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# Rikipedia

PRODUCT GUIDE

RIETUMU BANKA | Vesetas 7

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## Contents

<b>Shares, ETF</b> .....	3
<b>Common Shares</b> .....	3
<b>Complex Shares</b> .....	6
<b>Debt Instruments</b> .....	13
<b>Ordinary Bonds</b> .....	13
<b>Complex Bonds</b> .....	17
<b>Corporate Action (Events)</b> .....	21
<b>Derivatives and Margin Instruments</b> .....	23
<b>Simple Derivatives</b> .....	27
<b>Complex Derivatives</b> .....	30
<b>Options Strategies</b> .....	35
<b>Rolling Spot FX</b> .....	37
<b>Contract for Difference (CFD)</b> .....	40
<b>Metals (XAU, XAG, XPD and others). Currency swaps and forwards</b> .....	43
<b>Unallocated Bullion</b> .....	43
<b>Currency Swaps</b> .....	46
<b>Currency Forwards</b> .....	48
<b>Fund Shares</b> .....	50
<b>UCITS investment funds (regulated mutual funds)</b> .....	50
<b>Non-UCITS Funds</b> .....	53
<b>Money Market and Structured Deposits</b> .....	55
<b>Ordinary Money Market Instruments</b> .....	55
<b>Complex Money Market Instruments</b> .....	57
<b>Structured Deposits</b> .....	59
<b>Use of Margin Loans</b> .....	61
<b>Trading Via Electronic Platforms</b> .....	64
<b>Table of Suitability of Financial Instruments for Investment Objectives</b> .....	66

# Shares, ETF

## Common Shares

Shares are securities, which represent the capital of a company. By buying these securities, the owner of shares (shareholder) acquires a share of the company's own capital, which entitles him to a part of the company profits in the form of dividends, indirect participation in the management of the company, and part of the assets in the event of the company's liquidation (in proportion to the number of shares, following the satisfaction of all creditors' claims).

**Ordinary shares** present the right to participate in the voting of shareholders, in accordance with the principle that **one share equals one vote**. There are cases when the right of vote concerning ordinary shares can be transferred to a third party for participation in the voting. Additionally, the company may grant the right to the current shareholders to purchase more company shares at a price below the market price, with an additional issue of shares. In this case, the rights to purchase new shares will be traded on the market along with the shares.

In most cases in the modern world, a share represents an electronic entry in the register of shareholders.

Target Market

**Risk level**

3

The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients with basic knowledge and experience regarding financial markets.
- The financial position of the client and possible losses: the maximum possible losses, associated with the acquisition of the given product, are equal to all funds invested in this product (at the share price of zero), including commissions and costs associated with the storage of shares.
- Risk awareness: the risk of investing in shares depends on many factors. In particular, they include the liquidity of the stock (how quickly you can sell the asset), the size of the company (market capitalization), the term of investment and many others. Therefore, the risk parameter will vary depending on the company, but in general, the riskiness of investments can be estimated by three points on a six-point scale (one point is the lowest risk, six points is the highest risk).
- Aims and needs of the client: this type of investment is suitable for clients who are looking for an opportunity to increase their capital in the long term by linking it with the company's efficiency, while also being suitable for short-term speculative operations (purchase of shares prior to the release of financial news/statements, etc.).

Examples of investment in stock (shares):

### ***Investment with subsequent profit.***

On 6 March 2017 an investor acquired 1,000 shares of Apple Inc. for 100\$ per share. The costs of this purchase amount to:

- 1)  $1,000 \times 100\$ = 100,000\$$  (cost of shares).
- 2) 50\$ – minimum commission of the bank for the acquisition of shares in the American exchange. When calculating a commission of 2.5 ¢ per share, in this case you get 25\$, but since the minimum commission is 50\$, the client will be charged the minimum commission nonetheless.

Total purchase cost:  $100,000 + 50 = 100,050\$$ .

By 13 March 2017 the shares of Apple Inc. have risen to 120\$ per share.

The investor decides to sell the shares (close with a profit). The income from the sale:

- 1)  $1,000 \times 120 = 120,000\$$
- 2) 50\$ – minimum commission of the bank for the sale of shares in the American exchange.
- 3) 12.22\$ – servicing of the investment account (0.5% per annum of the total assets on the investment account, in this example there is only one asset in the portfolio). When calculating this amount, the constant increase in portfolio value was 2,857.14\$ per day during the period of ownership of the asset. The formula for the calculation is  $V \times 0.5\% / 360$ , where V is the value of the asset on a specific date.

Total income from the sale:  $120,000 - 50 - 12.22 = 119,937.78\$$ .

**Net profit** from the deal, including all commissions and storage costs,  $119,937.78 - 100,050 = \mathbf{19,887.78\$}$ .

### ***Investment with subsequent loss.***

On 6 March 2017 an investor acquired 5,000 shares of Commerzbank AG at 12\$ per share. The costs of this purchase are:

- 1)  $5,000 \times 12\text{€} = 60,000\text{€}$  (cost of shares).
- 2) 120€ – commission of the bank for the acquisition of shares on the German exchange in Frankfurt (Xetra Frankfurt). In this case, the commission is equal to 0.2% of the transaction amount ( $60,000 \times 0.2\%$ ).

Total cost of the purchase:  $60,000 + 120 = 60,120\text{€}$ .

By 13 March 2017 Commerzbank AG's share price fell to 10€ per share. The investor decides to sell the shares (record a loss). The income from the sale is:

- 3)  $5,000 \times 10\text{€} = 50,000\text{€}$  (cost of shares).
- 4) 100€ – commission of the bank for the sale of shares on the German exchange in Frankfurt (Xetra Frankfurt).

- 5) 6.11€ – servicing of the investment account. When calculating this amount, the constant decrease in the portfolio value was –1,428.57 € per day during the asset holding period.

Total income from the sale:  $50,000 - 100 - 6.11 = 49,893.89\text{€}$

**Net loss** from the deal, including all commissions and storage costs,  $49,893.89 - 60,120 = -10,226.11\text{€}$ .

## Complex Shares

The following types of shares can be classified as complex shares: preferred shares, ADR, GDR, and to a certain extent, leveraged ETFs and non-leveraged ETFs. Separately, we can also include in this category the shares that are commonly referred to as pink sheet – these are shares of various issuers that were issued with significant assumptions about the reliability and quality of the issuer, shares of various companies for which there is no (or there is simplified) reporting, shares whose exchanges do not perform a full-fledged check in respect to their issuers, since they were issued for developing enterprises in order to reduce the cost of listing and initial placement. Often, such shares are quoted on special sections of the exchange or on the so-called bulletin board (OTC BB), their liquidity is very low, while the volatility is very high and can reach tens of percent.

**Preferred shares** are shares without voting rights or with limited voting rights (depending on the charter of the joint-stock company). The absence or restriction of rights is compensated by additional privileges received by the owner of shares of this type. Usually, these privileges include the ability to receive a guaranteed income (dividends), seniority to the holders of common stock in the case of the company's liquidation, and others.

**Depository receipt** – this is a financial instrument, issued by banks, which certifies and guarantees the ownership of shares in a foreign company. The main purpose of depository receipts is to attract foreign capital and increase the liquidity of the stock. The most popular types of depository receipts are: ADR (American Depository Receipt) and GDR (Global Depository Receipt).

**ADR (American Depository Receipt)** – is a receipt issued for trading in the capital markets in the United States, by a depository bank that is located in the United States. **GDR (Global Depository Receipt)** is a receipt issued by any other depository bank. The currency in which ADR and GDR are circulated is the US Dollar, less often the Euro. It should also be noted that the face value of the depository receipt may not correlate to the share in the ratio of 1:1 (one receipt equals one share), and can be either more or less than that.

Separately, we should note the additional commission costs, which can be incurred to the investor by the ownership of the depository receipts. Since the issuing bank of the receipt carries costs when issuing and maintaining receipts, an additional commission is charged from the client for the servicing of the receipt (DR service fee). This commission is debited directly by the issuing bank. The depository commission is debited once a month on a certain date set by the issuing bank and its amount may vary.

### Sample calculation of the commission for servicing the depository:

On the 20<sup>th</sup> day of each month 0.02\$ is written off by the issuing bank for each receipt which the client owns. On 19 July 2017 an investor purchases 1,000 receipts. Consequently, on 20 July 2017 the client will have to pay 20\$ ( $1,000 \times 0.02 = 20$ \$).

In addition to the commission for servicing the depository, there are several other commissions set by the issuing bank (the principle of settlement is the same as for the commission for servicing the depository):

- Inspectional commission – for the inspection of the local stock register. The commission is debited once a year to cover the costs of the issuing bank.
- Conversion commission – written off at the conversion of receipts. For example, from the 144A series and vice versa.
- Insurance commission – written off by the agent for the insurance of the depository receipts.
- Dividend commission – written off when dividends are paid on the depository receipts.

Please take into consideration that the issuing bank's commission and their amount are unique for each depository receipt. For many receipts, the commission of the issuing bank may be absent or only partially present (i.e. the ADRs of Sanofi S.A. only contain the commission on dividends).

Target Market

<b>Risk level</b>
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<b>4</b>
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The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients with average knowledge and experience regarding financial markets.
- The financial position of the client and possible losses: the maximum possible losses, associated with the acquisition of the given product, are equal to all funds invested in this product (at the share price of zero), including commissions and costs associated with the storage of the receipts.
- Risk awareness: the risk of investing in receipts is higher than in shares. In addition to the risks of common shares, the risk associated with the issuing bank of the receipts is added - risk grows as the amount of parties involved increases. In general, the riskiness of investments can be estimated as four on a six-point scale (one point is the lowest risk, six points is the highest risk).
- Aims and needs of the client: this type of investment is suitable for clients who are looking for an opportunity to increase their capital in the long term by linking it with the company's efficiency, while also being suitable for short-term speculative operations (prior to the release of financial news/statements, etc.). Purchase of receipts allows the client to simplify the process of concluding transactions, settlements (transactions pass through one exchange and often in one currency), as well as help diversify the portfolio.

Examples of investment in depository receipts:

***Investment with a subsequent profit.***



On 10 April 2017 an investor acquired 1,000 depositary receipts (ADR) of Sanofi S.A. for 40\$ per receipt. The costs of this purchase are:

- 1)  $1,000 \times 40\$ = 40,000\$$  (cost of receipts).
- 2) 50\$ – the minimum commission of the bank for the acquisition of the receipts on the American exchange.

Total costs of the purchase:  $40,000 + 50 = 40,050\$$ .

By 14 April 2017 Sanofi's depositary receipts rose in price to 45\$ per receipt. The investor decides to sell the receipts (close with a profit). The income from the sale:

- 1)  $1,000 \times 45\$ = 45,000\$$
- 2) 50\$ – the minimum commission of the bank for the sale of the receipts on the American exchange.
- 3) 2.95\$ – servicing of the investment account (0.5% per annum of the total assets on the investment account, in this example there is only one asset in the portfolio). When calculating this amount, the constant increase in the value of the portfolio was equal to 1.250\$ / day during the period of ownership of the asset. The formula for the calculation is  $V \times 0.5\% / 360$ , where V is the value of the asset on a specific date.

Total income from the sale:  $45,000 - 50 - 2.95 = 44,497.05\$$ .

**Net profit** from the deal, including all commissions and storage costs,  $44,497.05 - 40,050 = 4,897.05\$$ .

#### ***Investment with subsequent loss.***

On 10 April 2017 an investor acquired 1,000 depositary receipts (ADR) of Sanofi S.A. at 40\$ per receipt. The costs of the given purchase:

- 1)  $1,000 \times 40\$ = 40,000\$$  (cost of receipts).
- 2) 50\$ – the minimum commission of the bank for the acquisition of the receipts on the American exchange.

Total costs of the purchase:  $40,000 + 50 = 40,050\$$ .

By 14 April 2017 the depositary receipts of Sanofi fell in price and now cost 35\$ per receipt. The investor decides to sell his receipts (record a loss). The income from the sale:

- 1)  $1,000 \times 35\$ = 35,000\$$
- 2) 50\$ – the minimum commission of the bank for the sale of the receipts on the American exchange.
- 3) 2.60\$ – servicing of the investment account. When calculating this amount, the constant decrease in the value of the portfolio was equal to  $-1.250\$ / \text{day}$  during the period of ownership of the asset.

Total income from the sale:  $35,000 - 50 - 2.60 = 34,947.40\$$ .

**Net loss** from the deal, including all commissions and storage costs,  $34,947.40 - 40,050 = -5,102.60\$$ .

## ETF

**Exchange Traded Funds** (Exchange Traded Funds, ETF's) is the fund whose shares are freely traded on the exchange. The ETF's are structured that way so the correlation between the fund and the underlying index (or asset) is positive or negative (if the fund is opposite correlation with index). With shares of the funds you can perform the same operations as with ordinary shares (i.e. purchase / sale). In addition to the usual ETF funds, there are also **funds with a built-in lever** (leveraged ETF). The difference between these funds is the presence of the so-called "lever." The presence of the financial leverage allows the ETF to generate a larger profit or loss than the index on which it is based. This is achieved through the use of various derivatives and debt instruments. Use of the derivatives in the structure of the fund also adds the need to transfer the derivative position to the next active month upon the expiry of the contract. This can lead to a situation when the value of ETF's shares decreased, even on a stable market. It should also be noted that funds with a lever **tend** to correlate with the base index (or asset) as accurately as possible, given the declared multiplier, but **do not guarantee** it. It should also be taken into account that the funds include the commissions of the managing firm for the administration of the fund (indicated in the description of the instrument and usually makes from 0.5% to 1.5% per annum of the total value of the fund's assets), which affects the potential amount of the profit or loss.

