insurance).

LTI-O is defined as:

$$\boldsymbol{LTI - O = \frac{L}{I}}$$

For the purpose of the calculation of 'L' at origination, we refer to the concept agreed under section 3.1.

For the purpose of the calculation, 'I' is defined as the disposable income.

The computation of disposable income should be done in a conservative way (e.g. by only taking recurrent sources of income into account), in line with institutions' credit policies. Net after-tax disposable recurrent income is defined as[10]: employee income + self-employment income (e.g. profits) + income from public pensions + income from private and occupational pensions + income from unemployment benefits + income from social transfers other than unemployment benefits + regular private transfers (such as alimonies) + net rental income from real estate property + income from financial investments + income from private business or partnership + regular income from other sources – taxes – health care/social security/medical insurance premiums + tax rebates.

Some of the income components can be estimated through a bulk assessment (*estimation forfaitaire*).

---

[10] For the purpose of this definition:
(a) 'gross rental income from real estate property' includes both rental income from owned property on which no RRE loan is currently outstanding and buy-to-let property. The rental income should be determined from the information that is available to banks or otherwise imputed. If precise information is not available, a best estimate of rental income should be provided by the reporting institution, and the methodology used to obtain it should be described;
(b) 'taxes' should include, in order of importance, payroll taxes, tax credits, pension or insurance premiums, if charged on gross income, specific taxes, e.g. property taxes, and other non-consumption taxes;
(c) 'health care/social security/medical insurance premiums' should include the fixed and compulsory expenditures that in some countries are made after taxes;
(d) 'tax rebates' should include restitutions from the tax authority that are linked to the RRE loan interest deduction;
(e) 'loan subsidies' should include all public sector interventions aimed at easing the borrower's debt servicing burden (e.g. subsidised interest rates, repayment subsidies).

3.4. Debt to income at origination (DTI-O)

'Debt-to-income ratio at origination' (DTI-O) means the total debt of the borrower at the moment of loan origination relative to the borrower's total annual disposable income at the moment of loan origination.

DTI-O is defined as:

$$DTI - O = \frac{D}{I}$$

For the purpose of the calculation, 'D' includes the total debt of the borrower, whether or not it is secured by real estate, including all outstanding financial loans (incl. consumer loans), i.e. granted by the RRE loan provider and by other lenders, at the moment of the RRE loan origination.

For the purpose of the calculation, 'I' has the same meaning as in Section 3.3.

All debts should be identified based on the customer's declaration at the time of the new loan origination. When needed, this declaration should be completed with a consultation of CKP.

3.5. Loan Service to Income at origination (LSTI-O)

'loan service' means the combined interest and principal repayment on all loans included in "L" (see section 3.1.) over one year.

'loan service-to-income ratio at origination' (LSTI-O) means the annual loan service on all loans included in "L" (see section 3.1.) relative to the borrower's total annual disposable income at the moment of loan origination.

LSTI-O is defined as:

$$LSTI - O = \frac{LS}{I}$$

For the purpose of the calculation, 'LS' is the annual debt servicing cost of the RRE loan, defined as 'L' in Section 3.1. at the moment of loan origination.

For the purposes of the calculation, 'I' has the same meaning as in Section 3.3.

3.6. Debt Service to Income at origination (DSTI-O)

'debt service' means the combined interest and principal repayment on a borrower's total debt over a given period (one year or one month);

'debt-service-to-income ratio at origination' (DSTI-O) means the annual total debt service relative to the borrower's total annual or monthly disposable income at the moment of loan origination;

DSTI-O is defined as:

$$\boldsymbol{DSTI-O}=\frac{\boldsymbol{DS}}{\boldsymbol{I}}$$

For the purpose of the calculation, 'DS' is the annual debt servicing cost of the total debt of the borrower, defined as 'D' in section 3.4, at the moment of loan origination.

For the purposes of the calculation, 'I' has the same meaning as in Section 3.4.

3.7. Interest Coverage Ratio at origination (ICR-O)

'interest coverage ratio' (ICR-O) means the gross annual rental income of the borrower (i.e. before operational expenses and taxes) accruing from the buy-to-let property/ies relative to the annual interest cost of the loan(s) used to finance the property/ies, at loan origination.

