

Instructions concerning leveraged transactions

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What are the terms of a loan?

A loan (a leveraged loan) may be taken out in currencies specified on the list "Interest rates for loan and margin transactions at LHV" published on the website of the Bank. Interest is charged for the use of a loan once a month, debited from the account linked to the Customer's loan on the 5th day of each month.

The loan is repaid automatically. Each transfer into the account linked to the Customer's loan reduces the amount of the loan taken out, while debt finance remains available in the amount of free equity. If the loan is denominated in one currency and the transfer into the account linked to the Customer's loan is denominated in another, a currency conversion must be carried out by the Customer in order to repay the loan (currency is not converted automatically). Interest is payable only for the dates on which the loan has been used.

Financing the purchase of securities through a loan constitutes the use of leverage. Leveraged transactions are indispensable for active investors but also involve risks, which may be reviewed [here](#).

In case of leveraged transactions or a margin loan, the loan has a term of 1 month and is extended automatically if the collateral in the account linked to the Customer's loan is adequate for securing the loan. The maximum loan amount depends on the market value of the collateral in the account linked to the Customer's loan as well as on the general limit set by the Bank. The loan limit that may be provided for effecting leveraged transactions is no more than EUR 100 000 or its equivalent in another currency. If a loan requirement exceeds the above amount, Customer Support at the Bank should be contacted on 6 800 400 or at info@lhv.ee. A leveraged loan should be preferred if the Customer wishes to use debt finance to buy securities (it is not permitted to natural persons to withdraw money from the account for any other purpose).

How is the value of collateral calculated?

When taking out a loan (including a short position), the Customer must have adequate collateral in the account linked to the Loan. If security prices move in a direction unfavourable for the Customer, the collateral will serve to ensure that the assets available in the account are adequate for the Customer to be able to repay the loan or to close the short position and to pay for the securities to be redeemed. The value of the collateral (collateral value) is ascertained by multiplying the market value of the collateral in the account linked to the Customer's loan by the collateral rate (see the list of financial instruments accepted as collateral).

Collateral value = market value of collateral*collateral rate

If the collateral rate of a security is 0%, it follows that this security has no collateral value, and the Customer will not be granted any loans against the collateral of this security.

The Bank has the right to apply a higher or lower collateral rate if deemed appropriate due to the risk level of some securities. The adequacy of collateral may be monitored on the basis of two different indicators. These are net equity ratio and free equity.

Net equity ratio

The net equity ratio is the ratio of collateral value to obligations, its purpose being the assessment of the adequacy of collateral value. In case of a loan, the maximum net equity ratio is 100% (no loan taken out by the Customer), whereas the minimum net equity ratio is negative infinity (loan taken out exceeds its collateral). In case of a short position, however, the maximum net equity ratio may be infinite (very little short selling compared to collateral value), whereas the minimum is -100% (no collateral value).

The net equity ratio must exceed 50% for both a loan and short selling. This limit has been set in order to meet the following criteria:

- Loan – let us assume that a loan is backed by securities with a collateral rate of 50%, and the Customer takes out a loan in the maximum amount (net equity ratio of 50%). In this case, the price of the relevant security must fall by 50% in order for the Customer to no longer be able to repay the loan to the Bank.
- Short selling – let us assume that the Customer has acquired a short position in the maximum amount (net equity ratio of 50%). In this case, the price of the short-sold security must increase by 50% in order for the Customer to no longer be able to redeem the borrowed securities.

If the net equity ratio drops below 50%, the Bank will become entitled to close the Customer's positions, and the Customer must transfer additional collateral into the account or serve liabilities, that is, liquidate short positions or repay loans taken out. Short positions are liquidated by redeeming securities. A loan taken out may be repaid by transferring funds into the account linked to the loan or by selling securities in the account.

Under normal market conditions, the Bank does not begin to liquidate the Customer's positions immediately. It is normal practice that when the net equity ratio drops below 50%, the Customer can no longer take out any loans or acquire new positions. If the net equity ratio drops below 45%, the Bank will e-mail the Customer a warning, and if the net equity ratio drops below 40%, the Bank will e-mail the Customer a further warning and may, without the Customer's consent, begin to liquidate the Customer's positions until the net equity ratio is once more at least 50%. The net equity ratio is calculated on the basis of the following formulae:

where: N – Net equity ratio, A – Collateral value, L – Loan, and S – Liquidation value of the short position.

In case of a short position:

$$N = \frac{A - 0,75S}{0,75S}$$

In case of a loan:

$$N = \frac{A - 0,5L}{A}$$

In case of a short position and a loan:

$$N = \frac{A - \sqrt{A^2 - 1,5S(2A - L - 1,5S)}}{1,5S}$$

Assuming that a Customer has portfolios A and B, with AA stocks worth EUR 2000 in the former and BB stocks also worth EUR 2000 in the latter. In case of either portfolio, the Customer has borrowed EUR 1000. The collateral rate is 50% for AA stocks and 40% for BB stocks.

Portfolio A:

Collateral value = EUR 2000*50% = EUR 1000

Net equity ratio = $(1000 - 0.5 * 1000) / 1000 = 0.5$ (50% shown in the Internet Bank)

Portfolio B:

Collateral value = EUR 2000*40% = EUR 800

Net equity ratio = $(800 - 0.5 * 1000) / 800 = 0.375$ (37.5% shown in the Internet Bank)

Portfolio A is right on the borderline, and no more securities may be purchased and added to it, whereas the net equity ratio of portfolio B is at a level where the Bank has to begin liquidating positions.

Free equity

Whereas the net equity ratio represents the percentage of incurred liabilities covered by collateral value, the value of free equity represents the actual amount that can be borrowed without the net equity ratio dropping below 50%. The net equity ratio and free equity are interlinked, so that the net equity ratio is 50% when free equity is nil.

To ascertain the free equity, first the collateral value of the collateral is calculated (collateral multiplied by the collateral rate), and from this amount the total of liabilities (weighted market value of short positions and loans) is deducted. If the result is positive, the relevant amount may still be borrowed. The Internet Bank indicates this amount on the line "Free equity or available limit"; however, the line "Free equity or available limit x 2" shows the amount that may be used for buying collateral with a collateral rate of 50%.

Assuming that there is currency worth EUR 1000 in the account linked to the Customer's loan (free equity: EUR 750), the Customer will be able to conduct the following transactions:

	same currency	other currency
transfer money out of the account (securities-backed overdraft facility only)	EUR 1000 *	EUR 750 *
purchase securities with a collateral rate of 0%	EUR 1000 *	EUR 750*
purchase securities with a collateral rate of 50%	EUR 2000 *	EUR 1500*
purchase securities with a collateral rate of 60%	EUR 2500 *	EUR 1875*
open a short position (leveraged transactions only)	EUR 2000 *	EUR 2000*
purchase currency		EUR 3000*

* free equity in EUR

Assuming that there are securities worth EUR 1000 with a 50% collateral rate in the account linked to the Customer's loan (free equity: EUR 500), the Customer may conduct transactions such as the following:

transfer money out of the account (securities-backed overdraft facility only)	EUR 500*
purchase securities with a collateral rate of 0%	EUR 500*
purchase securities with a collateral rate of 50%	EUR 1000*
purchase securities with a collateral rate of 60%	EUR 1250*
open a short position (leveraged transactions only)	EUR 1333*
purchase currency	EUR 2000*

* free equity in EUR