Target Market

Risk level

4

The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients with average knowledge and experience regarding financial markets.
- The financial position of the client and possible losses: the maximum possible losses, associated with the acquisition of the given product, are equal to all funds invested in this product (at the share price of zero), including commissions and costs associated with the storage of the shares.
- Risk awareness: The risk of investing in ETFs is higher than in stocks. In general, the riskiness of investments can be estimated as four on a six-point scale (one point is the lowest risk, six points is the highest risk).
- Aims and needs of the client: this type of investment is suitable for clients who are looking for an opportunity to increase their capital in the long term by linking it with the indexes, while also being suitable for short-term speculative operations (purchase prior to the release of statistical sectoral data, etc.). By investing in ETFs, clients gain the opportunity to cover certain sectors of the economy, while minimizing the cost of purchasing and storing securities.

Examples of Investment in ETFs:

*Investment with subsequent profit.*

On 5 May 2017 an investor acquired 1,000 shares of NUGT (Direxion Daily Gold Miners Index Bull 3X Shares) at 30\$ per share. The given ETF is based upon the goldminer index (NYSE Arca Gold Miners Index) and is designed to triple the gains, as well as the losses per day. The costs of the given purchase are:

- 1)  $1,000 \times 30\$ = 30,000\$$  (cost of shares).
- 2) 50\$ – the minimum commission of the bank for the acquisition of the shares on the American exchange.

Total costs of the purchase:  $30,000 + 50 = 30,050\$$ .

By 15 May 2017 the shares of NUGT rose to 50\$ per share. The investor decides to sell the shares (close with profit). The income from the sale is:

- 3)  $1,000 \times 50\$ = 50,000\$$
- 4) 50\$ – the minimum commission of the bank for the sale of the shares on the American exchange.
- 5) 6.11\$ – (0.5% per annum of the total assets on the investment account, in this example there is only one asset in the portfolio). When calculating this amount, a constant increase in portfolio value of 2.000\$ / day was used during the asset ownership period. The formula for the calculation is  $V \times 0.5\% / 360$ , where V is the value of the asset on a specific date.

Total income from the sale:  $50,000 - 50 - 6.11 = 49,943.89\$$ .

**Net profit** from the deal, including all commissions and storage costs,  $49,943.89 - 30,050 = \mathbf{19,893.89\$}$ .

#### ***Investment with subsequent loss.***

On 5 May 2017 an investor acquired 1,000 shares of NUGT (Direxion Daily Gold Miners Index Bull 3X Shares) for 30\$ per share. The costs of the given purchase are:

- 1)  $1,000 \times 30\$ = 30,000\$$  (cost of shares).
- 2) 50\$ – the minimum commission of the bank for the acquisition of the shares on the American exchange.

Total costs of the purchase:  $30,000 + 50 = 30,050\$$ .

By 15 May 2017 the shares of NUGT fall in price and now cost 20\$ per share. The investor decides to sell his shares (record a loss). The income from the sale is:

- 3)  $1,000 \times 20\$ = 20,000\$$  (cost of shares).
- 4) 50\$ – the minimum commission of the bank for the sale of the shares on the American exchange.
- 5) 3.82\$ – servicing of the investment account. When calculating this amount, a constant decrease in the value of the portfolio equal to  $-1.000\$ / \text{day}$  was used in the period of ownership of the asset.

Total income from the sale:  $20,000 - 50 - 3.82 = 19,946.18\$$ .

**Net loss** from the deal, including all commissions and storage costs, 19,946.18 – 30,050 = **-10,103.82\$**.

Example of loss through the transfer of derivative instruments within ETF funds:

As mentioned earlier, ETF funds, which are based on derivatives, can fall, even if the underlying instrument is traded at the same level. This is attributed to the transfer within the ETF funds (transfer of the position to the next active month). In general, the transfer envisages the recording of profits or losses according to contracts in the coming month and the opening of new position in the next active month. The situation, when the next active month is more expensive, is called contango. If the next active month is cheaper, a backwardation occurs. In the event of a long drop of an underlying asset, the loss due to the transfers become more noticeable than in the period of stability or small growth.



One of the most striking examples is the drop of ETF funds X0D2 GY–Commerzbank ETC 4x Brent Oil Daily Long. This fund uses futures contracts for Brent crude oil to achieve fourfold growth. At the beginning of 2015 Brent crude oil was traded at 68\$ per barrel, while shares of the fund were worth 5 euro per share. At the end of 2015 futures contracts for Brent crude oil dropped 2 times – up to 30\$ per barrel, while shares of the fund decreased by 0.1 euro per share (drop of 50 times). This drop was caused by the situation of contango, which was observed during this period on the futures market. That is, in the event of transfer to a later month, the fund purchased futures contracts at a higher price than closer ones and in case of further drop of market lost on subsequent transfers.

In early 2016 oil continued to grow and at the end of 2017 it returned to the level of early 2015. However, X0D2 GY did not return to the level of early 2015. The

<sup>1</sup> Data source – “Investing.com” (<https://www.investing.com/commodities/brent-oil-historical-data>)

<sup>2</sup> Data source – “FINANCIAL TIMES” (<https://markets.ft.com/data/etfs/tearsheet/historical?s=X0D2:FRA:EUR>)

reason for this behaviour was the price of the transfers and the value of the fund itself (lost 95% of the original value).

## Debt Instruments

A debt instrument is a documented (paper or electronic) financial liability between a borrower and a creditor that can be traded between one or more legal entities. Debt instruments include bonds, depository certificates and commercial paper.

### Ordinary Bonds

A bond is a debt security, which the borrower (issuer) undertakes to pay the lender (investor) a loan amount with a percentage that is paid within a certain period of time.

There are coupon bonds and zero-coupon bonds (discount bonds). **Coupon bonds** are interest bearing, for which the borrower pays interest (coupon) until maturity. The coupon is not paid out for **zero coupon bonds**, however, they are sold at a price below their nominal value (initial price set by the issuer), i.e. the holder's income is the discount – difference between the issue price and the face value (if the bond is held until maturity). Additionally, bonds differ by their respective issuer – there are government, municipal and corporate bonds. Most investors prefer bonds with the highest credit rating, which is determined by a rating agency – an organization engaged in assessing the creditworthiness of enterprises. Despite the large number of credit agencies, the most powerful are the “Big Three” – Fitch, Moody's and Standard & Poor's.

Ordinary bonds include so-called investment grade bonds, i.e. with a rating of BBB- (Fitch, S&P), Baa3 (Moody's) or higher.

Target market

Risk level

1

The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the clients: clients with basic knowledge and experience of financial markets.
- The financial position of the client and possible losses: the maximum possible losses, associated with the purchase of bonds, are equal to all funds invested in this product (at the instrument price of zero), including commissions and costs associated with the storage of the bonds.
- Risk awareness: the risk of investing in bonds varies depending on the rating of a specific bond. In general, the riskiness of investing in investment-grade bonds can be estimated as one on a six-point scale (one point is the lowest risk, six points is the highest risk).
- Aims and needs of the client: this type of investment is suitable for clients who are looking for an opportunity to increase their capital in the long term. Speculative operations with investment grade bonds are possible, but due to low

volatility, are rare. By investing in companies' debt, the client gets an opportunity to receive a regular income in the form of a coupon payment, which, in comparison with dividends for shares, is usually much higher.

Examples of investments in bonds:

Bond parameters:

Each bond has certain parameters, knowledge of which is necessary to complete the transaction. Despite a large number of nuances, the main parameters present in each bond are:

ISIN – international securities identification number, consists of a 12-digit alphanumeric code. This code is assigned to various financial instruments (stocks, bonds, etc.). At the same time, ISIN is not the only identifier (although the most common one), there are other identifiers in the world, usually assigned by national regulators (for example, VALOR).

Minimum transaction amount – the minimum amount at face value required to complete the transaction.

Increment – the step after the minimum transaction amount. With a minimum transaction amount, equal to 100 000 at face value, and with an increment of 1 000, the investor can buy bonds at face value of 100 000, 101 000, 102 000, 103 000, etc.

Name	VTB 6.875 29 May 2018
ISIN	XS0365923977
Coupon	6.875%
Frequency of coupon payment	2 times per year
Currency	USD
Maturity	29 May 2018
Minimum transaction amount	100,000.00
Increment	1,000.00

***Investment with subsequent profit.***

On 12 June 2017 the investor decided to acquire 230,000 bonds (at face value) of VTB Bank with a coupon of 6.875% per annum and maturity on 29 May 2018. The price of the purchase is 95% of the face value. The costs of the purchase are:

- 1)  $230,000 \times 95\% = 218,500\$$  (market value).
- 2) 702.78\$ – the accumulated coupon from the date of the previous payment (16 days\*).

\*The accumulated coupon is paid to the previous holder of the bond and is calculated based on the settlement date for the transaction. In this case, the bond is calculated in 2 days after the conclusion of the transaction, that is, on June 14. The last date of the coupon payment is 29 May 2017, so in total we have 16 days (14 June 2017 – 29 May 2017 = 16 days). Consequently the coupon per day is:  $230,000 \times 6.875\% / 360 = 43.9236\$$ . In 16 days we have  $43.9236 \times 16 = 702.78\$$ .

- 3) 328.80\$ – bank’s commission for the deal with corporate bonds denominated in US dollars. It is calculated as 0.15% of the transaction amount (face value + accumulated coupon).

Total cost of the purchase:  $218,500 + 702.78 + 328.8 = 219,531.58\$$ .

By 25 July 2017 the bond’s price rose up to 102% from its face value, and the investor decided to close with profit. The income from the sale:

- 1)  $230,000 \times 102\% = 234,600\$$  (market value).
- 2) 2,591.49\$ – the accumulated coupon from the date of the previous payment (59 days).
- 3) 355.79\$ – bank’s commission for the deal with corporate bonds, denominated in US dollars.
- 4) 139.45\$ – servicing of the investment account (0.5% per annum of the total assets on the investment account, in this example there is only one asset in the portfolio). When calculating this amount, the constant increase in portfolio value was 418.34\$ per day during the asset ownership period. The formula for the calculation is  $V \times 0.5\% / 360$ , where V is the value of the asset at a specific date.

Total income from the sale:  $234,600 + 2,591.49 - 355.79 - 139.45 = 236,696.25\$$ .

**Net profit** from the deal, including all commissions and storage costs,  $236,696.25 - 219,531.58 = 17,164.67\$$ .

#### ***Investment with subsequent loss.***

On 12 June 2017 an investor decided to acquire 230,000 bonds (at face value) of VTB Bank with a coupon of 6,875% per annum and maturity on 29 May 2018. The price of the purchase is 95% of the face value. The costs of the purchase are:

- 1)  $230,000 \times 102\% = 234,600\$$  (market value).
- 2) 702.78\$ – the accumulated coupon from the date of the previous payment (16 days).
- 3) 328.80\$ – bank commission for the deal with corporate bonds denominated in US dollars.

Total costs of the purchase:  $218,500 + 702.78 + 328.8 = 219,531.58\$$ .

By 25 July 2017 the bond fell in price to 92% of the face value and the investor decided to record a loss. The income from the sale is:

- 1)  $230,000 \times 92\% = 211,600\$$  (market value).
- 2) 2,591.49\$ – the accumulated coupon from the date of the previous payment (59 days).
- 3) 321.29\$ – bank’s commission for the deal with corporate bonds, denominated in US dollars.



- 4) 132.43\$ – servicing of investment account. When calculating this amount, a constant decrease in the value of the portfolio equal to – 116.54 \$ / day was used in the period of ownership of the asset.

Total income from the sale:  $211,600 + 2,591.49 - 321.29 - 132.43 = 213,737.77\$$ .

**Net loss** from the deal, including all commissions and storage costs,  $213,737.77 - 219,531.58 = -5,793.81\$$ .

## Complex Bonds

In addition to bonds with simple methodology of calculation, instruments with various variables are also common on the debt market. These variables can be both external and internal factors affecting the company or the economic situation as a whole; as well as additional conditions that the company establishes by itself (at the time of issuance). The most common variables include instruments with:

- Early redemption of bonds (CALL) – the company has the right to redeem the bond prior to the maturity date, at a predetermined price, if the market price at the date of possible redemption is lower.
- Early sell right (PUT) – the investor has the right to demand early repayment of the principal. This type of bond is typical for emerging markets, e.g. Brazil.
- Variable coupon rate – the bond rate may be floating, dependent on specific parameter (i.e. central bank rate, LIBOR, indexes and other indicators).
- Amortization of the principal amount of debt – often the company will pay a part of the face value along with the coupon in order to avoid paying the full amount at maturity. This can be done if the bond considers amortization.
- Extension of the maturity period – the maturity of the bond may be extended to a later date.
- Conversion to another financial instrument – the bond can be converted into another instrument, both into shares and into a debt instrument with an increased maturity.