ICR-O is defined as:

$$\boldsymbol{ICR-O}=\frac{\text{Gross annual rental income}}{\text{Annual interest costs}}$$

For the purposes of the calculation, 'gross annual rental income' is the annual rental income accruing from buy-to-let housing, gross of any operational expenses to maintain the property's value and of taxes;

For the purposes of the calculation, 'annual interest costs' are the annual interest costs associated with the loan(s) used to finance the buy-to-let property/ies.
For the calculation of this indicator, 'buy-to-let loan' is limited to RRE loans financing the buy-to-let property/ies, as defined in section 2.1. Since 'buy-to-sell' loans are not associated with rental income, the ICR-O is considered "not available" for these loans and hence they have to be reported in a separate line of the relevant PHL table.

3.8. Loan to Rent at origination (LTR-O)

'loan-to-rent ratio at origination' (LTR-O) means the "L" of the buy-to-let loan(s) of the borrower at the moment of loan origination relative to the annual rental income of the borrower accruing from the buy-to-let property/ies.

LTR-O is defined as:

$$\boldsymbol{LTR-O}=\frac{\text{Buy}-\text{to}-\text{let loan}}{\text{Net (gross)annual rental income}}$$

For the purpose of the calculation, 'buy-to-let loan' is limited to RRE loans financing the buy-to-let property/ies, as defined in section 2.1. Since 'buy-to-sell' loans are not associated with rental income, the LTR-O is considered "not available" for these loans and hence they have to be reported in separate line of the relevant PHL table.

The net annual rental income of the borrower should be used for the calculation of the LTR-O. If this information is not available, gross annual rental income may be used as an alternative.

For the purpose of the calculation:
(a)‘net annual rental income’ is the annual rental income accruing from the buy-to-let property net of any operational expenses to maintain the property’s value but gross of any taxes;
(b)‘gross annual rental income’ is the annual income accruing from renting out the buy-to-let property to tenants, gross of any operational expenses to maintain the property’s value and of taxes.

The table below covers different cases for loans granted by one same bank. If a loan has been granted by another bank with a more senior lien, then rules explained under section 3.1.3.c apply on top of the examples show below.

	New OO-loan (without existing OO-loan)		New BTL-loan (with existing OO-loan)*		New BTL-loan (without existing OO-loan)*	
	Mortgage/mandate on OO	No real estate collateral	Mortgage/mandate on OO	Mortgage/mandate on BTL	Mortgage/mandate on OO	Mortgage/mandate on BTL
L	L_{OO}	L_{OO}	$L_{BTL} + L_{OO}$	L_{BTL}	L_{BTL}	L_{BTL}
V	V_{OO}	0 (LTV-O to be reported seperately)	V_{OO}	V_{BTL}	V_{OO}	V_{BTL}
I	I	I	I	I	I	I
D	L_{OO}+ L_{other}	L_{OO}+ L_{other}	$L_{BTL} + L_{00} + L_{other}$	$L_{BTL} + L_{00} + L_{other}$	$L_{BTL} + L_{other}$	L_{BTL}+ L_{other}

$L_{OO:}$ owner-occupied loan amount
$L_{BTL:}$ buy-to-let loan amount
V_{OO}: value of the owner-occupied property (own residence)
$V_{BTL:}$ value of the buy-to-let property
$L_{other:}$ other loan amounts (including consumer loans and loans granted by other banks)

* The same reasoning applies to a loan granted for the purchase of a second owner-occupied residence (holiday home, student accommodation…).

In the case of a new loan for renovation purposes and of an existing loan at the same bank granted for the purchase of the property that is now being renovated, see Voorbeeld 2, Casus A.

The category of the loan (i.e. OO or BTL) is determined by the purpose of the loan (i.e. financing an OO-property or a BTL-property). In the case of loans financing a non-immovable investment, then the category of the loan is determined by the nature of the real estate collateral (i.e. OO-property or BTL-property).

