

Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014 on credit agreements for consumers relating to residential immovable property and amending Directives 2008/48/EC and 2013/36/EU and Regulation (EU) No 1093/2010 (Text with EEA relevance)

ANNEX I

CALCULATION OF THE ANNUAL PERCENTAGE RATE OF CHARGE (APRC)

I.

Basic equation expressing the equivalence of drawdowns on the one hand and repayments and charges on the other.

The basic equation, which establishes the annual percentage rate of charge (APRC), equates, on an annual basis, the total present value of drawdowns on the one hand and the total present value of repayments and payments of charges on the other hand, i.e.:

$$\sum_{k=1}^m C_k(1+X)^{-t_k} = \sum_{l=1}^{m'} D_l(1+X)^{-s_l}$$

where:

- X is the APRC
- m is the number of the last drawdown
- k is the number of a drawdown, thus $1 \leq k \leq m$
- C_k is the amount of drawdown k
- t_k is the interval, expressed in years and fractions of a year, between the date of the first drawdown and the date of each subsequent drawdown, thus $t_1 = 0$
- m' is the number of the last repayment or payment of charges
- l is the number of a repayment or payment of charges
- D_l is the amount of a repayment or payment of charges
- s_l is the interval, expressed in years and fractions of a year, between the date of the first drawdown and the date of each repayment or payment of charges.

Remarks:

- (a) The amounts paid by both parties at different times shall not necessarily be equal and shall not necessarily be paid at equal intervals.
- (b) The starting date shall be that of the first drawdown.
- (c) Intervals between dates used in the calculations shall be expressed in years or in fractions of a year. A year is presumed to have 365 days (or 366 days for leap years), 52 weeks or 12 equal months. An equal month is presumed to have 30,41666 days (i.e. 365/12) regardless of whether or not it is a leap year.

Where intervals between dates used in the calculations cannot be expressed as a whole number of weeks, months or years, the intervals shall be expressed as a whole number of one of those periods in combination with a number of days. Where using days:

- (i) every day shall be counted, including weekends and holidays;
- (ii) equal periods and then days shall be counted backwards to the date of the initial drawdown;
- (iii) the length of the period of days shall be obtained excluding the first day and including the last day and shall be expressed in years by dividing this period by the number of days (365 or 366 days) of the complete year counted backwards from the last day to the same day of the previous year.

(d) The result of the calculation shall be expressed with an accuracy of at least one decimal place. If the figure at the following decimal place is greater than or equal to 5, the figure at the preceding decimal place shall be increased by one.

(e) The equation can be rewritten using a single sum and the concept of flows (A_k), which will be positive or negative, in other words either paid or received during periods 1 to n , expressed in years, i.e.:

$$S = \sum_{k=1}^n A_k (1 + X)^{-k},$$

S being the present balance of flows. If the aim is to maintain the equivalence of flows, the value will be zero.

II. Additional assumptions for the calculation of the APRC

(a) If a credit agreement gives the consumer freedom of drawdown, the total amount of credit shall be deemed to be drawn down immediately and in full.

(b) If a credit agreement provides different ways of drawdown with different charges or borrowing rates, the total amount of credit shall be deemed to be drawn down at the highest charge and borrowing rate applied to the most common drawdown mechanism for this type of credit agreement.

(c) If a credit agreement gives the consumer freedom of drawdown in general but imposes, amongst the different ways of drawdown, a limitation with regard to the amount of credit and period of time, the amount of credit shall be deemed to be drawn down on the earliest date provided for in the credit agreement and in accordance with those drawdown limits.

(d) If different borrowing rates and charges are offered for a limited period or amount, the highest borrowing rate and charges shall be deemed to be the borrowing rate and charges for the whole duration of the credit agreement.

(e) For credit agreements for which a fixed borrowing rate is agreed in relation to the initial period, at the end of which a new borrowing rate is determined and subsequently periodically adjusted according to an agreed indicator or internal reference rate the calculation of the APRC shall be based on the assumption that, at the end of the fixed borrowing rate period, the borrowing rate is the same as at the time of calculation of the APRC, based on the value of the agreed indicator or internal reference rate at that time, but is not less than the fixed borrowing rate.

