

## Aspects Regarding the Instrumentalization in Accounting of the Financing Systems

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### Abstract

*The purpose of this work consists in the schematic scoring of the accounting of instruments accessible to the financing of different categories of entities in the economy. Currently we can observe the increase in the cost of financing economic activities, in the context of an increasing inflationary spiral, generated by the steep increase in energy prices. Thus, the requirement for solutions to make the financing systems of the entities more flexible, with the corresponding reflection in the accounting, emerges. What are the ways forward? It is difficult to offer simple solutions to a complex of problems arising in front of the financing of economic activities. The extension of the application of financial instruments - to the extent of their accessibility, correlated with the use of tools, software solutions provided by Information Technology (IT), is necessary in the management of the accounting of entities.*

**Key words:** financial solutions, accounting, technologies.

**J.E.L. classification:** M41, G32.

### 1. Introduction

The ROBOR index recorded another sharp increase. The ROBOR index was established as follows starting on August 1, 2022: ROBOR 3 months = 8.01%, registering an increase of 0.04%; ROBOR 6 months = 8.13%, registering an increase of 0.05%; ROBOR 12 months = 8.24%, registering an increase of 0.05%.

The total lending for the population and companies reached in November 2021 a balance of 321.98 billion lei. Loans in lei increased by 14.6% compared to October 2020, while foreign currency loans increased by 4.7%. Total deposits registered in November 2021 an annual increase of 12.7% to the amount of 462.46 billion lei. ([www.insse.ro](http://www.insse.ro))

The year 2021 was a year out of the ordinary, with many challenges but - simultaneously - and opportunities in front of the banking sector. The activities of the financial-banking and lending sectors have had to adapt to the rigid context of constraints on economic activities. The banking system presents the necessary resources - material and human - through which it has done and continues to successfully face the challenges posed in the conduct of banking activities. It is found the use of a flexible working regime in the banking activity through which it is made available to its customers in multiple variants in the offer of banking products. The use of computer tools, the use of internet banking applications adapted to the new requirements, ensures quality and operative banking services for customers. ([www.insse.ro](http://www.insse.ro))

The level of systemic risks to financial stability in Romania remains significant, analogous to international dynamics, given that the outlook for future economic activity continues to be marked by uncertainty, fueled mainly by the multitude of effects associated with the COVID-19 pandemic. The measures to support the economy, implemented by the authorities, as well as the relaxation of restrictions on social distancing have contributed to mitigating the negative effects caused by the health situation. The National Bank of Romania will continue to monitor the evolution of the macro-financial framework and implement the necessary measures, aiming at achieving an adequate and balanced mix of economic policies, able to reduce both structural vulnerabilities and the negative effects generated by the current pandemic. ([www.insse.ro](http://www.insse.ro))

## 2. Theoretical background

Financial instruments are generally the legal obligations of a party to transfer an asset / value (usually cash) to another party at a future date and under certain conditions. (Nicolae, 2010)

Financial instruments are, in fact, assets that can be traded. These assets can be cash, contractual rights to deliver or receive money or another type of financial instrument or proof of ownership of an economic entity. (Nicolae, 2010)

Financial instruments fall into two broad categories (Nicolae, 2010) :

- Basic financial instruments are instruments whose value is determined directly by the markets. They are mainly used by savers / borrowers to transfer resources directly to investors / those in need of funds.

- They improve the efficient allocation of resources;

- They are liquid and easily transferable;

- Examples of financial instruments - for this category we note: shares and bonds.

- Derivative financial instruments: derivatives are those instruments whose value and remuneration is derived from the underlying instruments / assets.

Examples of financial derivatives are futures or options contracts or CFDs (exchange rate contracts). (Nicolae, 2010)

The main purpose of derivatives is to disperse investor risk.

For most traders who are just starting out in trading, financial instruments are the first tools or products they come in contact with. In addition, opening a trading account is fairly straightforward.

As it is a product with high leverage and due to decentralized exchanges, all you have to do is open an account with a broker, transfer funds and start the actual trading.

## 3. Research methodology

The research methodology used in this article consists of the empirical research of a data set available on the Internet and the construction of models of accounting records.