Bonds with variables are considered complex bonds as they require the investor to have deeper knowledge of financial markets and are more demanding in awareness of the increased risks.

Target Market

<b>Risk level</b>	2; 3*
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The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients with high level knowledge and experience regarding financial markets.
- The financial position of the client and possible losses: the maximum possible losses, associated with the purchase of bonds, are equal to all funds invested in this product (at the instrument price of zero), including commissions and costs associated with the storage of the bonds.
- Risk awareness: the risk of investing in bonds varies depending on the rating of a specific bond. In general, the riskiness of investing in complex bonds with a high investment rating can be estimated as two on a six-point scale (one point is the lowest risk, six points is the highest risk). However, if we talk about

complex bonds with a low (not investment) rating, the risk parameter rises to three points.

- Aims and needs of the client: this type of investment is suitable for clients who are looking for an opportunity to increase their capital in the long term. By investing in companies' debt, the client gets an opportunity to receive a regular income in the form of a coupon payment, which, in comparison with dividends for shares, is usually much higher.

\* 2 points – level of risk for bonds with a high (investment) rating

\* 3 points – level of risk for bonds with a low (not investment) rating

### Examples of investment in bonds:

Bond parameters:

Name	HCFBRU 10.5 19 April 2021
ISIN	XS0981028177
Coupon	10.50%
Frequency of coupon payment	2 times per year
Currency	USD
Maturity	19 April 2021
Minimum transaction amount	200,000
Increment	1,000

The given bond has the following variables:

- 1) Possibility of early redemption on 17 April 2019 at 100% of the face value.
- 2) Variable coupon rate after 17 April 2019. The new rate will be determined by the issuer.

### ***Investment with subsequent profit.***

On 2 April 2019 the investor decided to acquire 500,000 bonds (at face value) of HomeCredit Bank with a 10.5% coupon rate per annum and maturity on 19 April 2021. The cost of the purchase amounts to 100% of the face value. The costs of the purchase are:

- 1)  $500,000 \times 100\% = 500,000\$$  (market value is the same as face value).
- 2) 24,354.17\$ – the accumulated coupon from the date of the previous payment (167 days\*).

\*The accumulated coupon income is paid to the previous holder of the bond and is calculated based on the settlement date for the transaction. In this case, the bond is calculated in 2 days after the conclusion of the transaction, that is, on April 4. The last date of the coupon payment is 17 October 2018, so in total we have 167 days (2 April 2019 – 17 October 2018 = 167 days). Coupon per day makes  $500,000 \times 10.5\% / 360 = 145.8334 \$$ . Consequently

in 167 days we have  $145.8334 \times 167 = 24\,354.17\$$ .

- 3) 786.53\$ – the commission of the bank for the transaction with corporate bonds, denominated in US Dollars. It is calculated as 0.15% of the transaction amount (face value + accumulated coupon).

Total costs of the purchase:  $500,000 + 24\,354.17 + 786.53 = 525,140.70\$$ .

By 12 June 2019 the bond rose in price to 105% of its face value, and the investor decided to close with a profit. However, the issuer of the bond lowered the coupon rate to 6% per annum on the 17<sup>th</sup> of April 2019 (with the possibility of changing the coupon rate again after 17 April 2019). The income from the sale is:

- 1)  $500,000 \times 105\% = 525,000\$$  (market value).
- 2) 26,250\$ – the paid coupon (17 April 2019).
- 3) 4,833.33\$ – the accumulated coupon (coupon rate 6% per annum, for 58 days).
- 4) 794.75\$ – the commission of the bank for the transaction with corporate bonds, denominated in US Dollars.
- 5) 534.31\$ – servicing of the investment account (0.5% per annum of the total assets on the investment account, in this example there is only one asset in the portfolio). This amount was calculated by using the constant increase in portfolio value 342.47\$ per day during the asset ownership period. The formula for the calculation is  $V \times 0.5\% / 360$ , where V is the value of the asset at a specific date.

Total income from the sale:  $525,000 + 4833.33 - 794.75 - 534.31 = 528,504.27\$$ .

**Net profit** from the deal, including all commissions and storage costs,  $528,504.27 + 26,250 - 525,140.70 = \mathbf{29,613.57\$}$ .

#### ***Investment with subsequent loss.***

On 2 April 2019 the investor decided to acquire 500,000 bonds (at face value) of HomeCredit Bank with a 10.5% coupon rate per annum and maturity on 19 April 2021. The cost of the purchase amounts to 101% of the face value. The costs of the purchase are:

- 1)  $500,000 \times 101\% = 505,000\$$  (market value).
- 2) 24,354.17\$ – the accumulated coupon from the previous payment date (167 days\*).

\*The accumulated coupon income is paid to the previous holder of the bond and is calculated based on the settlement date for the transaction. In this case, the bond is calculated in 2 days after the conclusion of the transaction, that is, on April 4. The last date of the coupon payment is 17 October 2018, totaling 167 days (2 April 2019 – 17 October 2018 = 167 days). Coupon per day makes  $500,000 \times 10.5\% / 360 = 145.8334 \$$ .

Consequently, in 167 days we have  $145.8334 \times 167 = 24,354.17\$$ .

- 3) 794.03\$ – the commission of the bank for the purchase of corporate bonds, denominated in US Dollars. It is calculated as 0.15% of the transaction amount (face value + accumulated coupon).

Total cost of the purchase:  $505,000 + 24,354.17 + 794.03 = 530,148.20\$$ .

By 17 April 2019 the bond's price fell to 95% of its face value, and the issuer decided to exercise early redemption, for which he received 100% of the face value. The income from the redemption:

- 1)  $500,000 \times 100\% = 500,000\$$  (face value).
- 2) 26,250\$ – the accumulated coupon.
- 3) 789.38\$ – the commission of the bank for the purchase of corporate bonds, denominated in US Dollars.
- 4) 114.83\$ – servicing of the investment account. When calculating this amount, a constant decrease in the value of the portfolio equal to \$ 2,000 / day during the asset holding period was used up to the date of early redemption (at the date of cancellation of the bond, the calculations are based on the early redemption price).

Total income from the sale:  $500,000 + 26,250 - 789.38 - 114.83 = 525,345.79\$$ .

**Net loss** from the deal, including all commissions and storage costs,  $525,345.79 - 530,148.20 = -4,802.41\$$ .

Please take into consideration that depending on the bond prospectus, the bond can be partially paid off or not repaid at all – the ability to pay off the bond is the right, and not the obligation of the company. In the case of partial repayment, the distribution of funds is most often proportional (pro rata), i.e. the received sums are distributed proportionately between the holders according to a certain rule.

## Corporate Action (Events)

Corporate action is any event of corporate governance that can affect the material condition of the company, shareholders or debt holders. These actions and events are usually approved by the board of directors of the company and in many corporate events shareholders have the right to participate and vote. Some corporate events require mandatory participation of shareholders. The absence of a shareholder in a corporate event results in consequences, e.g., the shareholders meeting may consider his vote to be abstained or in favor of the motion. Separately, it must be noted that an investment firm (in our case – a bank) is not obliged to notify its clients of the coming corporate event - the tracking of such events is entirely the prerogative of the shareholders (investors). In addition, due to the fact that the client shares are held by a custodian (depository) on collective accounts (i.e. “omnibus” type), and not on personal ones, the bank may not have the opportunity to vote on behalf of the client since the stock storage format may not provide for a separate voting, whilst the shareholder register indicates the bank as the nominal owner. In turn, the bank sends out notices received by the depository about the occurrence of corporate events, if possible. Such notifications in most cases come in the form of standardized messages on the SWIFT system, which include basic information about the corporate event, voting aspects among others. The language of the notification is English in most cases. In case the client wishes to receive a further explanation regarding the nature of the notification sent, the bank is ready to provide a summary of such notice as a paid service.

The most common corporate events include:

- Stock split or stock consolidation – a reduction (consolidation) or an increase (stock split) in the number of shares traded on the market. During a stock split, the price per share falls, while during a stock consolidation, it rises.

*Example: A company announces a stock split, in the ratio of 2:1, where for each issued share, the company will issue one more. Therefore, if a client had 1,000 shares that traded at 100\$ apiece, then after the stock split, the number of shares will increase to 2,000 while the price will fall to 50\$. During a stock merge, the reverse occurs – the number of shares decreases while the price increases.*

- Dividends – payment of income on securities. Payment can be made at the expense of the received profit or using the issue of additional shares.

*Example: When dividends are paid out at the expense of the received profit, the company announces the amount of funds to be paid to each shareholder. If an investor has 1,000 shares in his portfolio and declared dividends of 0.5\$ per share, the investor will receive 50\$.*

*When dividends are paid in shares, the company declares how many shares will be received by the investor. If the company pays 0.1 share for each share of which the investor owns, and the investor has 1,000 shares, then after the payment the number of shares of the investor will increase to 1,100.*

- Rights issue – the company may issue rights to purchase additional shares for current shareholders under preferential terms. Each shareholder is allocated a certain number of rights that can be sold or used to obtain new shares at a discount price.

*Example: An investor has 2,000 shares in his portfolio. The company announces a rights issue for current shareholders at a certain date. Furthermore, 10 rights can be used to purchase 1 share at a predetermined price. Accordingly, the investor will receive 2,000 rights, which he can use to purchase 200 shares, at a discounted price.*

- Mergers and Acquisitions – this is a common phenomenon in modern financial markets. A merger is the formation of two or more different companies into a single entity by mutual agreement. An acquisition, on the contrary, implies a buy-out of a controlling stake, with the establishment of control over the company, but without the merger of two stocks into one.

*Example: An investor owns 100,000 shares of company X. The management of companies X and Z decides to merge together and form a new company U. According to the merger agreement, holders of shares of the company X will receive shares of the new company U with a coefficient of 1 to 4. At the date of the merger, the investor will receive 25,000 shares of the new company U.*

- Corporate spin-off – a separation of a subsidiary from the parent company. In a spin-off, shares of the new company are issued, while holders of shares of the parent company receive new shares in proportion to their original holdings.

*Example: An investor owns 250,000 shares (2.5% of the total number of shares) of the parent company X, the total number of shares issued is 10,000 000. A new company Z will be separated from the parent company. At the separation, the company Z produces 1 million shares. Proportionally, the investor gets a 2.5% stake in the new company Z or 25,000 shares.*

The expenses of the clients incurred by participation in a corporate event depend on the type of corporate event. Most corporate actions do not require additional costs; however some may increase storage costs (i.e. exercise of rights to purchase shares at a discount, etc.). In a number of cases (rarely) companies provide compensation for participation or a certain action at the voting, which depends on the amount of the asset (the number of shares or the nominal value of the debt).

It should also be taken into account that there are many other corporate events that can affect not only the number and price of shares / bonds, but also the future of the company, and consequently the success of investments. Therefore, these events are essential for market participants.

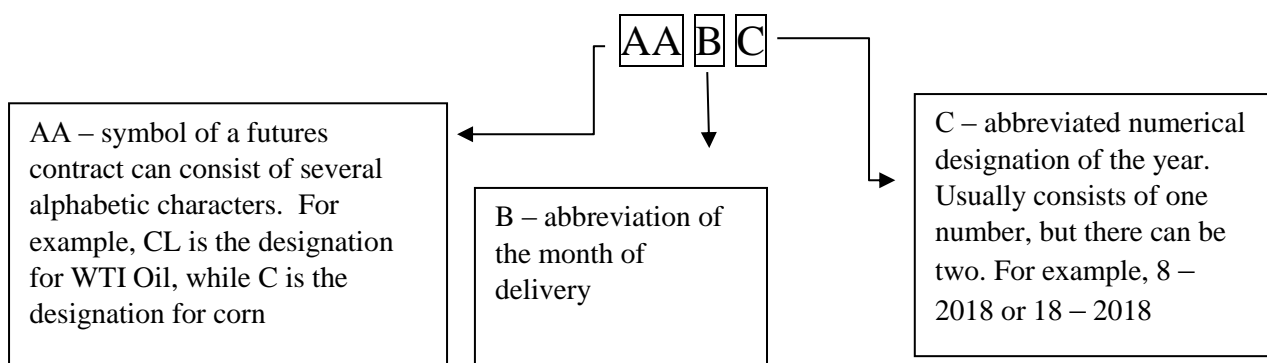
## Derivatives and Margin Instruments

Futures are securities that represent a futures contract entered into the stock exchange. The essence of the transaction is the delivery of a certain asset in a certain place on a specific date in the future. When buying futures, neither the transfer of this asset nor the payment for it occurs. The price of the contract at a particular point in time is the current value of the asset plus the interest for the time remaining until payment, that is, until the contract is realized. Thus, futures markets are a kind of auction, trade on which reflects the latest data on the correlation of demand and offers for specific assets. There are two types of futures contracts – delivery and settlement (non-delivery). At the expiration of delivery futures, raw materials (oil, grain, gasoline, etc.) are delivered, while a settlement future does not imply physical delivery, and a settlement takes place instead, where the contractual parties settle the difference between the price under the opening of the contract and the official price at the contract's expiration. By buying and selling futures, investors tend to predict the direction of price movements of certain underlying assets and thus to receive profit. Futures contracts are traded by month of delivery. The corresponding month is mentioned in the contract name and may have the following abbreviations:

Abbreviation	Deciphering
F	January
G	February
H	March
J	April
K	May
M	June
N	July
Q	August
U	September
V	October
X	November
Z	December



According to generally accepted standards, the abbreviated name of the futures contract is based on the following principle:



Futures contracts are characterized by a high degree of standardization – according to the specification, quantity, place and time of delivery of the goods. Due to standardization, contracts are similar not only in the calculation methodology and structure, but also in the terminology used to describe the main parameters. The main terms include:

- Contract size – the number of units of weight or volume in one contract. Can be measured in different mass / volume units (troy ounces, bushels, barrels, etc.)
- Value of 1.0pt – the cost of changing the contract price by one point (for example, from 15.4 to 16.4, etc.)
- Tick size – the minimum change in the price of the contract. Also called the minimum step.
- Tick value – the price of the price change in the currency of the contract (US dollar, euro, yen, etc.) with a minimum price change.
- Contract price – the current market price of the futures contract.
- Contract value – contract price multiplied by the size of the contract.
- Up Limit and Down Limit:
  - Up Limit – the maximum value of the contract price during the day. The upper limit is set by the exchange and serves as a kind of restrictor, above which the price cannot go. This limitation exists to control panic states and excessive volatility. When the upper limit is reached, the trade under the contract can be suspended. The exchange revises the upper limit daily, based on the closing price of the contract.
  - Down Limit – the minimum value of the contract price during the day. The lower limit is set by the exchange and serves as a sort of restrictor, below which the price cannot go. This limitation exists to control panic moods and excessive volatility. When the lower limit is reached, trade under the contract can be suspended. The exchange revises the lower limit daily, based on the closing price of the contract.

