# THE USE OF CRYPTOCURRENCIES AS SETTLEMENT TOOLS IN INTERNATIONAL TRADE: ECONOMIC AND ACCOUNTING PERSPECTIVES FOR ROMANIAN COMPANIES

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***Abstract***

*The present paper aims to explore the applicability of cryptocurrencies as settlement tools in international trade operations between companies in the European Union, with a particular focus on Romania. It addresses both the economic potential of blockchain-based payment mechanisms and the accounting implications arising from the lack of unified regulation. The study emphasizes the need for harmonized frameworks, while outlining the advantages, risks, and current limitations companies face when adopting cryptocurrencies in external trade.*

***Key words:*** *cryptocurrency; international trade; settlement instruments; accounting treatment; blockchain; financial reporting;*

***JEL classification:*** *F15, M41, E42, G32*

## 1. Introduction

The exponential growth of economic digitalization and the rapid development of blockchain technology have led to the emergence and expansion of cryptocurrencies, regarded by some authors as the fourth monetary revolution. In a context characterized by high international transaction costs, long settlement times, currency volatility, and complex banking regulations, European companies are beginning to explore modern alternatives for cross-border payments. Thus, cryptocurrencies are evolving beyond speculative assets into potential settlement instruments in foreign trade.

The European Union has taken significant steps toward the regulation of crypto-assets through the adoption of the Markets in Crypto-Assets (MiCA) Regulation, yet accounting and tax harmonization remains a major challenge. In Romania, corporate interest in implementing cryptocurrencies in commercial operations is growing; however, the lack of clear guidance from accounting authorities limits their practical applicability.

This article explores the potential of cryptocurrencies to serve as settlement methods in B2B international trade transactions, with a focus on their economic, accounting, and fiscal implications from the perspective of Romanian companies.

## 2. Objectives

The main objective of this research is to assess the applicability of cryptocurrencies as means of payment in foreign trade between companies, with a focus on:

- Identifying the advantages and limitations of using cryptocurrencies in international commercial settlements;
- Analyzing the accounting and fiscal implications within the European Union and Romania;
- Examining the current level of cryptocurrency adoption among European companies;
- Providing strategic recommendations for corporate actors and regulatory bodies to support the structured integration of cryptocurrencies into the formal economic system

## 3. Methodology

The study is based on a documentary-analytical methodology, relying on secondary data sourced from academic literature, financial reports, international accounting standards and regulations (IAS/IFRS), as well as studies published by relevant institutions such as the European Commission, the European Central Bank, and the National Bank of Romania. The comparative analysis between accounting frameworks in the EU and Romania provides a valuable foundation for identifying existing misalignments.

Additionally, the paper includes a set of illustrative examples and concise case studies reflecting the experience of companies that have adopted cryptocurrencies as an external means of payment, with particular emphasis on financial reporting and the impact on trade flows.

## 4. Analyses

According to the Romanian platform Tradesilvania, since 2021 there has been a significant increase in the number of Romanian companies investing in cryptocurrencies. This growth includes both small and medium-sized enterprises (SMEs) as well as publicly listed companies. Industry experts estimate that several hundred active companies have integrated crypto payments or hold cryptocurrencies for transactional or investment purposes. Although no centralized registry exists, the activity of local platforms—such as those offering fund trading, custody services, and crypto payment processing—suggests the involvement of dozens of legal entities in this ecosystem, including IT firms, retailers, and crypto startups.