The non-performing rate of non-financial companies that resorted to the suspension of rates was 12.3% in March 2021, compared to 5.2% for companies that did not resort to moratoriums, while in the population segment the values were 7.4 % and 3.1%, respectively. ([www.insse.ro](http://www.insse.ro)) Another important vulnerability is the poorer financial position of companies that have resorted to suspending payment rates, their financial health indicator being in the risk zone according to data from June 2020. Unlike all credit companies, they are characterized by a low level of profitability, a significantly higher degree of indebtedness and a lower capacity to recover debts, but with a super-unit liquidity. The forecast of the probability of default for the period March 2021 - March 2022, in the case of non-financial companies, indicates an average value of 4.8%, a level below the maximum recorded in the previous crisis, without taking into account the positive effects of measures to support the real sector. ([www.insse.ro](http://www.insse.ro))

If the negative economic effects of the pandemic will continue over a longer period, the high level of indebtedness of companies is a vulnerability, the difficulties of these companies being able to spread both along the commercial chains and to the banking sector. The most risky companies from a debt perspective are of significant importance, both for the company sector as a whole (38% of turnover and 41% of the number of employees, respectively) and for credit institutions (55% of the loan portfolio). Unlike the degree of indebtedness, the distribution of companies according to the level of liquidity shows a significantly better resilience, 73% of companies having values of the indicator above the signal threshold of 100%. And in this case, however, companies with subunit liquidity values are of high importance: (i) they generate 26% of turnover, (ii) they employ 34% of employees and (iii) they hold a share of 43% of bank credit . ([www.insse.ro](http://www.insse.ro))

The insolvency phenomenon improved in 2020. Although insolvency companies account for only 3% of the stock of loans granted, they are responsible for 30% of non-performing exposures. However, the number of insolvencies is expected to increase, similar to the European trend, which calls for a re-evaluation by the authorities of the regulatory framework for exit, so that this process is more efficient. ([www.insse.ro](http://www.insse.ro))

#### **4. Survey on the evolution of the use of financial instruments in the accounting of financing activities of national entities**

There are a multitude of financial instruments to meet the needs of an investor or a speculator, depending on the purpose of each. For example, some investors prefer to settle for lower but safer profits and invest in government bonds. (Nicolae, 2010)

Bonds will usually yield lower returns than equity investments. The advantage here is that the bonds are less risky and safer. Most of the time they have government guarantees. (Nicolae, 2010)

Investing in stock markets may seem more interesting from the point of view of an investor with a higher risk appetite. To assume this risk, the investor will be rewarded with higher returns, but there are no guarantees.

The decision to invest in capital or debt markets has a lot to do with managing the risks associated with a portfolio. (Nicolae, 2010)

As far as foreign exchange markets are concerned, again it all comes down to the choice and purpose of the investor or speculator. An exporting company will be more interested in investing in the foreign exchange market to cover the risks associated with the currencies in which it operates, than in investing in the stock market, for example. (Nicolae, 2010)

In other words, a person interested in saving for retirement will probably be more interested in bonds and stocks than in investing in the foreign exchange market.

When proposing to invest in financial instruments, you need to evaluate those financial instruments in terms of the following parameters (Nicolae, 2010):

- yield - the ratio between the result obtained and the effort made to obtain that result
- net profit - the difference between the amount of money received from the transaction and the amount of money spent on it
- risk - financial instruments may present different degrees of risk, from losing all or part of the amount invested to making profits below expectations
- liquidity - is the ability of a financial instrument to be converted into cash without losing value.

As a result, each investor can choose the financial instruments that suit him according to his risk appetite (Nicolae, 2010):

- banking financial instruments such as bank deposit correspond to very low risk investments, with very low return and are preferred by defensive investors with very low risk appetite
- government bonds and securities are financial instruments with a slightly higher risk and a potentially appropriate return. They are preferred by conservative investors who prefer fixed, guaranteed profit and low risk
- stocks and mutual funds are preferred by balanced investors who are comfortable with a higher degree of risk and a potential gain to match
- Financial derivatives and speculation in the Forex market are the preference of aggressive investors, who prefer large gains also associated with high risks.

It is essential to know as many types of financial instruments as possible and how they work in order to maximize the efficiency of your investments.