***N.B.** It should be noted that many exchanges set restrictive limits also for other classes of financial instruments, as well as for the whole stock exchange trade. Thus, exchanges can stop trading in case of significant (10 or more percent) changes in stock indices.*

- Initial margin – the required amount of money to open a futures position.
- Notification dates under the contract:
  - Last trade – the last day when a futures contract is traded or may be closed before the delivery of the underlying asset or cash settlement. This parameter is present for all futures contracts.
  - First notice – on this day the holder of the contract can receive a notice of the need to receive delivery of the underlying asset. In order to avoid the risk of delivery, clients close or transfer positions to the next active month on the day before the first day of the delivery notification. This parameter is present only for contracts for which the physical delivery of the underlying assets is provided.
  - First delivery date – the beginning date of the physical delivery under the futures contract. This parameter is present only for contracts for which the physical delivery of the underlying assets is provided.

***N.B.** Brokers can independently set the end dates until which they are willing to hold the position of their clients, without fear of the risk of delivery and related administrative costs and cancellation formalization difficulties. In this case, they can force the client to close the position ahead of schedule on such instrument.*

In addition to the aforementioned terms, when trading futures / stock options, one should be familiar with the following terms:

- Underlying instrument – a tool that an option owner can buy or sell at the strike price of the option, upon expiration or the request of the option holder. It should be noted that early delivery can only be requested by American options.
- Option side – there are two kinds of options: PUT and CALL. PUT options give the holder the right to sell the underlying instrument at the strike price of the option, while CALL options give the opportunity to buy the underlying instrument at the strike price of the option.
- Exercise type – type of option expiry. Options can be exercised in two different ways – American and European. As regards American options, the delivery of the underlying contract can occur at any point in time (if the holder of long position requests the discharge prior to the terms), while European options only allow delivery on the expiration date of the option, depending on the market for the underlying contract.

Since not all basic assets submit to standardized, futures exist only for the main assets, in particular, futures on stock indices, stocks, currencies, agricultural commodities, metals, oil products, etc are widespread. The counterparty is not known to the investor, nor is it needed, since there exists a system of security deposits that operates to provide for the mechanism of bidding. When opening a long (purchase) or short (sale) position, the client must provide a guarantee that usually ranges from 2%

to 10% of the current market value of the asset. Thus, in the futures market there are a lot of bilateral deals.

## Simple Derivatives

Simple derivatives are instruments that include only one underlying asset. These include future contracts for:

- Raw materials – oil, gas, gasoline, orange juice, wheat and others.
- Metals – gold, silver, platinum, palladium and others.
- Currencies – EUR/USD, USD/CAD, USD/JPY and others.
- Indexes – NASDAQ, S&P, DowJones, CAC 40 and others.

Target market

Risk level	3
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The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients with average knowledge and experience in financial markets.
- The financial position of the client and possible losses: because futures are derivative instruments, for the opening of which it is necessary to have only a guarantee, the maximum possible losses associated with the acquisition or sale of derivatives may exceed the amount of the collateral.
- Risk awareness: the risk parameter for trading in derivatives is significantly higher than for trading in stocks and bonds. Since derivative instruments already include a lever (you can open a position without having the full amount of funds to calculate when the physical asset is delivered), this increases the risk of doing ill-considered actions in the hope of greater profits. Therefore, the risk of using simple derivatives can be estimated as three on a six-point scale (one point is the lowest risk, six points is the highest risk).
- Aims and needs of the client: this type of financial instrument is suitable for both speculators and hedge clients. Speculative clients are looking for an opportunity to make money by analyzing and predicting market movements. Hedge clients want to protect themselves from fluctuating market prices using futures contracts to fix the price of a physical asset by selling or buying derivatives. With the help of leverage in the contract, clients can increase both the profitability and reduce the costs of servicing and commission fees.

Examples of trade with futures contracts:

*Description of the contract:*

<b>CLH8 – WTI CRUDE OIL March 2018</b>	
Contract size	1,000 Barrels
Price of 1.0 point	1,000\$
Minimum movement size	0.01

Price of minimum movement	10\$
Contract price	65.71\$/bbl. (dollars per barrel)
Contract value	65,710\$
Initial reserve requirement	2,145\$
Up Limit	70.61
Down Limit	60.61

Purchase of futures:

% P/L	Opening price	Closing price	Commission (19\$ per side)	Profit/Loss (including paid commissions)
+3%	65.71	67.68	38\$*	$= (67.68 - 65.71) \times 1,000 - 38 = 1,932\$$
-3%	65.71	63.74	38\$*	$= (63.74 - 65.71) \times 1,000 - 38 = -2,008\$$

\*commission of 19\$ for the contract per side means that by buying and reselling one contract, the client pays 38\$.

Sale of futures:

% P/L	Opening price	Closing price	Commission (19\$ per side)	Profit/Loss (including paid commissions)
+3%	65.71	63.74	38\$*	$= (65.71 - 63.74) \times 1,000 - 38 = 1,932\$$
-3%	65.71	67.68	38\$*	$= (65.71 - 67.68) \times 1,000 - 38 = -2,008\$$

\* commission of 19\$ for the contract per side means that by buying and reselling one contract, the client pays 38\$.

Trade with margin instruments, which includes futures, is associated with the need to maintain a certain level of margin. In case of insufficient coverage of margin requirements, a margin call may occur on the account, in case of occurrence of which the investor needs to refill the account to fully cover all of the margin requirements. With further deterioration of the situation, a stop-loss situation may also arise. It should be taken into account that when the situation of margin calls arises, the bank has the right to close the client's position, without waiting for the onset of a stop-loss situation.

*N.B. Often, the opening price of trading of financial instruments can be lower (opening with a gap down) or higher (opening with a gap up) in comparison with closing price of the previous day. When trading starts with a gap, there may be a situation in which the requirements to the client may exceed the security deposit. In this case, the client*

*will be required to provide additional funds to cover the difference between loss and security deposit.*

Determining the level of margin call and stop loss:

Available funds prior to the opening of the position	5,000\$
Opened position	Purchase of 1 CLH8
Price of purchase	65.71
Initial reserve requirement	2,145\$
Commission for opening the contract	19\$
Available funds after the opening of the contract	$= 5,000 - 2,145 - 19 = 2,836$$
Margin call level in points from the position entry price	$= 2,836 / 1,000 / 1 = 2.836$
Margin call level	$= 65.71 - 2.836 = 62.874^*$
Stop loss level in points from the position entry price	$= (2,836 + 0.7 \times 2,145) / 1,000 / 1 = 4.3375$
Stop loss level	$= 65.71 - 4.3375 = 61.3725^{**}$

\*because the minimum movement under the contract is 0.01; the margin call will occur at a price of 62.87

\*\* since the minimum movement under the contract is 0.01; stop-loss will occur at a price of 61.37

## Complex Derivatives

Complex derivatives include the following derivative instruments:

- All other futures that do not fall under the definition of simple derivatives
- Stock options
- Futures options
- Forward contracts for metals, energy carriers, etc.
- Forex margin trade
- CFD (contracts for difference)

### Stock Options and Options on Futures

An option is a derivative that allows the option buyer (the owner or holder of a long position of the option) the right, but not the obligation, to buy or sell the underlying asset or financial instrument at the strike price of the option, depending on the option type (European or American). It should be taken into account that when buying an option, a premium is received by the counterparty (the seller of the option). In regard to this, the maximum loss of the holder of a long position can be equal only to the premium paid for the option. For a holder of a short position on an option (the seller), the loss is unlimited (except for the sale of PUT options, since the underlying asset cannot be below zero), but profit is limited to the initial amount of premium received for the sale.

In addition to being either CALL or PUT, options can also be divided by their duration – weekly and monthly, where weekly options expire each week, and monthly options expire each month. For liquid stock and futures contracts, three weekly options and one monthly expire per month (totalling four working weeks or one month). Some options for the underlying asset do not provide for the trading of weekly options – in most cases this is due to the demand for the underlying asset (the availability of options for the base contract is determined by the issuer of the contract, in most cases it is the exchange).

A holder of a long position in American-type options during the option may request for the underlying asset to be delivered (CALL option), or sell the underlying asset at the strike price (PUT option). For European-type options, delivery can only occur on the maturity date of the option. The holder of the short position (the seller) is, on the contrary, obliged to fulfil the requirements of the other party either to sell the asset (CALL option) or buy the option (PUT option). When delivering the underlying asset by option, one must take into account the need to provide an initial reserve requirement for a futures contract, or cash for the supplied shares.

It should be noted that a standard stock option on the exchange contains 100 shares, while a futures option contains one contract. However, the number of shares/futures may vary depending on the specification of the option.

Target market

<b>Risk level</b>	<b>4</b>
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The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients with high level knowledge and experience in financial markets.
- The financial position of the client and possible losses: the maximum loss of a holder of a long position of options is equal to the premium paid for the option, including commissions for opening and closing the position. The maximum loss of the holder of a short position on the option is unlimited.
- Risk awareness: the risk parameter when buying or selling options is higher than in similar transactions with futures contracts. One of the factors that increase the riskiness of operations on options is a small volume of transactions and a large range of strikes (for further strikes the market may be absent). Therefore, the riskiness of using complex derivatives can be estimated on four on a six-point scale (one point is the lowest risk, six points is the highest risk).
- Aims and needs of the client: generally, options are used for trading (obtaining increased income and speculative orders) or hedging on existing positions (protection from falling or price volatility). In the case of trading, speculative market participants can speculate on price increases or decreases using various option strategies.

Examples of trade with stock and futures options:

*Contract Description (futures option):*

CLH8 P65 – Crude oil option March 2018	
Base Contract	CLH8
Number of contracts	1 contract CLH8
Size of the contracts	1,000 barrels
Price of 1.0 point	1,000\$
Minimum movement size	0.01
Price of minimum movement	10\$
Price	1.38
Contract value	1,380\$
Initial reserve requirement	2,250\$ (collected only at sale)
Option type	American
Option side	PUT



Strike	65
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Purchase of option (futures):

Profit/Loss calculation using option price

% P/L	Opening price	Closing price	Commission (19\$ per side)	Profit/Loss (including paid commissions)
+30%	1.38	1.79	38\$	$= (1.79 - 1.38) \times 1,000 - 38 = 372 \$$
-30%	1.38	0.97	38\$	$= (0.97 - 1.38) \times 1,000 - 38 = -448 \$$

Profit/Loss calculation using option premium

% P/L	Premium paid upon opening of the position	Premium received upon the sale	Commission (19\$ per side)	Profit/Loss (including paid commissions)
+30%	$= 1.38 \times 1,000 = 1,380 \$$	$= 1.79 \times 1,000 = 1,790 \$$	38\$	$= 1,790 - 1,380 - 38 = 372 \$$
-30%	$= 1.38 \times 1,000 = 1,380 \$$	$= 0.97 \times 1,000 = 970 \$$	38\$	$= 970 - 1,380 - 38 = -4,48 \$$

Sale of option (futures):

Profit/Loss calculation using option price

% P/L	Opening price	Closing price	Commission (19\$ per side)	Profit/Loss (including paid commissions)
+30%	1.38	0.97	38\$	$= (1.38 - 0.97) \times 1,000 - 38 = 372 \$$
-30%	1.38	1.79	38\$	$= (1.38 - 1.79) \times 1,000 - 38 = -448 \$$

Profit/Loss calculation using option premium

% P/L	Premium received upon opening of the position	Premium paid upon the sale	Commission (19\$ per side)	Profit/Loss (including paid commissions)
+30%	$= 1.38 \times 1,000 = \$1,380$	$= 0.97 \times 1,000 = 970 \$$	38\$	$= 1,380 - 970 - 38 = 372 \$$
-30%	$= 1.38 \times 1,000 = \$1,380$	$= 1.79 \times 1,000 = 1,790 \$$	38\$	$= 1,380 - 1,790 - 38 = -448 \$$

Contract Description (stock option):

AAPL US 02/16/18 C160	
Base contract	Shares of Apple Inc.
Base number of shares	100 shares of Apple Inc.
Price of 1.0 point	100\$
Minimum movement size	0.05
Price of minimum movement	5 \$
Price	9.36
Initial reserve requirement	936\$ (collected only at sale)
Option type	American
Option side	CALL
Strike	160

Purchase of option (stock):

Profit/Loss calculation using option price

% P/L	Opening price	Closing price	Commission (12.5\$ per side)*	Profit/Loss (including paid commissions)
+30%	9.36	12.17	25\$	$= (12.17 - 9.36) \times 100 - 25 = 256\$$
-30%	9.36	6.55	25\$	$= (6.55 - 9.36) \times 100 - 25 = -306\$$

\*minimum commission 12.5\$. When exceeding the threshold of 2.5\$ per option.