Examples of indicators' computation

Voorbeeld 1

Aankoop van een eerste woning : waarde = 500.000 (=prijs in compromis), kosten (notaris, registratie,…) = 60.000, kredietaanvraag woonkrediet = 400.000 (jaarlijkse aflossing: 30.000), lopend consumentenkrediet = 5.000 (jaarlijkse aflossing : 1500); jaarlijks netto inkomen: 50.000

For the sake of clarity, while calculations of indicators may incorporate other elements than the newly granted loans, new production volume (vintage) to be reported in PHL is limited to the amount of the new loan (in this case, 400.000)

<u>Casus A: 100% hypotheek op gefinancierde woning</u>

<u>Casus B: 50% hypotheek 50% volmacht op gefinancierde woning</u>

<u>Casus C: 50% volmacht op gefinancierde woning</u>

For casus A, B and C::

L = 400.000
LS = 30.000
D = 400.000 + 5.000 = 405.000
DS = 30.000 + 1.500 = 31.500
V = 500.000
I = 50.000

LTV-O = 400.000 / 500.000 = 80%

LTI-O = 400.000 / 50.000 = 8.0
DTI-O = 405.000 / 50.000 = 8.1

LSTI-O = 30.000 / 50.000 = 60%
DSTI-O = 31.500 / 50.000 = 63%

<u>Casus D: effectenpand ten belope van 400.000 (met hypotheekbelofte op gefinancierde woning)</u>

Deze casus valt binnen de scope van MCD

V = 0 ; LTV-O = 400.000 / 0 (= apart te rapporteren in de relevante PHL-tabellen, met name onder "not available o/w no real estate collateral")

LTI-O = 400.000 / 50.000 = 8.0
DTI-O = 405.000 / 50.000 = 8.1

LSTI-O = 30.000 / 50.000 = 60%
DSTI-O = 31.500 / 50.000 = 63%

Voorbeeld 2

Verbouwing enige woning : huidige waarde woning = 400.000, verbouwkost = 100.000 (inclusief BTW), kosten (notaris, registratie,…) = 2.000, kredietaanvraag WK = 80.000 (jaarlijkse aflossing: 6.000), lopend consumentenkrediet = 5.000 (jaarlijkse aflossing : 1500); jaarlijks netto inkomen: 50.000

For the sake of clarity, while calculations of indicators may incorporate other elements than the newly granted loans, new production volume (vintage) to be reported in PHL is limited to the amount of the new loan (in this case, 80.000)

<u>Casus A : Hypotheek eigen financiële instelling op woning, uitstaand bedrag lopend woonkrediet eigen financiële instelling = 200.000 (jaarlijkse aflossing: 15.000)</u>

L = 80.000 + 200.000 = 280.000
V = 400.000 + 100.000 = 500.000
LTV-O = 56%

LTI = 280.000 / 50.000 = 5.6
DTI = (280.000 + 5.000) / 50.000 = 5.7

LSTI = (6.000 + 15.000) / 50.000 = 42%
DSTI = (6.000 + 15.000 + 1.500) / 50.000 = 45%

<u>Casus B : Hypotheek in eerste rang bij een andere financiële instelling op de woning ten belope van 300.000; uitstaand bedrag lopend WK bij de andere financiële instelling = 200.000 (jaarlijkse aflossing: 15.000)</u>

<u>Optie A:</u> resterend saldo in mindering brengen op waarborg
L = 80.000
V = (400.000 + 100.000) - 200.000 = 300.000
LTV-O = 27%

LTI = 80.000 / 50.000 = 1.6
DTI = (80.000 + 200 000 + 5.000) / 50.000 = 5.7

LSTI = 6.000 / 50.000 = 12%
DSTI = (6.000 + 15.000 + 1.500) / 50.000 = 45%

<u>Optie B:</u> waarde hypothecaire inschrijving in mindering brengen
L = 80.000
V = (400.000 + 100.000) - 300.000= 200.000
LTV-O = 40%