Diversification is the foundation of a balanced portfolio that aims to minimize risks while keeping the potential for profits as high as possible. So it is advisable to invest in a wide range of financial instruments, depending on your risk profile.

#### **4. Findings**

##### **4.1. The observation of the accounting issues associated with financial instruments used in accounting for the financing sector of the entities**

Derivative financial instruments or derivative securities are exchange products, based on contracts concluded between an issuer and a beneficiary, and confer on the beneficiary rights over the issuer's assets at a future maturity, in accordance with the terms of the contract. They are called derivatives because they are exercised over assets, not over the monetary profit of the issuer. (IASB,2018).

There are three categories of securities (Nicolae, 2010):

- Futures contracts;
- Options contracts;
- CFDs - Exchange rate contracts.

#### Derivative Financial Instruments - Futures Contracts

Futures contracts are an agreement between two entities to sell or buy an asset at a set price at a future date.

Futures can be used for financial investments or stock market speculation in hopes of making future gains. Or to hedge the risk on the assets on which those securities are based.

#### Derivatives - Options Contracts

Options are contracts between two entities, one seller and one buyer, whereby the buyer has the right, but not the obligation, to buy or sell an asset at a later date. In exchange for this right, the purchasing entity pays a premium. (IASB, 2018).

Types of options depending on the right it confers:

- put option - Put - the buyer acquires the right to sell an asset at a certain price, set a priori;
- call option - Call - the buyer acquires the right to buy an asset at a certain price, set a priori.

Options and futures contracts are futures contracts, standardized by the market operator where they are traded.

When different financial assets are combined, new financial instruments are created called synthetic products. They can result from a combination of futures contracts, or a combination of options, or a combination of different types of options and futures.

Stock market contracts are the most well-known synthetic financial securities. It provides investors with additional investment and risk management opportunities for a stock-based investment portfolio.

Stock index contracts allow you to trade upwards or downwards without holding the actual shares in the portfolio.

## 4.2. Contracts for Exchange Rate Difference – CFD

The exchange rate contract, or CFD, is essentially a contract between an investor and an investment bank or broker. At the conclusion of the contract, the parties shall transfer to each other the difference between the opening and closing price of the contract relating to a particular financial instrument. (Nicolae, 2010)

CFDs are contracts based on differences in price levels, without having to actually own those assets.

Contracts for difference are derivative financial instruments. With the help of CFDs you can speculate the increase or decrease of the prices of financial instruments with large fluctuations. CFDs can be used for a wide range of underlying assets from currencies, stocks and indices to bonds and commodities. (Nicolae, 2010)

You can trade CFDs through a regulated broker. However, it is important to keep in mind that trading CFDs online can be very risky for your capital, as it is most often based on leverage. It amplifies your profits, but also your losses. So, it is recommended that you first test trading on a demo account before trading for real money. (Nicolae, 2010)

When you trade CFDs, you do not sell or buy that underlying asset, but the financial instrument that is based on that asset.

Financial instruments that can be traded in the form of CFDs are (Nicolae, 2010):

- Currency pairs (Forex) – EUR/USD, GBP/JPY, USD/RON, USD/CHF,
- Goods - WTI oil, Brent oil, gold, silver, corn,
- Shares - Google, Amazon, Facebook, Airbus,
- Indices - Dow Jones, FTSE 100, DAX30, CAC40, NASDAQ, Nikkei 225,
- Bonds.

The trading costs of CFDs through brokers are generally reduced to the spread you pay with the opening of the transaction.

Trading CFDs has several major advantages that have attracted a great deal of popularity over the last decade (Nicolae, 2010):

- High leverage and lower margin requirements and higher yield potential
- Access to global markets through a single platform
- There are no downward selling rules or the need to borrow assets
- Professional execution of orders without commissions
- There are no minimum daily trading requirements
- There is a wide variety of trading opportunities

### Example

*Table no. 1 Cash versus cash (net cash payment)- transactions related to the case study*

Transactions	Textual description of the transactions
Assumptions	The forward purchase contract for the own shares of a company will be settled net in cash, ie there are no inflows and outflows of equity instruments of the company at the settlement of the forward contract. (Nicolae, 2010)
February 1, 2023	On February 1, 2023, Alfa5 entered into a contract with Beta7 to collect the fair value of 10,000 of the outstanding common shares outstanding of entity A until January 31, 2024 in exchange for the transfer of the amount of 10,400,000 m.u. (monetary units) in cash (ie 1040 m.u. per share) on January 31, 2024. The contract will be paid net in cash.