Profit/Loss calculation using option premium

% P/L	Premium paid upon opening of the position	Premium received upon the sale	Commission (12.5 \$ per side)*	Profit/Loss (including paid commissions)
+30%	$= 9.36 \times 100 = 936\$$	$= 12.17 \times 100 = 1,217\$$	25\$	$= 1\ 217 - 936 - 25 = 256\$$
-30%	$= 9.36 \times 100 = 936\$$	$= 6.55 \times 100 = 655\$$	25\$	$= 655 - 936 - 25 = -306\$$

\*minimum commission 12.5\$. When exceeding the threshold of 2.5\$ per option.

Sale of option (stock):

Profit/Loss calculation using option price

% P/L	Opening price	Closing price	Commission (12.5\$ per side)*	Profit/Loss (including paid commissions)
+30%	9.36	6.55	25 \$	$= (9.36 - 6.55) \times 100 - 25 = 256\$$
-30%	9.36	12.17	25 \$	$= (9.36 - 12.17) \times 100 - 25 = -306\$$

\*minimum commission 12.5\$. When exceeding the threshold of 2.5\$ per option.

Profit/Loss calculation using option premium

% P/L	Premium paid upon opening of the position	Premium received upon the sale	Commission (12.5 \$ per side)*	Profit/Loss (including paid commissions)
+30%	$= 9.36 \times 100 = 936\$$	$= 6.55 \times 100 = 655\$$	25 \$	$= 1,380 - 970 - 38 = 372\$$
-30%	$= 9.36 \times 100 = 936\$$	$= 12.17 \times 100 = 1217\$$	25 \$	$= 1,380 - 1,790 - 38 = -448\$$

\*minimum commission 12.5\$. When exceeding the threshold of 2.5\$ per option.

## Options Strategies

An option strategy is a combination of various options, which can either be paired with an underlying asset of the option, or without it. An option strategy is determined by the investor, based on his goals and aims, which can include increasing profit of the position (with market growth) or limiting losses (hedging). Since option strategies are related to the movement of the market, they can be divided into two types – Bull and Bear. The main principle of the Bull strategy is to increase the value of the underlying asset, while a Bear strategy bets on the reduction of an underlying asset's value. For effective use of option strategies, you need to understand where the payback point is (the price level at which the income and expense for the option position, including commission costs, is 0). Despite a large number of optional strategies, the most common ones are:

- Bull (CALL) Spread – this strategy involves the purchase of a CALL option with the simultaneous sale of a CALL option, but with a higher strike. The premium received from the sale will partially offset the premium paid for the purchase. Using this strategy, the investor assumes that the price for the underlying asset will go up (above the strike of the long position), but not above a certain level (strike of the short position).
- Bear (PUT) Spread – this strategy is the opposite of a bull spread. The strategy involves the purchase of a PUT option with the simultaneous sale of a PUT option, but with a lower strike. As in the above paragraph, the sales premium partially covers the premium paid. Using this strategy, the investor assumes that the price for the underlying asset will go down (below the strike of the long position), but not below a certain level (strike of the short position).
- Covered CALL/PUT options – the main idea of this strategy is either the sale of a CALL option against a long position on the underlying asset, or the sale of a PUT option against a short position of the underlying asset. When an option is sold, the investor receives a premium. Due to this premium, a kind of airbag is created that reduces the risk of a price fall on the underlying asset (for a long position on the underlying asset) or growth (for a short position on the underlying asset), and also increases the yield on the position if the price of the underlying asset remains within certain limits.

For example, an investor's portfolio has 100 shares of Apple Inc. bought for 100\$ apiece. In order to increase a profit, he sells CALL options with a strike price of 105\$. The received profit is 2\$. In this case, the border at which the investor will suffer a loss from below will be 98\$ per share (the price of entry into the underlying asset minus the premium). However, the maximum profit will also be limited to 7\$ per share (with a trade above 107\$ at the expiration date of the option, the investor will have to place the shares to the counteragent).

- Straddle – this strategy is based on the purchase of the same number of long options CALL and PUT with the same strike price and the same maturity date for one underlying asset. A straddle purchase is useful in cases when high price

volatility is expected due to which the profit on options will exceed the premium paid for the purchase.

For example, the shares of Tesla Inc. currently trade at 265\$ per share. The investor expects high price volatility after the release of quarterly financial reports. As a result, he buys a CALL option and a PUT option with a strike price of 265 for 4.5\$ per share. In total, the investor pays 9\$ for both options. If at the maturity date the share will be traded below 256\$ or over 274\$, the option strategy will make a profit.

- Strangle – the given strategy uses the same principle as Straddle, but is used instead with options that are “out of the money” (options whose strike price is distanced from the current market price). The option is "out of the money", when there is no sense to make a delivery, because to buy or sell the underlying asset at a market price is more profitable. Options that are "out of money" are, as a rule, cheaper. The main advantage of strangle option strategies is the presence of a smaller premium. However, with a decrease in costs, the profitability margins increase (the upper and lower levels of the strategy payback).

An example of using a Strangle strategy would be a purchase of a CALL option with a strike of 270 for 3\$ each and a PUT option with a strike of 260 for 5\$ each, when the market offer is 265. The maturity date of both options must be the same, just like the underlying asset. The aggregate premium will be equal to 8\$. If the price of the underlying asset at maturity date will be lower than 252\$ ( $260 - 8$ ) or higher 278\$ ( $270 + 8$ ) the strategy will bring a profit.

## Rolling Spot FX

**Please note! The given product can be considered as Contracts for differences (CFDs). CFDs are complex instruments and come with a high risk of losing money rapidly due to leverage. 86% of retail investor accounts lose money when trading CFDs with JSC Rietumu Bank. You should consider whether you understand how CFDs work and whether you can afford to take the high risk of losing your money.**

The given product allows to speculate using leverage on the increase, or decrease of currency quotations. The distinct features of the Forex market include **high leverage and high volatility**. The operation with the currency pair (i.e. EUR/USD) is a simultaneous purchase and sale of two currencies. An investor can buy (long position) if he believes that's the base currency (EUR) will grow in value in comparison with the quoted currency (USD), or sell (short position) if he believes that the base currency price will fall. Rolling spot Forex trading **does not imply a physical delivery** and has an open settlement date. Compared with other products, this instrument **carries the highest level of risk**.

The margin requirements of the Forex market are one of the lowest (up to 3.33%), which should encourage investors to be especially cautious. Margin trading allows to have large exposures with a relatively small deposit account. If the account does not have enough funds to maintain the position and the investor can't replenish the account on time, **the positions will be automatically closed at the first available price**. The possibility of high profits also carries the risk of high losses, which, in case of extreme price movements, **may exceed the initial deposit of the account**. (\*Starting from 1 August 2018 a negative balance protection will apply to retail investors.)

**The client's costs include commissions as well as commissions in the form of a spread** and a transfer fee for the position with which the client is required to familiarize himself before concluding the transaction. If the position remains open at the end of day, then a position transfer fee (swap, rollover fee) is either charged or debited. The transfer fee is calculated on the basis of the differences between the interest rates of both currencies, as well as the remuneration of the bank.

The Forex market is not centralized and essentially depends on the liquidity providers with which the bank operates. **The formation of prices is carried out outside the regulated market**, therefore the current prices may differ from broker to broker. Liquidity providers can significantly expand the market spread, which is reflected in the Forex market and is a significant risk for short-term trading. **Marginal currency trading is possible only on the Rietumu FX platform (Metatrader 4)**.

In addition it should be noted that due to the peculiarities of Forex market (is not centralised, depends on the liquidity provider), at the most unfavourable market changes, the liquidity provider will not be able to fulfil its obligations under the transaction (counterparty's risk of bankruptcy).

Target Market

Risk level 6 (Highest)

The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients with **high level knowledge and experience** on the currency market. The client must understand the effect of leverage and risks associated with margin trading.
- The financial position of the client and possible losses: the client's losses may exceed the level of the initial deposit. Speculative operations should not be conducted on funds **that the investor cannot afford to lose**.
- Risk awareness: leverage trading carries **the highest amount of risk**. Potentially high profits can also result in big losses.
- Aims and needs of the client: **speculative operations** (acquisition of high income, paired with high amount of risk).

Example of trading on Rietumu FX platform (\*for retail investors):

Currency pair EUR/USD		
Operation type	Purchase	
Opening price	1.2230	Position opening price
Position size	1 lot	1 lot = 100 000 of base currency
Margin requirements	3.33% (1:30)	Available funds required to open the position
Margin requirements (USD)	4 072.59\$	$100,000 \times 3.33\% \times \text{EUR/USD rate} = 4\ 072.59$
Commission	0.025%	$100,000 \times 0.025\% = 25\$$ (full turnover)
Account balance	6,000\$	Account deposit
Stop-Out level	50%	Stop-Out level determined by the broker. When this level is reached, the positions will be automatically liquidated

Scenario	Price change	P/L (P/L – commission)	Assets (Account balance + P/L)	Available funds (Assets – margin requirements)	Margin level (Assets/ margin requirements )	Account compliance with margin requirements
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Favo- rable	+2%	2,000 – 25 = 1,975\$	6,000 + 1,975 = 7,975\$	7,975 – 4,072.59 = 3,902.41\$	7,975 / 4,072.59 = 195.8%	570% > 90% = OK
Unfavo- rable	–1.5%	–1,500 – 25 = –1,525\$	6,000 – 1,525 = 4,475\$	4,475 – 4,072.59 = 402.41\$	4,475 / 4,072.59 = 109.88%	284% > 90% = OK
Extreme	–4%	–4,000 – 25 = –4,025\$	6,000 – 4,025 = 1,975\$	1,975 – 4,072.59 = – 2,097.59\$	1,975 / 4,072.59 = 48.49%	48.49% < 50% = Stop Out



## Contract for Difference (CFD)

**Please note! CFDs are complex instruments and come with a high risk of losing money rapidly due to leverage. 86% of retail investor accounts lose money when trading CFDs with JSC Rietumu Bank. You should consider whether you understand how CFDs work and whether you can afford to take the high risk of losing your money.**

CFD is a derivative that reflects the movement of the price of an underlying asset. **CFD exists for almost every product:** share, index, future, bond and other instruments. An investor can buy a CDF (long position) if he believes that the underlying asset (example: AAPL shares) will grow, or he can sell a CDF (short position) one if he believes that the price of the underlying asset will fall. When the position is closed, the client will be paid the difference between the opening price and the closing price.

CFD reflects the price and features of the product, but **it is not the product itself**. Having bought a CFD for share, the investor does not become the owner of the company's shares, but continues to receive dividends (if any) in the form of transfers to his account. Other corporate events which apply to the stock will also be reflected in the CFD. If the underlying asset is a futures contract, the CFD will also have an expiration date. The underlying asset is usually traded on a regulated market, but **CFD transactions are always made in an unregulated market**. Thus, the only **guarantor of payment of profit is the counterparty** with whom the transaction is concluded.

CFD is a **financial instrument which features leverage** that allows to have large exposures with a relatively small deposit account. If the account does not have enough funds to maintain the position and the investor cannot replenish the account on time, **the positions will be automatically liquidated at the first available price**. The possibility of high profits carries the risk of high losses, which, in case of extreme price movements, **may exceed the initial deposit of the account**. (\*Starting from 1 August 2018 a negative balance protection will apply to retail investors.)