LTI = 80.000 / 50.000 = 1.6
DTI = (80.000 + 200.000 + 5.000) / 50.000 = 5.7

LSTI = 6.000 / 50.000 = 12%
DSTI = (6.000 + 15.000 + 1.500) / 50.000 = 45%

Voorbeeld 3
Bouwen op beschikbare grond (eerste woning) : huidige waarde grond = 100.000, bouwkost = 400.000 (BTW inbegrepen), kosten (notaris, registratie,…) = 20.000, kredietaanvraag WK = 300.000

<u>Casus A: hypotheek bij eigen financiële instelling op grond, uitstaand bedrag lopend woonkrediet bij eigen financiële instelling = 50.000</u>

L = 300.000 + 50.000 = 350.000
V = 100.000 + 400.000 = 500.000
LTV-O = 70%

<u>Casus B: geen lopend krediet op grond, hypotheek wordt nu genomen</u>

L = 300.000
V = 500.000
LTV-O = 60%

Voorbeeld 4
Aankoop eerste woning + verbouwen : waarde woning = 200.000, verbouwkost = 300.000 (BTW inbegrepen), kosten (notaris, registratie,…) = 30.000, kredietaanvraag woonkrediet = 400.000

L = 400.000
V = 200.000 + 300.000 = 500.000
LTV-O: 80%

Voorbeeld 5
Aankoop grond + bouwen (eerste woning) : waarde grond = 100.000, bouwkost = 400.000 (BTW inbegrepen), kosten (notaris, registratie,…) = 30.000, kredietaanvraag woonkrediet = 400.000

L = 400.000
V = 100.000 + 400.000 = 500.000
LTV-O: 80%

Voorbeeld 6
Aankoop woning + verkoop van de huidige (kleinere) woning: waarde huidige woning = 200.000, uitstaand bedrag lopend WK bij de eigen financiële instelling = 150.000, waarde nieuwe woning = 400.000, kosten (notaris, registratie…) = 30.000. Op aanvraagmoment: hypotheek op oude woning, volmacht op nieuwe woning. Na verkoop oude woning: volmacht op nieuwe woning wordt omgezet in inschrijving. Lopend WK van 150.000 wordt vereffend bij verkoop van de huidige woning. Kredietaanvraag = 400.000 (waarvan 50.000 overbrugging en 350.000 langlopend WK)

De berekening gebeurt met alle kredieten in scope, dus inclusief overbruggingskredieten:
L = 150.000 + 50.000 + 350.000 = 550.000
V = 200.000 + 400.000 = 600.000
LTV-O: 92%

Voorbeeld 7
Aankoop woning + verkoop huidige (grotere) woning : waarde huidige woning = 400.000, waarde nieuwe woning = 200.000, kosten (notaris, registratie,…) = 15.000.
Hypotheek eigen financiële instelling op huidige woning, uitstaand bedrag lopend WK eigen financiële instelling = 50.000. Op aanvraagmoment : hypotheek op oude woning, volmacht op nieuwe woning. Na verkoop oude woning : volmacht op nieuwe woning wordt omgezet in inschrijving. Lopend WK van 50.000 wordt vereffend bij verkoop van de huidige woning. Kredietaanvraag 250.000 (waarvan 100.000 overbrugging en 150.000 langlopend WK)

Het betreft eenzelfde voorbeeld als voorbeeld 6, enkel wordt van de overstap van een duurdere huidige woning naar een goedkopere nieuwe woning uitgegaan.
De berekening gebeurt met alle kredieten in scope, dus inclusief overbruggingskredieten:
L = 50.000 + 100.000 + 150.000 = 300.000
V = 400.000 + 200.000 = 600.000
LTV-O = 50%

Voorbeeld 8 (Buy-to-let) (idem voor aankoop tweede residentie)

Aankoop buy-to-let pand; waarde buy-to-let pand = 200.000; kredietaanvraag WK = 100.000 (jaarlijkse aflossing: 7.000); jaarlijkse netto huurinkomsten = 12.000

Huidige waarde eigen woning = 400.000, <u>uitstaand bedrag lopend woonkrediet eigen financiële instelling = 200.000 (jaarlijkse aflossing: 15.000)</u>