Source: Case study data proposed by the author

*Table no. 2 Registrations to date February 1, 2023*

Transactions	Textual description of the transactions
Assumptions	The price per share when the contract is concluded on February 1, 2023 is 1000 m.u. The initial fair value for the forward contract on 1 February 2023 is zero.
	No accounting is required because the fair value of the derivative is zero and no cash receipts or payments are made.

Source: Case study data proposed by the author

*Table no. 3 Registrations to date December 31, 2023*

Transactions	Textual description of the transactions
Assumptions	The price per share rises to 1100 m.u. and, as a result, the fair value of the forward contract increases to 11,000,000 m.u.

Source: Case study data proposed by the author Source: Case study data proposed by the author

*Table no. 4 Recording the increase in the fair value of the forward contract*

Account - Debit	Account - Credit	Amount
Account for financial investments at term	Financial results account	11,000,000

Source: Case study data proposed by the author

*Table no. 5 Registrations to date January 31, 2024*

Transactions	Textual description of the transactions
Assumptions	The market price per share fell to 1,060 m.u.
	The fair value of the term contract is $(1,100 \text{ u.m.} \times 10,000) - 10,400,000 \text{ m.u.} = 200,000 \text{ m.u.}$
	On the same day, the contract is paid in cash. The Alfa5 entity assumes the duty to transfer 10,400,000 m.u. to the Beta7 entity, and the Beta7 entity assumes the duty to pay 10,600,000 m.u. to the Alfa5 entity, so the Beta7 entity pays the net amount of 200,000 m.u. to the Alfa5 entity.
	Recording the decrease of the fair value of the term contract, ie $= 10,600,000 \text{ m.u.} - 200,000 \text{ m.u.} = 10,400,000 \text{ m.u.}$

Source: Case study data proposed by the author

*Table no. 6 Recording the decrease of the fair value of the term contract*

Account - Debit	Account - Credit	Amount
Financial results account	Account for financial investments at term	10,400,000

Source: Case study data proposed by the author

Table no. 7 Registration of the payment of the term contract

Account - Debit	Account - Credit	Amount
Cash accounts at banks	Account for financial investments at term	200,000

Source: Case study data proposed by the author

#### 4.3. A case study of the accounting records for financial instruments

Table no. 8 Table of transactions related to the case study for financial instruments

Transactions	Textual description of the transactions
January 1, 2022	The entity concludes a contract granting 70 shares to 30 employees in the general financial and administrative sector, at a price of 3,500 m.u. (monetary unit) per share. (Nicolae, 2010).
	The contract provides for the granting of equity instruments for a period of 4 years.

Source: Case study data proposed by the author

#### Accounting data

(Making entries by the author)

Table no. 9 Registration of granted capital instruments

Calculations and records
Total fair value of equity instruments granted = 30 employees x 70 shares x 3,500 m.u. = 7,350,000 m.u.

Source: Calculations made by the author

Table no. 10 Recognition of expenses for year 2022

Account - Debit	Account - Credit	Amount
Expenses with remuneration of employees in equity instruments	Amounts granted to employees through equity instruments - stock options	7,350,000 m.u. x 1/4 = 1,837,500 m.u.

Source: Calculations and records made by the author

Table no.11 The profit tax related to the non-deductible expenses for year 2022

Calculations and records
Corporate profit tax calculated = 1,837,500 m.u. x 16% = 294,000 m.u.

Source: Calculations made by the author

Table no. 12 Registration of expenses with profit tax

Account - Debit	Account - Credit	Amount
Current profit tax expenses	Current profit tax	294,000

Source: Calculations and records made by the author

Table no. 13 Recognition of expenses for year 2023

Account - Debit	Account - Credit	Amount
Expenses with remuneration of employees in equity instruments	Amounts granted to employees through equity instruments - stock options	7,350,000 m.u. x 1/4 = 1,837,500 m.u.

Source: Calculations and records made by the author

Table no.14 The profit tax related to the non-deductible expenses for year 2023

Calculations and records
Corporate profit tax calculated = 1,837,500 m.u. x 16% = 294,000 m.u.