**The client's expenses include commissions or commissions in the form of a spread and a transfer fee for the position** with which the client is required to familiarize himself before concluding the transaction. If the position remains open at the end of the day, then a position transfer fee (swap, rollover fee) is either charged or debited. If it is a CFD for shares or an index, then the CFD funding rate applies, meanwhile if a CDF is for energy spots (i.e. XBRUSD), then it is defined as a derivative instrument from two futures – from the nearest expiration, and the following one. Thus the payment is calculated from the price difference between contracts with different months of expiration. **Margin trading with CDF is possible only on the Rietumu FX platform (Metatrader 4).**

Target Market

<b>Risk level</b>	<b>6 (Highest)</b>
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The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients **with high level knowledge and experience** with underlying asset and CFD. The client must understand the effect of leverage and risks associated with margin trading.
- The financial position of the client and possible losses: the client's losses may exceed the level of the initial deposit. Speculative operations **should not be conducted on funds that the investor cannot afford to lose**.
- Risk awareness: leverage trading carries **the highest amount of risk**. Potentially high profits can also result in big losses.
- Aims and needs of the client: **speculative operations** (acquisition of high income, paired with high amount of risk).

Example of trading on Rietumu FX platform (\*for retail investors):

CFD for S&P 500 index		
Operation type	Purchase	
Opening price	2,823.4	Position opening price
Position size	1 lot	1 lot = 50 units of index
Transaction amount	141,170	Transaction amount – 2,823.4 x 50 = 141.170
Margin requirements	5%	Available funds required to open the position
Margin requirements (USD)	7,058.50\$	141,170 x 5%
Commission	20\$	20\$ per lot (full turnover)
Account balance	8,000\$	Account deposit
Stop-out level	50%	Stop-out level determined by the broker. When this level is reached, the positions will be automatically liquidated

Scenario	Price change	P/L (P/L – commission)	Assets (Account balance + P/L)	Available funds (Assets + margin requirements)	Margin level (Assets/ margin requirements)	Account compliance with margin requirements
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Favo- rable	+1%	1,412 – 20 = 1.392\$	8,000 + 1,392 = 9,392\$	9,392 – 7,058.50 = 2,333.50\$	9,392 / 7,058.50 = 134.06%	134.06% > 50% = OK
Unfavo- rable	–0.5%	–706 – 20 = –726\$	8,000 – 726 = 7,274\$	7,274 – 7,058.50 = 215.50\$	7,274 / 7,058.50 = 103.05%	103.05% > 50% = OK
Extre- me	–3.25%	–4,588.03 – 20 = – 4,608.03\$	8,000 – 4,608.03 = 3,391.97\$	3,391.97 – 7,058.50 = –3,666.53\$	3,391.97 / 7,058.50 = 48.05%	48.05% < 50% = Stop Out

## **Metals (XAU, XAG, XPD and others). Currency swaps and forwards**

Precious metals are one of the most popular and reliable forms of capital storage. It is believed that this type of assets can be used in investment portfolios to protect the overall purchasing power, reduce portfolio volatility and minimize losses during the period of market shocks.

There are two main options for the purchase and sale of precious metals: at spot prices – for lots of physical metal and at futures prices – for future deliveries.

### **Unallocated Bullion**

An investment account in JSC “Rietumu Banka” makes it possible to perform operations with unallocated bullion (without indicating its individual characteristics, the number of ingots, samples, manufacturer, serial number, etc.). In this case, the purchase of precious metal will not incur the costs of transportation and storage. In addition, the commission for buying unallocated bullion is lower than for metal in bars and coins.

*N.B. It should be noted that this type of assets is not a financial instrument for the purposes of the FITL law, however, we believe that in line with the best practice, we should clarify the specifics of investing in this type of assets.*

Currently, JSC “Rietumu Banka” offers trading with the following unallocated bullion:

- XAU – troy ounce of gold;
- XAG – troy ounce of silver;
- XPT – troy ounce of platinum;
- XPD – troy ounce of palladium.

Target Market

<b>Risk level</b>	2
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The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients with basic level knowledge and experience regarding financial markets.
- The financial position of the client and possible losses: the maximum possible losses, associated with the purchase of unallocated bullion, are equal to all funds invested in this product (at the instrument price of zero), including commissions and costs associated with the storage.

- Risk awareness: the risk of investing in unallocated metals varies depending on the particular metal. In general, investing in unallocated metals is less risky than in derivative contracts. Therefore, the riskiness of investing in depersonalized metals can be estimated as two of six on a six-point scale (one point is the lowest risk, six points is the highest risk).
- Aims and needs of the client: this type of investment is suitable for clients who are looking for the opportunity to diversify their portfolio by investing in precious metals while not acquiring them in physical form.

Examples of investment in unallocated bullion:

***Investment with subsequent profit.***

On 3 November 2017 an investor acquires XAU certificates for a volume equal to 150 ounces (the minimum amount for buying / selling is 100 ounces). At the time of purchase, the price of gold per ounce is 1,150\$. The cost of the purchase is:

- 1)  $150 \times 1,150 = 172,500\$$  (cost of certificates).
- 2) 1,725\$ – a commission for the purchase of XAU certificates (1% from the transaction amount).

Total cost of the purchase:  $172,500 + 1,725 = 174,225\$$ .

By 18 January 2018 the price of XAU certificates increases to 1,212\$ per ounce. The investor decides to close with a profit. The income from the sale is:

- 1)  $150 \times 1,212 = 181,800\$$  (cost of certificates).
- 2) 1,818\$ – a commission for the purchase of XAU certificates.
- 3) 189.45\$ – a commission for servicing the investment account for XAU certificates (0.5% per annum of the market value of certificates on the investment account). When calculating this amount, the constant increase in portfolio value was equal to 122.37\$ / day during the period of ownership of the certificates. Calculation formula is  $V \times 0.5\% / 360$ , where V is the cost of certificates for a specific date.

Total income from the sale:  $181,800 - 1,818 - 189.45 = 179,792.55\$$ .

**Net profit** from the deal, including commission and storage costs,  $179,792.55 - 174,225 = 5,567.55\$$ .

***Investment with subsequent loss.***

On 23 November 2017 an investor decides to acquire XAG certificates for a volume equal to 15,000 ounces (the minimum volume for purchase / sale on XAG certificates is 5,000 ounces). At the time of the purchase, silver costs 15.74\$ per ounce. The costs of the purchase are:

- 1)  $15,000 \times 15.74 = 236,100\$$  (cost of certificates).
- 2) 2,361\$ – a commission for the purchase of XAG certificates (1% from the transaction amount).

Total cost of the purchase:  $236,100 + 2,361 = 238,461\$$ .

By 18 January 2018 the price of XAG certificates falls to 13.14\$ per ounce. The investor decides to record a loss. The income from the sale is:

- 1)  $15,000 \times 13.14 = 197,100$ \$ (cost of certificates).
- 2) 1,971\$ – a commission for the purchase of XAG certificates.
- 3) 505.40\$ – a commission for servicing the investment account for XAG certificates (1% per annum of the market value of certificates on the investment account). When calculating this amount, a constant decrease in the portfolio value equal to  $-469.88$ \$ per day was used during the period of possession of the certificates. The calculation formula is  $V \times 1\% / 360$ , where V is the cost of certificates for a specific date.

Total income from the sale:  $197,100 - 1,971 - 505.40 = 194,623.60$ \$.

**Net loss** from the deal, including all commissions and storage costs,  $194,623.60 - 238,461 = -43,837.40$ \$.

## Currency Swaps

A swap is a combination of two opposite transactions for the conversion of currencies of the same amount, but with different value (settlement) dates. Most of the transactions for currency swaps are up to one year. Furthermore, there are two types of currency swaps – "buy/sell" and "sell/buy". With a "buy/sell" swap, the first conversion deal is the purchase of the base currency, and the second is the sale, and vice versa.

Target market

Risk level	5
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The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients with advanced knowledge and experience regarding financial markets.
- The financial position of the client and possible losses: the maximum possible losses associated with a swap transaction are equal to the difference between the market exchange rate used during the swap transaction, including commissions.
- Risk awareness: the risk parameter when using a swap transaction depends on the currencies used in it (each currency has its own volatility, and therefore the risk parameter varies). In general, the riskiness of using currency swaps can be estimated as five of six on a six-point scale (one point is the lowest risk, six points is the highest risk).
- Aims and needs of the client: this type of investment is suitable for clients who are looking for an opportunity to protect themselves from foreign exchange risk while conducting business activities or in an unstable economic situation or, where the price of the currency can change dramatically under the influence of various factors. Additionally, the swap allows you to use cash (less the security deposit) during the time interval between the opening and closing of the swap.

Examples of swap transactions:

One month later, a client needs to purchase equipment for conducting business activities for US Dollars. However, during this month, the US is expected to have various economic data and processes, which may affect the value of the dollar against other currencies (both positively and negatively). Therefore, the client decides to reduce the currency risk by concluding a swap deal for dollar/euro.

The parameters of the swap:

- The amount of the transaction is 1,000,000\$.
- Security deposit of 50,000\$ – 5% of the swap amount, charged in one of the swap currencies and is calculated individually.
- The first exchange rate is 1.15 (as of the date of the transaction, the sale of the dollar and purchase of the euro).

- The second exchange rate is 1.17 (a month later, selling the euro and buying the dollar).

By initiating a swap, the client sells 1,000,000\$ and receives 869,565.22€ (rate 1.15). One month later, the closing swap transaction will be made, namely the client will sell 869,565.22€ and buy 1,017,391.31\$ (rate 1.17).

If at the time of closing the swap transaction, the market exchange rate will decrease to 1.14 (the dollar will strengthen against the euro), the client will earn 26,086.96\$ ( $1,017,391.31 - 869,565.22 \times 1.14$ ) on the swap, since the market rate will be less than the rate fixed by the swap (swap exchange is more profitable than exchange at the market rate).

However, if the market rate at the close of the deal is higher than the rate fixed by the swap, the client will lose money (exchange at the market rate is more profitable than the swap exchange).



## Currency Forwards

A currency forward is a contract whereby one party (the seller) must exchange the other party (the buyer) a certain amount of money at a predetermined exchange rate on a certain day in the future (unilaterally).

<u>Target market</u>	<b>Risk level</b>	5
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The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients with advanced knowledge and experience regarding financial markets.
- The financial position of the client and possible losses: the maximum possible losses associated with a forward transaction equal the difference between the market exchange rate and the rate that was used in concluding the forward transaction, including commissions.
- Risk awareness: the risk parameter when using a forward transaction depends on the currencies used in it (each currency has its volatility, and therefore the risk varies). In general, the riskiness of using currency forwards can be estimated as five of six on a six-point scale (one point is the lowest risk, six points is the highest risk).
- Aims and needs of the client: this type of investment is suitable for clients who are looking for an opportunity to protect themselves from foreign exchange risk while conducting business activities or in an unstable economic situation, where the price of the currency can change dramatically under the influence of various factors.

### Examples of a forward transaction:

In one month, a client needs to buy equipment for conducting business activities for US Dollars. Since the company operates in the Eurozone, the main income is in euros. If one makes a conversion at the time of the transaction (in a month), it is unclear how much money will be needed, since the rate may change.

In order to protect the company from foreign exchange risk and allocate the necessary amount of money for the transaction, the client decides to fix the exchange rate, which will occur in a month by using a forward transaction.

Transaction parameters:

- The required amount of US dollars for the acquisition of equipment is – 1,000,000\$.
- Security deposit 70,000\$ – 7% of the forward amount to be collected in one of the forward contract currencies and calculated individually.
- The fixed exchange rate is 1.17.

- Necessary amount of euro for converting in a month:  $1,000,000 / 1.17 = 854,700.86\text{€}$ .

If in a month the market exchange rate is equal to 1.15\$ per euro, the client will earn 17,094.02\$ on the deal (the forward rate is better than the market rate). With a market rate of 1.19\$ per euro, the client will lose 17,094.02\$ on the deal (the market exchange rate is better than the forward rate). It should be noted that even with an, exchange rate loss, the forward contract allows you to plan future costs, which has a positive effect on the company's activity as a whole.

## Fund Shares

### UCITS investment funds (regulated mutual funds)

An UCITS fund is an investment fund corresponding to the provisions of the European Union regulation of the same name. The UCITS standard offers additional benefits for both the manager and the investor. One of the most important advantages of these funds is a high degree of awareness, transparency and high standards of risk management (limitations on the range of instruments in which investment can be made, etc.). Each UCITS fund has a "passport" that allows the fund to sell its shares in different EU countries. Bear in mind that many funds have a threshold of entry – that is, a minimum amount of investment.

UCITS funds like non-UCITS funds can have different classes (Class A, Class B, etc.). The division by classes and the number of these classes is determined by the fund itself and can depend on various factors. For example, class A may have a higher entry threshold and is intended for institutional investors, and class B for private ones with a lower entry threshold for private clients. It should, however, take into account that, despite the division into classes, the shareholders of the fund own the same financial instrument (the same ISIN, profitability by shares).

Target market

Risk level
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3
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The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients with basic knowledge and experience regarding financial markets.
- The financial position of the client and possible losses: the maximum possible losses associated with the purchase of the fund's shares equal to all cash funds invested in this product (with the instrument price equal to zero), including commissions and associated storage costs.
- Risk awareness: the risk of investing in UCITS funds varies depending on the main components of the fund (what type of assets the fund invests in, which markets, etc.). In general, the overall riskiness of investment can be estimated as three on a six-point scale (one point is the lowest risk, six points is the highest risk).
- Aims and needs of the client: this type of investment is suitable for clients who are looking for the opportunity to increase their capital in the long term. The profitability of UCITS funds depends on the strategy and assets in which the fund invests.