(f) If the ceiling applicable to the credit has not yet been agreed, that ceiling is assumed to be EUR 170 000. In the case of credit agreements — other than contingent liabilities or guarantees — the purpose of which is not to acquire or retain a right in immovable property or land, overdrafts, deferred debit cards or credit cards this ceiling is assumed to be EUR 1 500.

(g) In the case of credit agreements other than overdrafts, bridging loans, shared equity credit agreements, contingent liabilities or guarantees and open-ended credit agreements as referred to in the assumptions set out in points (i), (j), (k), (l) and (m):

(i) if the date or amount of a repayment of capital to be made by the consumer cannot be ascertained, it shall be assumed that the repayment is made at the earliest date provided for in the credit agreement and is for the lowest amount for which the credit agreement provides;

- (ii) if the interval between the date of initial drawdown and the date of the first payment to be made by the consumer cannot be ascertained, it shall be assumed to be the shortest interval.
- (h) Where the date or amount of a payment to be made by the consumer cannot be ascertained on the basis of the credit agreement or the assumptions set out in points (g), (i), (j), (k), (l) and (m) it shall be assumed that the payment is made in accordance with the dates and conditions required by the creditor and, when these are unknown:
 - (i) interest charges are paid together with the repayments of the capital;
 - (ii) non-interest charges expressed as a single sum are paid at the date of the conclusion of the credit agreement;
 - (iii) non-interest charges expressed as several payments are paid at regular intervals, commencing with the date of the first repayment of capital, and if the amount of such payments is not known they shall be assumed to be equal amounts;
 - (iv) the final payment clears the balance of capital, interest and other charges, if any.
- (i) In the case of an overdraft facility, the total amount of credit shall be deemed to be drawn down in full and for the whole duration of the credit agreement. If the duration of the overdraft facility is not known, the APRC shall be calculated on the assumption that the duration of the credit is three months.
- (j) In the case of a bridging loan, the total amount of credit shall be deemed to be drawn down in full and for the whole duration of the credit agreement. If the duration of the credit agreement is not known the APRC shall be calculated on the assumption that the duration of the credit is 12 months.
- (k) In the case of an open ended credit agreement, other than an overdraft facility and bridging loan, it shall be assumed that:
 - (i) for credit agreements, the purpose of which is to acquire or retain rights in immovable property the credit is provided for a period of 20 years starting from the date of the initial drawdown, and that the final payment made by the consumer clears the balance of capital, interest and other charges, if any; in the case of credit agreements the purpose of which is not to acquire or retain rights in immovable property or which are drawn down by deferred debit cards or credit cards, this period shall be of one year;
 - (ii) the capital is repaid by the consumer in equal monthly payments, commencing one month after the date of the initial drawdown. However, in cases where the capital must be repaid only in full, in a single payment, within each payment period, successive drawdowns and repayments of the entire capital by the consumer shall be assumed to occur over the period of one year. Interest and other charges shall be applied in accordance with those drawdowns and repayments of capital and as provided for in the credit agreement.

For the purposes of this point, an open-ended credit agreement is a credit agreement without fixed duration and includes credits which must be repaid in full within or after a period but, once repaid, become available to be drawn down again.

- (l) In the case of contingent liabilities or guarantees, the total amount of credit shall be deemed to be drawn down in full as a single amount at the earlier of:
 - (a) the latest draw down date permitted under the credit agreement being the potential source of the contingent liability or guarantee; or

- (b) in the case of a rolling credit agreement at the end of the initial period prior to the rollover of the agreement.
- (m) In the case of shared equity credit agreements:
 - (i) the payments by consumers shall be deemed to occur at the latest date or dates permitted under the credit agreement;
 - (ii) percentage increases in value of the immovable property which secures the shared equity credit agreement, and the rate of any inflation index referred to in the agreement, shall be assumed to be a percentage equal to the higher of the current central bank target inflation rate or the level of inflation in the Member State where the immovable property is located at the time of conclusion of the credit agreement or 0 % if those percentages are negative.