Netopia Payments, one of the main local payment service providers, currently serves approximately 100 active online merchants that accept cryptocurrencies (e.g., Bitcoin, Ethereum, Elrond). However, there are no publicly available statistics specifically tracking companies engaged in international trade that accept crypto payments. [3]

A recent study conducted by the European Commission (2023) found that only 8% of large companies in the EU reported using cryptocurrencies for international payments. In Romania, corporate adoption of cryptocurrencies remains at an early stage. According to a 2022 study by Tradesilvania and Ipsos, only 4% of surveyed SMEs indicated that they accepted cryptocurrency payments, with over 80% of these companies using stablecoins (such as USDT) in their international trade operations. [12]

At the national level, the academic literature indicates that the adoption and implementation of accounting regulations for cryptocurrencies remains largely experimental, due to the absence of comprehensive fiscal and accounting guidelines. Consequently, various specialists in the field have proposed different approaches to address this gap. [8]

### *4.1 Advantages of Using Cryptocurrencies in Foreign Trade*

The use of cryptocurrencies as settlement instruments in international business transactions offers a number of clear advantages, particularly in the current context marked by global inflation, currency volatility, and high levels of banking bureaucracy. Among the most significant benefits identified in both academic literature and corporate practice are:

- **Reduction of transaction costs**: By eliminating intermediaries (commercial banks, SWIFT networks), cryptocurrencies enable direct transfers between trading partners at significantly lower costs.
- **Near-instant settlement time**: Blockchain transactions can be recorded and confirmed within minutes, compared to traditional bank transfers that typically require 1 to 5 business days.
- **Traceability and transparency**: Blockchain technology provides a verifiable transaction history, contributing to the reduction of commercial fraud and facilitating audit processes.

- **Access to unstable markets**: In countries with volatile monetary regimes or financial sanctions, cryptocurrencies can serve as an alternative channel for conducting international trade.
- **Automation via smart contracts**: These allow for automatic execution of payments based on predefined conditions (e.g., delivery confirmation), reducing contractual risk and commercial misunderstandings.

The identified advantages—such as the elimination of intermediaries, cost reduction, and transaction traceability—are supported by international literature (Tapscott & Tapscott, 2017) as well as Romanian researchers. For example, Hotca M.A. (2019) emphasizes the potential of blockchain to enhance transparency in cross-border transactions and combat tax evasion.

***4.2 Risks and Limitations of Using Cryptocurrencies***

Despite their potential, cryptocurrencies raise several issues that limit their practical applicability in international commercial transactions:

- **High volatility**: Major cryptocurrencies (e.g., Bitcoin, Ethereum) exhibit significant price fluctuations, which can result in value losses between the time of invoicing and the actual payment.
- **Regulatory uncertainty**: Legal frameworks governing the use and reporting of cryptocurrencies vary considerably across EU member states. In Romania, cryptocurrencies are still not clearly addressed in existing accounting or tax legislation.
- **Digital security risks**: Although blockchain is considered secure, digital wallets remain vulnerable to cyberattacks or access loss.
- **Limited acceptance**: While growing, the number of companies willing to accept cryptocurrencies in B2B transactions is still relatively low.
- **Accounting integration challenges**: The absence of a standardized accounting framework—particularly for SMEs—makes it difficult to incorporate cryptocurrencies into corporate balance sheets.

These limitations, such as price volatility and regulatory ambiguity, are also highlighted by Grigoraș R. (2022), who argues that accounting uncertainty prevents Romanian SMEs from actively adopting cryptocurrencies as a payment instrument.

Nevertheless, it can be argued that the use of cryptocurrencies for commercial purposes may be effective for Romanian exporters operating in countries with currency restrictions, and can also serve as a strategy for boosting the sale of goods and services on international markets.

***4.3 Accounting and Tax Implications for Companies in the European Union and Romania***

***a) Accounting Regulations in the European Union and Romania***

In the European Union, due to the absence of a dedicated accounting standard for cryptocurrencies, companies apply general IFRS standards in an adapted manner. According to the official IFRIC interpretation issued in 2019, cryptocurrencies are not recognized as legal tender or cash equivalents, as they do not meet the criterion of being a generally accepted means of payment.

In both accounting recognition scenarios—illustrated in Figure 1—cryptocurrencies are initially measured at acquisition cost. Revaluation is permitted only if an active market exists (for intangible assets). Upon disposal, gains or losses are recognized in the profit or loss of the reporting period.