Examples of investment in UCITS funds:

*Investment with subsequent profit.*

On 9 July 2017 an investor acquires 1,000 shares in a UCITS fund: Rietumu Asset Management Cash Reserve Fund – USD. This fund specializes in investing in short / medium term bonds, fixed deposits, investment funds and money market instruments. The minimum investment in this fund is 1,000\$. The purchase costs are:

- 1)  $1,000 \times 1,013.75 = 1,013,750\$$  (cost of fund shares).
- 2) 0 – a commission for the purchase / sale of this fund (\*).

\* The standard minimum commission in JSC “Rietumu Banka” for the purchase / sale of third party funds is 1,000 EUR. This commission does not apply to the funds of JSC "Rietumu Asset Management" IPS.

Total costs of the purchase: 1,013,750\$.

By 6 June 2018 the price of shares of the UCITS Rietumu Asset Management Cash Reserve Fund – USD rises to 1,035\$. The investor decides to close with a profit. The income from the sale:

- 3)  $1,000 \times 1,035 = 1,035,000\$$  (costs of fund shares).
- 4) 1,165.23\$ – servicing of the investment account (0.15% per annum of the market value of all fund shares). When calculating this amount, the constant increase in portfolio value was 78.13\$ / day in the period of ownership of the shares. The formula for the calculation is  $V \times 0.15\% / 360$ , where V is the value of the asset for a specific date.
- 5) 776.82\$ – management fee (0.1% per annum of the market value of all fund shares). When calculating this amount, the constant increase in portfolio value was 78.13\$ / day in the period of ownership of the shares. The formula for the calculation is  $V \times 0.1\% / 360$ , where V is the value of the asset for a specific date.

**There is no** commission for servicing the client's investment account in the portfolio of which there is **only** the Rietumu Asset Management Cash Reserve Fund. The commission for management and maintenance of the fund account is already included in the cost of shares. For other funds, commissions may not be included in the cost of shares and may be withdrawn separately.

Total income from sale: 1,035,000\$.

**Net profit** from the deal, including all commissions, storage and management costs,  $1,035\ 000 - 1,013\ 750 = \mathbf{21,250\$}$ .

#### ***Investment with subsequent loss.***

On 7 September 2017 an investor acquires 1 000 shares of UCITS Rietumu Asset Management Cash Reserve Fund – USD. The minimum investment in this fund is 1 000\$. The costs of this purchase are:

- 1)  $1,000 \times 1,013.75 = 1,013,750\$$  (cost of fund shares).

Total cost of purchase: 1,013,750\$.

By 6 June 2018 the share price of UCITS Rietumu Asset Management Cash Reserve Fund – USD falls to 1 005\$. The investor decides to record a loss. The income from the sale is:

- 2)  $1,000 \times 1,005 = 1,005,000\$$  (cost of fund shares).
- 3) 1,148.16\$ – servicing of the investment account. When calculating this amount, the constant decrease in portfolio value was  $-32.17\$ / \text{day}$  in the period of ownership of the shares.
- 4) 765.44\$ – management fee. When calculating this amount, the constant decrease in portfolio value was  $-32.17\$ / \text{day}$  in the period of ownership of the shares.

**There is no** commission for servicing the client's investment account in the portfolio of which there is **only** the Rietumu Asset Management Cash Reserve Fund. The commission for management and maintenance of the fund account is already included in the cost of shares. For other funds, commissions may not be included in the cost of shares and may be withdrawn separately.

Total income from the sale: 1,005,000\$.

**Net loss** from the deal, including all commissions, storage and management fees,  $1,005,000 - 1,013,750 = -8,750\$$ .

## Non-UCITS Funds

Funds can be considered non-UCITS if they did not receive the so-called "UCITS passport". In general, they are not so transparent and are not strictly regulated by the European regulator, but they have more opportunities regarding the structure and financial instruments that they can buy. These funds are created and regulated by the local supervisory authority depending on the country of registration (SICAV, SICAF, FCP, etc.). It should be taken into account that any non-UCITS fund can receive UCITS accreditation, but for this it must fulfil a number of conditions.

Target market

Risk level	3
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The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients with average knowledge and experience regarding financial markets.
- The financial position of the client and possible losses: the maximum possible losses associated with the purchase of the fund's shares equal to all the funds invested in this product (with the instrument price equal to zero), including commissions and associated storage costs.
- Risk awareness: the risk of investing in non-UCITS funds varies depending on the components of the fund (what type of assets the fund invests in, which markets, etc.). In general, the overall riskiness of investment can be estimated as three on a six-point scale (one point is the lowest risk, six points is the highest risk).
- Aims and needs of the client: this type of investment is suitable for clients who are looking for the opportunity to increase their capital in the long term. The profitability of non-UCITS funds depends on the strategy and assets in which the fund invests.

Examples of investment in shares of non-UCITS funds:

### ***Investment with subsequent profit.***

On 19 September 2017 an investor acquires 2 500 shares of Thibault worldwide FLEX-A fund for 118.05\$ per share. This fund aims at a return of +5% to the Consumer Price Index (US Consumer Price Index for Urban Consumers Seasonally Adjusted). The minimum investment in this fund is 150,000\$. The acquisition costs were as follows:

- 1)  $2,500 \times 118.05 = 295,125\$$  (cost of fund shares)
- 2) 4,426.88\$ – a commission for the purchase of this fund (1.5% of the transaction amount).

Total costs of the purchase:  $295,125 + 4,426.88\$ = 299,551.88\$$ .

By 6 February 2018 the share price of Thibault worldwide FLEX-A fund rises to 123.36\$. The investor decides to close with a profit. The income from the sale is:

- 3)  $2,500 \times 123.36 = 308,400\$$  (cost of fund shares).
- 4) 3,084\$ – a commission for the purchase of this fund (1% of the transaction amount).
- 1) 590.95\$ – servicing of the investment account (0.5% per annum of the market value of all fund shares). When calculating this amount, the constant increase in portfolio value was 94.82\$ / day in the period of ownership of the shares. The formula for the calculation is  $V \times 0.1\% / 360$ , where V is the value of the asset for a specific date.

*In this example, there is no management fee.*

Total income from the sale:  $308,400 - 3,084 - 590.95 = 304,725.05\$$

**Net profit** from the deal, including commission, storage and management costs,  $304,725.05 - 299,551.88 = \mathbf{5,173.17\$}$ .

#### ***Investment with subsequent loss.***

On 21 September 2017 an investor acquires 2,500 shares of Thibault worldwide FLEX-A fund for 11.87\$ per share. The minimum investment in the given fund is 150,000\$. The acquisition costs are as follows:

- 1)  $2,500 \times 115.87 = 289,675\$$  (price of fund shares).
- 2) 4,345.13\$ – a commission for the purchase of this fund (1.5% of the transaction amount).

Total costs of the purchase:  $289,675 + 4,345.13 = 294,020.13\$$ .

By 8 May 2018 the share price of Thibault worldwide FLEX-A fund falls to 103.16\$. The investor decides to record a loss. The income from the sale is:

- 3)  $2,500 \times 103.16 = 257,900\$$  (cost of fund shares).
- 4) 2,579\$ – a commission for the purchase of this fund (1% of the transaction amount).
- 5) 881.76\$ – servicing of the investment account (0.5% per annum of the market value of all fund shares). When calculating this amount, the constant decrease in portfolio value was -138.76\$/day in the period of ownership of the shares.

*In this example, there is no management fee.*

Total income from the sale:  $257,900 - 2,579 - 881.76 = 254,439.24\$$

**Net loss** from the deal, including commission, storage and management costs,  $254,439.24 - 294,020.13 = \mathbf{-39,580.89\$}$ .

## Money Market and Structured Deposits

The money market along with the capital market is part of the financial market. The main differences in the money market are its borrowing term – up to one year, and low financial risk. Since borrowing takes place in the short term, money market instruments have a small interest income and mainly serve short-term borrowing or investing funds.

Money market instruments include:

- Short-term securities (bills, bank checks, depository receipts)
- Short-term loans (commercial and interbank)
- REPO transactions

### Ordinary Money Market Instruments

The simplest and most popular instruments are short-term US Treasury bills (maturity up to one year, inclusive). These bills are one of the most liquid and ultra-reliable financial instruments. The difference between the US bills from all others is the price, which is below its face value, and the absence of a coupon payment. Since US Treasury bills are non-coupon discount securities, the yield on paper is its current price.

Target Market

Risk level	1
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The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients with basic knowledge and experience regarding financial markets.
- The financial position of the client and possible losses: the maximum possible losses associated with the acquisition of US Treasury bills are equal to all cash funds invested in this product (with the instrument price equal to zero), including commissions and associated costs for storage.
- Risk awareness: because short-term US Treasury bills are among the most secure instruments, the risk parameters of investing in these instruments are minimal. In general, the riskiness of investing in bills can be estimated as one on a six-point scale (one point is the lowest risk, six points is the highest risk).
- Aims and needs of the client: this type of investment is suitable for clients who are looking for an opportunity to save their capital in the short term.

Examples of investment in US Treasury bills:

*Investment with subsequent profit.*



On 2 February 2018 an investor acquired 100,000 short-term US Treasury bills at face value with maturity on 1 March 2018. At the time of purchase the given bill was traded with a yield of 1.2625% (99.7475%). The costs of the purchase are:

- 1)  $100,000 \times 99.7475\% = 99,747.50\$$  (face value of the bill).
- 2) 99.75\$ – the bank's commission for the purchase of the given bills (0.1% from the transaction amount).

Total cost of the purchase:  $99,747.5 + 99.75 = 99,847.25\$$

The investor decides to hold the given bills until maturity. Since repayment occurs at 100% of face value, the income from the redemption of the bill are:

- 3)  $100,000 \times 100\% = 100,000\$$  (face value of the bill).
- 4) 0\$ – a commission of the bank at the repayment of the bill (commission for the repayment of the bond is not levied).
- 5) 38.84\$ – servicing of the investment account (0.5% per annum of the total assets on the investment account, in this example only one asset is in the portfolio). When calculating this amount, the constant increase in the value of the portfolio was equal to 9.35\$/day during the period of ownership of the asset. The formula for the calculation is  $V \times 0.5\% / 360$ , where V is the value of the asset for a specific date.

Total income from the redemption:  $100\ 000 - 38.84 = 99,961.16\$$

**Net profit** from the deal, including all commissions and storage costs,  $99,961.16 - 99,847.25 = \mathbf{113.91\$}$ .

#### ***Investment with subsequent loss.***

On 1 February 2018 an investor acquires 100,000 short term US Treasury bills at face value with maturity at 1 March 2018. At the time of the purchase, the given bill was traded with a yield of 1.895% (99.621). The costs of the purchase are:

- 1)  $100,000 \times 99.621\% = 99,621\$$  (face value of the bill).
- 2) 99.62\$ – the bank's commission for the purchase of the given bills. (0.1% of the transaction amount).

Total costs of the purchase:  $99,621 + 99.62 = 99,720.62\$$

By 22 February 2018 the yield on bills increases to 2.15% (99.57). The investor decides to record a loss and sell the position. The income from the sale is:

- 3)  $100,000 \times 99.57\% = 99,570\$$  (face value of the bill).
- 4) 99.57\$ – the bank's commission for the sale of the given bills.
- 5) 71.93\$ – servicing of the investment account. When calculating this amount, the constant decrease in the value of the portfolio was equal to 1\$ per day during the period of ownership of the asset.

Total income from the sale:  $99,570 - 99.57 - 71.93 = 99,398.5\$$

**Net loss** from the deal, including all commissions and storage costs,  $99,398.5 - 99,720.62 = \mathbf{-322.12\$}$ .

## Complex Money Market Instruments

Complex money market instruments include repurchase transactions (REPO agreements). The repurchase agreement implies a deal to buy/sell a security with an obligation to sell/buy later on. This transaction can be considered as a cash loan secured by securities (REPO) or a loan of securities secured by cash (reverse REPO). REPO can be concluded both for a certain period and without a term, but the second option is more risky, as it increases the likelihood of one party's inability to buy back the securities.

In each REPO transaction, the repurchase price, the interest and the premium to the creditor (party which lent the cash funds secured by securities) are negotiated. Most REPO transactions occur at a discount, where the creditor issues cash that is not equal to the full market value of the pledged asset, but to about 80% to 90% (this method allows the creditor to reduce risks if the assets are not sold off and the market value of the pledged instruments decreases). It should be noted that when the asset is transferred from the borrower to the creditor, the ownership of the securities switches, where the dividend payments and voting rights for the time of the REPO transaction are now owned by the creditor.

Target market

**Risk level**

1

The characteristics of the clients for whom this product is meant:

- Type/status of the client: professional clients and eligible business partners.
- Knowledge and experience of the client: clients with high level knowledge and experience regarding financial markets.
- The financial position of the client and possible losses: the maximum possible losses associated with the use of REPO are equal to all funds / assets that are used in the transaction. With an inability to exercise the redemption of assets, securities are transferred to the creditor, however, their value can fall down to zero (bankruptcy of the company).
- Risk awareness: the risk parameter of using the repurchase agreement depends on the term on which the transaction is concluded, as well as the assets that are pledged. In general, the riskiness of the use of REPO transactions can be estimated as one on a six-point scale (one point is the lowest risk, six points is the highest risk).
- Aims and needs of the client: REPO transactions are suitable for clients who are looking for an opportunity to borrow money in the short term, while not selling assets.