Source: Calculations made by the author

Table no. 15 Registration of expenses with profit tax

Account - Debit	Account - Credit	Amount
Current profit tax expenses	Current profit tax	294,000

Source: Calculations and records made by the author

Table no. 16 Recognition of expenses for year 2024

Account - Debit	Account - Credit	Amount
Expenses with remuneration of employees in equity instruments	Amounts granted to employees through equity instruments - stock options	7,350,000 m.u. x 1/4 = 1,837,500 m.u.

Source: Calculations and records made by the author

Table no. 17 The profit tax related to the non-deductible expenses for year 2024

Calculations and records
Corporate profit tax calculated = 1,837,500 m.u. x 16% = 294,000 m.u.

Source: Calculations made by the author

Table no. 18 Registration of expenses with profit tax

Account - Debit	Account - Credit	Amount
Current profit tax expenses	Current profit tax	294,000

Source: Calculations and records made by the author

Table no. 19 Recognition of expenses for year 2025

Account - Debit	Account - Credit	Amount
Expenses with remuneration of employees in equity instruments	Amounts granted to employees through equity instruments - stock options	7,350,000 m.u. x 1/4 = 1,837,500 m.u.

Source: Calculations and records made by the author

Table no. 20 The profit tax related to the non-deductible expenses for year 2025

Calculations and records
Corporate profit tax calculated = 1,837,500 m.u. x 16% = 294,000 m.u.

Source: Calculations made by the author

Table no. 21 Registration of expenses with profit tax

Account - Debit	Account - Credit	Amount
Current profit tax expenses	Current profit tax	294,000

Source: Calculations and records made by the author

Table no. 22 Exercising options in the 2025 year

Calculations and records
The balance of the account Amounts granted to employees through equity instruments - stock options is = 7,350,000 m.u.
Total profit tax related to the non-deductible expenses for 2022- 2025 = 294,000 x 4 = 1.176.000 m.u.

Source: Calculations and records made by the author

Table no. 23 Registration for exercising options in the 2025 year

Account - Debit	Account - Credit	Amount
Amounts granted to employees through equity instruments - stock options	Paid subscribed capital	7,350,000

Source: Calculations and records made by the author

When implemented in practice, entities may also consider other accounting records alternatives as long as there is a fair presentation of the results in profit and loss statement and other comprehensive.

## 5. Conclusions

In my opinion, there are multiple elements that need to be considered in order to be able to implement financial instruments in the day-to-day activities of the entities, in a manner that is appropriate and tailored to the specific needs of each entity.

Consideration should be given to developing and implementing a complex and flexible legislative, fiscal framework that allows and stimulates at the same time the concrete applicability of the various embodiments of financial instruments for financing economic activities. The provisions of the legal acts must be issued in a context adapted to the European legislation, simultaneously with the establishment of the concrete modalities of implementation, adapted to Romania.

There is a significant impact of the changes in the financial markets globally, which puts its mark on the expansion of the use of financial instruments in the current and future activities of economic entities in Romania. It is noted, in the conditions of a tightening of the possibilities of access to the financing resources for the Romanian companies, the need for a flexibility of the opportunities for application of the financial instruments.

## 6. References

- IASB (International Accounting Standards Board), 2011. *International Financial Reporting Standard 13 Fair Value Measurement*, [online] Available: <http://eifrs.ifrs.org>
- IASB, 2018. *International Financial Reporting Standards (IFRSs)*, [online] Available at: <http://eifrs.ifrs.org>.
- Nicolae, Traian, 2010. *Standarde contabile [Accounting standards]*. Constanta: Ex Ponto Publishing House
- Nicolae, Traian Cristin, 2015. *Contabilitate financiară aprofundată: caiet de studiu individual: învățământ la distanță(ID) [Advanced financial accounting: individual study book for distance learning (DL)]*. Constanta: Ovidius University Press
- [www.arbc.ro](http://www.arbc.ro)
- [www.bnr.ro](http://www.bnr.ro)
- [www.cdep.ro](http://www.cdep.ro)
- [www.ccr.ro](http://www.ccr.ro)
- <https://eba.europa.eu>
- [www.insse.ro](http://www.insse.ro)