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INTERACTIVE APP «DEPOSIT CALCULATOR» AS A METHOD FOR DETERMINING INCOME FROM OPENING A DEPOSIT

ИНТЕРАКТИВНОЕ ПРИЛОЖЕНИЕ «ДЕПОЗИТНЫЙ КАЛЬКУЛЯТОР» КАК СПОСОБ ОПРЕДЕЛЕНИЯ ДОХОДА ОТ ОТКРЫТИЯ ВКЛАДА

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ABSTRACT

*BANK DEPOSIT, INTEREST, DEPOSITOR,
MONETARY FUNDS, DEPOSIT CALCULATOR*

The article defines the term "deposit" and its meaning, outlines the advantages of opening the deposit for both parties – a depositor and a bank – and specifies the features of storing money in deposit. Comparative analysis of simple interest and compound interest is done. Topicality, functionality, and advantages of the deposit calculator are determined as well as the input data for its use.

АННОТАЦИЯ

БАНКОВСКИЙ ДЕПОЗИТ, ВКЛАД, ПРОЦЕНТ, ВКЛАДЧИК, БАНК, ДЕНЕЖНЫЕ СРЕДСТВА, ДЕПОЗИТНЫЙ КАЛЬКУЛЯТОР

В статье рассмотрено понятие «депозит»: дано научное определение этого понятия, его сущность, преимущества открытия депозита для обеих сторон – вкладчика и банка, а также особенности хранения денежных средств на депозитном счете. Изучены понятия простого и сложного процента, преимущества простых и сложных процентов, их сходства и различия. Также выявлены актуальность и возможности созданного нами депозитного калькулятора, его преимущества и необходимые для расчета параметры.

The concept of "deposit" is quite common. The fact is that deposits have long been an integral part of the global financial system. Moreover, deposits are part of the daily lives of tens of millions of people around the world [3].

The purpose of the transfer of funds is to receive any income (usually in the form of interest), which is formed as a result of certain financial transactions with cash [3].

A deposit is a tool provided by financial institutions, most often by banks and credit unions. The deposit is designed to help customers store money and increase their savings. In other words, by investing money in a bank, the customer ensures its safe storage and receives interest as a reward, depending on the type and currency of the deposit, as well as the period of time the funds are in the bank accounts.

Many people think that a contribution is equal to a deposit. In a general sense, this is the right train of thought. When you come to the bank, you will be asked to deposit the amount exactly on the deposit, it will be listed as such according to the documents [2]. However, there is a difference between the concepts of contribution and deposit, which is insignificant for an ordinary investor. The first word is used if you brought money to the bank. A deposit is not only assets in cash, but also securities, metal and even real estate. In other words, a deposit is a broader concept that includes various objects for savings [2]. In our article we will apply the concept of contribution and deposit in the equivalent sense.

The entire deposit amount remains the property of the depositor and must be returned either immediately, at the request of the client, or at another time specified in the contract. Banks use the funds raised in deposits for commercial operations, including the issuance of loans [1]. Also, a banking organization places funds in the stock market by buying shares of other companies or state-level bonds. The bank uses its customer's funds, they are not idle. It pays interest for managing their funds. Depending on the type of deposit, a customer can do the following: withdraw accrued interest on the deposit during the term of the deposit and use them at their own discretion; increase the amount of the deposit; receive interest on the deposit at the end of its validity; freely increase / decrease the amount of the deposit. Interest is paid for a certain period of time, and not just for every week or month of a certain period of time. All interest on the total amount of the bank deposit is calculated from the day following the day the deposit is received at the banking institution. Accrual occurs until the day when the amount is returned to the depositor or until the day when the bank deposit is closed by the depositor. When choosing a bank for making a deposit, individuals and businesses compare interest rates and the amount of future income [4]. To simplify these tasks, we have developed a deposit calculator that calculates future income for different types of deposits, taking into account both simple and compound interest. A simple interest is understood as profit that is accrued only on the initial amount for each certain period of time. Compound interest is a slightly different form of calculating interest on a deposit. The profit here is not calculated on the initial payment, but on the whole amount, together with the already accrued interest, which is currently in the account of the depositor. That is, after each period, the amount on which profit is accrued proportionally increases. In fact, the system of accruing interest on deposits varies greatly primarily because the interest capitalization benefits deposit may be much higher than with a simple system. Because of a simple system, profit grows in arithmetic progression, and with a compound one the growth represents a geometric progression[5].

The deposit calculator of interest calculation will allow to do the following: calculate the profitability of a deposit with different interest payments: monthly, at the end of the term or with capitalization of interest on a bank deposit; find out what income can be received on the deposit, if you make regular replenishment of the deposit account.

The advantages of this application are the following [6]:

- 1) Automation - the ability to use for different sets of source data.
- 2) Ease of use - the developed application does not require special skills for its use.
- 3) Visibility - thanks to the application, you can analyze the profitability of the contribution and consider the possibility of influencing the source data.
- 4) Practical focus - the ability to use this application to practice skills in professional and educational activities.

REFERENCE

1. Vklad (depozit) / MYFIN.BY [Elektronnyj resurs]. – 2019. – Rezhim dostupa: <http://znatokdeneg.ru/terminologiya/otlichie-prostyh-protstentov-ot-slozhnyh.html>. Data dostupa: 22.09.2019.
2. Depozit v banke – chto eto takoe prostymi slovami, kak otkryt' depozit / Proekt TREY.PRO [Elektronnyj resurs]. – 2019. – Rezhim dostupa: <https://kakarabativat.ru/finansy/chto-takoe-depozit-v-banke/>. Data dostupa: 22.09.2019.
3. Depozit – chto eto takoe prostymi slovami / Finansovyj zhurnal «Fin-Journal.ru» [Elektronnyj resurs]. – 2019. – Rezhim dostupa: <https://fin-journal.ru/chto-takoe-depozit-prostymi-slovami/>. Data dostupa: 07.05.2019.
4. Kal'kulyator vkladov v Belarusi v 2019 godu / Onlajn-servis poiska i sravneniya samyh populyarnyh uslug bankov Belarusi [Elektronnyj resurs]. – 2019. – Rezhim dostupa: <https://bankchart.by/servisy/kalkulyatory/dk>. Data dostupa: 07.05.2019.