Example of a REPO transaction:

An investor has 1 000 shares of Facebook Inc. in his portfolio, which can be used as collateral for a REPO transaction. In respect of his operational activities the client needs to get a short-term loan for which he decides to use a REPO transaction for a period of one week to receive the cash funds. At the time of entering into the REPO

transaction (19 October 2017), JSC “Rietumu Banka” may provide 80% of the market value of the asset at the LIBOR rate (1 week) +1% per annum. The market value of the shares, at the time of the REPO transaction, is 120\$ per share. The repurchase price of the shares is 120\$. The LIBOR rate is 1.486% per annum.

Total amount of borrowed funds:

- 1)  $120 \times 1,000 \times 80\% = 96,000\$$  (to be received by the client at the conclusion of the transaction).

In one week the investor needs to repurchase his shares (close the REPO deal).  
The costs of the repurchase are:

- 1)  $120 \times 1,000 \times 80\% = 96,000\$$  (repurchasing of shares).
- 2)  $96,000 \times 2.486\% / 360 \times 7 = 46.41\$$  (interest on the REPO transaction).

Total cost of the repurchase:  $96,000 + 46.41 = 96,046.41\$$ .

## Structured Deposits

Structured deposits are a popular type of investment in countries with a highly developed financial system. This type of deposit guarantees the depositor the safety of the principal amount of the deposit with the possibility to receive additional income, which considerably exceeds the standard rate on deposits. This income is possible due to the structure of the deposit. The bank invests most of the principal amount in low-yield, but ultra-reliable money market instruments (treasury bills, agency bills, etc.), while the rest is invested in high-risk instruments with large potential income (options, futures, etc.). This structure allows you to keep the initial capital and provides an opportunity, under favourable conditions, to gain high profit.

Target Market

Risk level	1
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The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients with basic knowledge and experience regarding financial markets.
- The financial position of the client and possible losses: the maximum possible losses associated with investing in structured deposits are equal to all funds invested in this product.
- Risk awareness: the risk of investing in structured deposits varies depending on the desired yield and the term of the investment. In general, the riskiness of investing in structured deposits can be estimated as one on a six-point scale (one point – the lowest risk, six points – the highest risk).
- Aims and needs of the client: this type of investment is suitable for clients who are looking for the opportunity to increase their capital both in the short term and in the long term. The risk is minimized by investing in ultra-reliable and highly liquid instruments.

Examples of investment in structured deposits:

A client decides to invest 100,000\$ into a structured deposit until 31 November 2019. The deposit's structure is made up of 2 assets – a two year US Treasury note with a coupon of 1.75% per annum with maturity on 30 November 2019; and a call option on WTI oil with a strike price of 52\$ (maturity on 17 October 2019). On the purchase date (12 August 2017) the yield on the Treasury note is 1.794% per annum and the option price is 1.5\$. The funds will be allocated in the following manner: 97,000\$ invested into the short term US Treasury note and 3,000\$ invested into options (with an option price of 1.5\$ two options will be purchased).

***Investment with subsequent profit.***

At maturity /for the period of holding of the Treasury note, the investor will receive:

- 1) Face value – 97,000\$.
- 2) Coupon + discounted profit (purchase price is below 100% of the face value) – 3,480.36\$.

If the price of options rises to 5\$ each, the investor will receive:

- 3)  $5 \times 2 \times 1,000 = 10,000$ \$ (for 2 options).

Total income from the structured deposit:  $97,000 + 3,480.36 + 10,000 = 110,480.36$ \$. In this case the yield on the deposit was 10.48% for two years, or 5.24% per annum.

***Investment with subsequent loss.***

Since the short term US Treasury notes are highly liquid and super-reliable, the case of non-payment on their face value is not considered.

At maturity/for the period of holding of the Treasury note, the investor will receive:

- 1) Face value – 97,000\$.
- 2) Coupon + discounted profit (purchase price is below 100% of the face value) – 3,480.36\$.

If the price of the options is 0 at the time of maturity, the option holder will receive nothing.

Total income from the structured deposit:  $97,000 + 3,480.36 = 100,480.36$ \$. In this case, the yield on the deposit is 0.48% for 2 years, or 0.24% per annum.

## Use of Margin Loans

Margin loans secured by securities allow an investor to increase the profitability of his portfolio by increasing the number of assets that are available to the client for acquisition. Also, such a loan allows you to get quick access to funds and use them in other transactions if necessary. Margin loans can be issued for a portfolio of securities consisting of shares, bonds, ETF-funds, UCITS-funds, etc., which meet the criteria for granting a loan.

With the presence of borrowed funds, the portfolio becomes marginal. When buying securities using a margin loan, the investor must provide a deposit that will serve as collateral for the transaction. The relationship can be written as follows: "The market value of a security = margin loan + security deposit." With a decrease in the price of an asset, there may be a situation of a shortage of money to maintain marginal parameters – a margin call. If this situation arises, the investor must restore the balance between the margin loan and the client's deposit by means of a cash inflow or by selling part of the asset. In case of a margin call, the bank has the right, but not the obligation, to close the position.

Target market

Risk level	4
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The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.
- Knowledge and experience of the client: clients with high level knowledge and experience regarding financial markets.
- The financial position of the client and possible losses: the maximum possible losses associated with the use of the service of a margin loan (financing) are equal to all money resources invested in products that are pledged for a margin loan.
- Risk awareness: because the margin loan is an instrument that allows you to use borrowed funds to acquire assets, the risk parameter depends on the assets used as collateral for the margin loan. In general, the use of borrowed funds for the transaction equates the level of risk to complex derivatives. Therefore, the level of risk can be estimated as four on a six-point scale (one point is the lowest risk, six points is the highest risk).
- Aims and needs of the client: this product is suitable for clients who want to increase the profitability of their portfolio by attracting borrowed funds, while not increasing the riskiness of their portfolio.

### ***Investment with a margin loan and subsequent profit.***

On 6 December 2017 an investor decides to acquire shares of Tesla Inc. using 200,000\$ of his own money and a marginal loan. Shares of Tesla Inc. are financed in the proportion of 80% / 20%, where 80% is the financing of JSC “Rietumu Banka”, and 20% is the client's deposit. Financing of the bank will be 800,000\$ and at a rate of 3.5% per year. The price per share is 250\$. The cost of the purchase was:

- 1)  $4,000 \times 250 = 1,000,000\$$  (cost of shares).
- 2)  $4,000 \times 0.025 = 100\$$  – the bank's commission for the purchase of shares in the American stock exchange.

Total cost of the purchase:  $1,000,000 + 100 = 1,000,100\$$

On 15 February 2018 the shares of Tesla Inc. Rise in price to 410\$ per share. The investor decides to sell his shares (close with a profit). The income from the sale are:

- 3)  $4,000 \times 410 = 1,640,000\$$  (price of shares).
- 4)  $4,000 \times 0.025 = 100\$$  – the bank's commission for the purchase of shares in the American exchange.
- 5) 1,320\$ – servicing of the investment account (0.5% per annum of the total assets on the investment account, in this example only one asset is in the portfolio). When calculating this amount, the constant increase in the value of the portfolio was equal to 9,014.08\$ / day during the period of ownership of the asset. The formula for the calculation is  $V \times 0.5\% / 360$ , where V is the value of the asset for a specific date.
- 6) 5,522.22\$ – interest on the issued loan for the period of use (3.5% per annum of the amount of the margin loan). The calculation formula is  $K \times 3.5\% / 360$ , where K is the size of the margin loan for a specific date.

Total income from the sale:  $1,640,000 - 100 - 1,320 - 5,522.22 = 1,633,057.78\$$

**Net profit** from the deal, including all commissions and storage costs,  $1,633,057.78 - 1,000,100 = 632,957.78\$$ .

***Investment with a margin loan and subsequent loss.***

On 15 December 2017 an investor decides to acquire shares of Tesla Inc. using 200 000\$ of his own money and a marginal loan. Shares of Tesla Inc. are financed in the proportion of 80% / 20%, where 80% is the financing of the JSC “Rietumu Banka”, and 20% is the client's deposit. Financing of the bank will be 800,000\$ and at a rate of 2.45% per year. The price per share is 400\$. The cost of the purchase was:

- 1)  $2,500 \times 250 = 1,000,000\$$  (cost of shares).
- 2)  $2,500 \times 0.025 = 62.5\$$  – the bank's commission for the purchase of shares in the American exchange.

Total cost of the purchase:  $1,000,000 + 62.5 = 1,000,062.5\$$

By 19 April 2018 shares of Tesla Inc. fall to 350\$ per share. The investor decides to sell the shares (record a loss). The income from the sale is:

- 3)  $2,500 \times 350 = 875,000\$$  (cost of shares).
- 4)  $2,500 \times 0.025 = 62.5\$$  – the bank's commission for the purchase of shares in the American exchange.
- 5) 1,640.63\$ – servicing of the investment account. When calculating this amount, the constant decrease in the value of the portfolio was equal to 1,000\$/day during the period of ownership of the asset.
- 6) 6,805.56\$ – interest on the issued loan for the period of use (2.45% per annum of the amount of the margin loan).

Total income from the sale:  $875,000 - 62.5 - 1,640.63 - 6,805.56 = 866,491.30\$$

**Net loss** from the deal, including commission and storage costs,  $866,491.30 - 1,000,062.50 = -133,571.19\$$ .



## Trading Via Electronic Platforms

JSC “Rietumu Banka” offers its clients four platforms for independent trading. The following products can be traded on these platforms:

**Rietumu FX (MetaTrader4)** – rolling spot forex, metals, energy carriers, CFD.

**RB trader Station** – shares, ETF, options, futures, options on futures on world markets.

**CTS T4** – futures on American exchange.

**QUIK** – shares, bonds, futures of the Moscow Stock Exchange.

Trading platforms are designed for active investors who perform transactions with various products and require speed and flexibility in their operations. On the platform, the investor sees the state of his portfolio, margin requirements and stock quotes in real time. All platforms have access to wide trading and analytical tools.

Independent trading via electronic platforms carries a high level of risk due to trade access to virtually all assets. Such trade also carries a technological risk – interruptions of communication channels, lack of Internet connection or other software problems.

It is necessary to bear in mind that when trading through a platform, the bank does not notify the client about situations of insufficient coverage (margin call). Also, the bank can close the client's positions without warning on the trading platform account to meet margin requirements. The client specifies the margin requirements independently before submitting the trade order. An additional risk factor is that on the platforms the client is given an opportunity of DMA – direct market access. The client itself can choose a particular stock exchange or the place of execution of order at his own discretion. Also, on some platforms proprietary systems of transaction routing may be available, e.g., system SMART on RB Trader Station platform, which can split orders into several places of execution to achieve better result of execution.

In addition to commissions for trading operations, a subscription fee for real-time exchange quotes (RB Trader Station, CTS T4) and a subscription fee for the use of software (CTS T4), and transfer of funds/assets on the platform and their withdrawal (find out more on the commissions on the bank’s website under chapter “Trading via electronic platforms”) may be applied. Instruments traded on electronic platforms are accounted in separate accounts from voice trading accounts.

Target Market

Risk level	5; 6 (Highest)*
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The characteristics of the clients for whom this product is meant:

- Type/status of the client: private clients, professional clients and eligible business partners.

- Knowledge and experience of the client: clients with high level knowledge and experience about the traded product. The client must understand the effect of leverage and the risks of margin trading.
- The financial position of the client and possible losses: client's losses may exceed the level of the initial deposit.
- Risk Awareness: depends on the product
- Aims and needs of the client: speculative operations (getting high income with high risk).

*\* 5 points – level of risk for RB Trader Station, QUICK, CTS*

*\* 6 points – level of risk for RietumuFX*

## Table of Suitability of Financial Instruments for Investment Objectives

Investing in financial instruments, clients are guided by different goals (capital preservation, speculative operations, etc.). The "suitability" is an indicator designed to help clients determine which instruments correspond to specific trading goals. All suitability levels for financial instruments, as well as brief description thereof, are listed in the table below.

Table of Risk Suitability Level of Financial Instrument

Type of instrument	Suitability level	Level description
Ordinary bonds	1	1 – Preservation of capital – maximum safety and stability, storage
Ordinary money market instruments	1	
Complex money market instruments	1	
Structured deposits	1	
Common shares	2	2 – Income – generation of income from coupons, dividends in long-term perspective
Complex shares	3	3 – Growth – profit from the growth in the value of underlying assets
Complex bonds (investment grade)	3	
Unallocated bullion	3	
UCITS funds	3	
Non-UCITS funds	3	
Basic derivatives	4	4 – Hedging – operations in the market of financial instruments for commercial purposes
Currency swaps	4	
Currency forwards	4	
Complex bonds (non-investment grade)	5	5 – Trading profits – use of complex financial instruments to generate higher income, speculative operations.
Complex derivatives	5	
Rolling spot FOREX	5	
Contracts for difference (CFD)	5	
Use of margin loans	5	