Lopend consumentenkrediet = 5.000 (jaarlijkse aflossing : 1500);
Jaarlijks netto inkomen = 50.000 (met uitsluiting van nieuwe netto huurinkomsten)

For the sake of clarity, while calculations of indicators may incorporate other elements than the newly granted loans, new production volume (vintage) to be reported in PHL is limited to the amount of the new loan (in this case, 100.000, to be reported as buy-to-let loan)
<u>Casus A: Hypotheek op buy-to-let pand voor nieuw buy-to-let krediet,</u>

L = 100.000
V = 200.000
LTV-O = 50%

LTI = 100.000 / (50.000 + 12.000) = 1.6
DTI = (100.000 + 200.000 + 5.000) / (50.000 + 12.000) = 4.9

LSTI = 7.000 / (50.000 + 12.000) = 11%
DSTI = (7.000 + 15.000 + 1.500) / (50.000 + 12.000) = 38%

<u>Casus B: Hypotheek op eigen woning voor nieuw buy-to-let krediet,</u>

L = 200.000 + 100.000 = 300.000
V = 400.000
LTV-O = 75%

LTI = 300.000 / (50.000 + 12.000) = 4.8
DTI = (100.000 + 200.000 + 5.000) / (50.000 + 12.000) = 4.9

LSTI = (7.000 +15.000) / (50.000 + 12.000) = 35 %
DSTI = (7.000 + 15.000 + 1.500) / (50.000 + 12.000) = 38%

Voorbeeld 9

Aankoop van een eerste woning : waarde = 250.000 (=prijs in compromis), kosten (notaris, registratie,…) = 35.000, kredietaanvraag woonkrediet door Bank 1 = 200.000 (jaarlijkse aflossing: 15.000), kredietaanvraag krediet voor 20% waarde + kosten door Bank 2 = 85.000 (jaarlijkse aflossing: 5.000); lopend consumentenkrediet = 5.000 (jaarlijkse aflossing : 1500) jaarlijks netto inkomen: 50.000.

For the sake of clarity, while calculations of indicators may incorporate other elements than the newly granted loans, new production volume (vintage) to be reported in PHL is limited to the amount of the new loan (in this case, 200.000 by Bank 1 and 85.000 by Bank 2)

<u>Casus A: Hypotheek in eerste rang op gefinancierde woning door Bank 1; effectenpand voor Bank 2</u>
<u>Casus B: Hypotheek in eerste rang op gefinancierde woning door Bank 1; hypotheek in tweede rang op gefinancierde woning door Bank 2</u>

There is no difference in the indicators calculation and the amounts to be reported between the two cases. For the two banks: the two loans must be considered as part and parcel of a housing loan financing transaction (at least partly financed with real estate collateral) and must thus be included in “L”. Indicators will be identical for the two banks as they are financing the same transaction.

Bank 1

L = 200.000 + 85.000 = 285.000
LS = 15.000 + 5.000 = 20.000
D = 200.000 + 85.000 + 5.000 = 290.000
DS = 15.000 + 5.000 + 1.500 = 21.500
V = 250.000
I = 50.000

LTV-O = 285.000 / 250.000 = 114%
LTI-O = 285.000 / 50.000 = 5.7
DTI-O = 290.000 / 50.000 = 5.8
LSTI-O = 20.000 / 50.000 = 40%
DSTI-O = 21.500 / 50.000 = 43%

Bedrag te rapporteren: 200.000 met LTV van 114%

Bank 2

L = 200.000 + 85.000 = 285.000
LS = 15.000 + 5.000 = 20.000
D = 200.000 + 85.000 + 5.000 = 290.000
DS = 15.000 + 5.000 + 1.500 = 21.500
V = 250.000
I = 50.000

LTV-O = 285.000 / 250.000 = 114%
LTI-O = 285.000 / 50.000 = 5.7
DTI-O = 290.000 / 50.000 = 5.8
LSTI-O = 20.000 / 50.000 = 40%
DSTI-O = 21.500 / 50.000 = 43%

Bedrag te rapporteren: 85.000 met LTV van 114%

*****