

Bank Account

Interest rate calculation example:

Deposit amount – AMD 15,000,000

Term – 365 Day

Annual interest rate - 6%

Daily interest amount = $(15,000,000 \times 0.06) / 365 = 2465$ AMD

Deposit annual percentage yield calculation example:

APY - The annual percentage yield is calculated on the basis of the following formula:

$$A = \sum_{n=1}^N \frac{K_n}{(1 + APY)^{(D_n/365)}}$$

Where

A – the initial deposit amount,

n - sequential number of repayment,

N – last cash flow, generated under the deposit agreement (including cash flow on the day of deposit attraction), after which the deposit agreement matures,

K_n – mandatory cash flows at attraction and/or during the deposit agreement included the invested deposit and/or capitalized interest and other cash flows, if any,

D_n – a number, indicating the number of days since the attraction to the regular nth cash flow inclusive,

i=APY-Annual percentage yield of deposit.

Bank Account, AMD

Deposit amount – AMD 15,000,000 (remains unchanged during the whole tenor of the deposit)

Deposit opening fee-AMD 500

Deposit service fee for six months - AMD 600

Term – 365 days

Interest capitalization frequency –6 months

Annual interest rate - 6%

Income tax – 10%

Deposit opening day 15/10/12

n- 1, 2, 3

Dn – 0,182,365

Kn- deposit and interest payment at maturity of the deposit (service fee and income tax deducted)

$$K_0 = 15,000,000 - 500 = 14,999,500 \text{ AMD}$$

$$K_1 = 14,999,500 * ((6/12) * 0.06) * (1 - 0.1) - 600 = 404,387 \text{ AMD}$$

(taxed cash flows at the end of 1st semester)

$$K_2 = (404,387 + 14,999,500) * ((6/12) * 0.06) * (1 - 0.1) - 600 = 415,304 \text{ AMD}$$

(taxed cash flows at the end of 2nd semester)

$$K_{(0,2)} = 14,999,500 + 404,387 + 415,304 = 15,819,191 \text{ AMD}$$

$$APY = (15,819,205 / 14,999,500 - 1) * 100 = 5.55\%$$

Bank Account, USD

Deposit amount – USD 50,000 (remains unchanged during the whole tenor of the deposit)

Deposit opening fee-AMD 500

Deposit service fee for six months - AMD 600

Term – 365 days

Interest capitalization frequency –6 months

Annual interest rate - 3%

Income tax – 10%

Deposit opening day 15/10/12

1USD=407.91AMD (as of 15/10/12)

n- 1, 2, 3

Dn – 0,182,365

Kn- deposit and interest payment at maturity of the deposit (service fee and income tax deducted)

$$K_0 = 50,000 - 500 / 407.69 = 49,999 \text{ USD}$$

$$K_1 = 49,999 * ((6/12) * 0.03) * (1 - 0.1) - 600 / 407.91 = 674.98 - 1.47 = 673.5 \text{ USD}$$

(taxed cash flows at the end of 1st semester)

$$K_2 = (49,999 + 673.5) * ((6/12) * 0.03) * (1 - 0.1) - 600 / 407.91 = 684.08 - 1.47 = 682.61 \text{ USD}$$

(taxed cash flows at the end of 2nd semester)

$$K_{(0;2)} = 49,999 + 673.5 + 682.61 = 51,355 \text{ USD}$$

$$APY = (51,355/50,000 - 1) * 100 = 2.71\%$$

Note: Calculation of annual percentage rate (APY) of the deposit is based on cash credit to an account.

Bank Account, EURO

Deposit amount – EURO 25,000 (remains unchanged during the whole tenor of the deposit)

Deposit opening fee–AMD 500

Deposit service fee for six months - AMD 600

Term – 365 days

Interest capitalization frequency –6 months

Annual interest rate - 1%

Income tax – 10%

Deposit opening day 15/10/12 (

1EURO=528.73AMD as of 15/10/12)

n- 1, 2, 3

Dn – 0,182,365

Kn- deposit and interest payment at maturity of the deposit (service fee and income tax deducted)

$$K_0 = 25,000 - 500/530.32 = 24,999 \text{ EURO}$$

$$K_1 = 24,999 * ((6/12) * 0.01 * (1 - 0.1) - 600/528.73) = 112.50 - 1.13 = 111.37 \text{ EURO}$$

(taxed cash flows at the end of 1st semester)

$$K_2 = (24,999 + 111.37) * ((6/12) * 0.01 * (1 - 0.1) - 600/528.73) = 112.99 - 1.13 = 111.87 \text{ EURO}$$

(taxed cash flows at the end of 2nd semester)

$$K_{(0;2)} = 24,999 + 111.37 + 111.87 = 25,222 \text{ EURO}$$

$$APY = (25,222/25,000 - 1) * 100 = 0.89\%$$

Note: Calculation of annual percentage rate (APY) of the deposit is based on cash credit to an account.