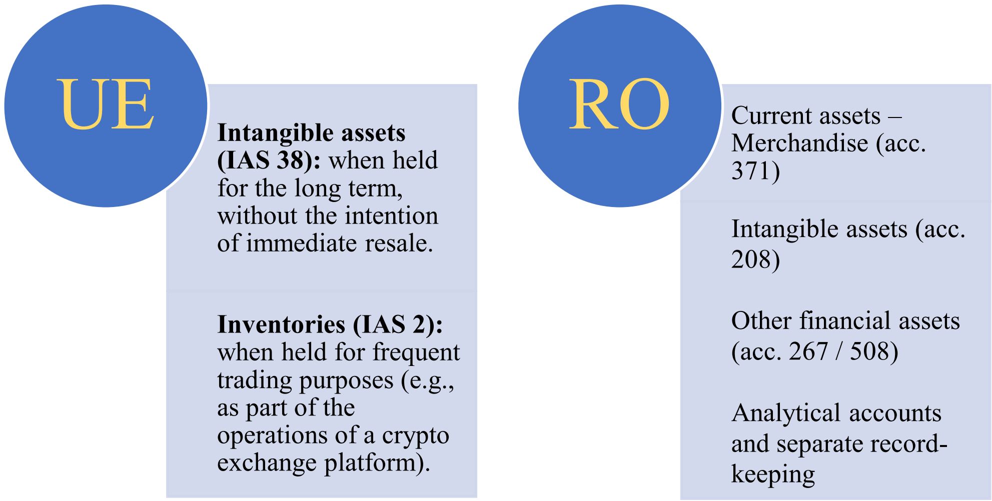


***Figure 1 – Alternative Approaches to the Recognition of Cryptocurrencies in Corporate Accounting: EU vs. Romania (****own projection****)***

In Romania, the legal framework (Order of the Ministry of Public Finance no. 1802/2014) does not explicitly regulate cryptocurrencies. However, accounting practice, professional opinions, and several academic studies have proposed the alternatives illustrated in the figure above.

Generally, in companies engaged in commercial activity on cryptocurrency exchanges, cryptocurrencies are recognized as current assets—Merchandise (account 371)—a classification applicable when crypto assets are frequently traded. Initial measurement is based on acquisition cost, while inventory outflows may be accounted for using either the FIFO or weighted average cost (WAC) method.

Cryptocurrencies held for the long term (e.g., for settlement in commercial transactions) may be recognized as intangible assets. These are not amortized, but are subject to impairment testing, meaning that subsequent measurement is based on historical cost less any impairment adjustments.

When cryptocurrencies are used strictly as digital payment instruments in foreign trade, they may be classified as cash equivalents or temporary financial investments (analytical sub-accounts for 5124, respectively acc. 267 or 508). Fair value remeasurement at the reporting date is recommended for enhanced reporting relevance. Any resulting value differences at the time of settlement or revaluation should be recognized as financial income if favorable, or financial expenses if unfavorable.

Moreover, the use of distinct analytical accounts for each type of cryptocurrency is strongly recommended, along with the archiving of digital wallet statements and exchange reports as supporting documentation.

Some authors also argue that cryptocurrencies should be accounted for based on their economic purpose, rather than being treated as traditional monetary instruments, given that they are not issued by a central bank and lack an official exchange rate.

**b) Tax Treatment in Romania**

According to current legislation (the Fiscal Code and official ANAF guidelines), cryptocurrency transactions carried out by Romanian companies may have the following implications:

➢ **Corporate income tax**: Revenues generated from cryptocurrency transactions are taxable. The deductibility of related expenses depends on the availability and accuracy of supporting documentation.

➢ **Value-added tax (VAT)**: The exchange of cryptocurrencies for fiat currencies is **not subject to VAT**, in line with the Court of Justice of the European Union (CJEU) ruling in the *Hedqvist* case.

➢ **VAT on goods and services**: When goods or services are paid for using cryptocurrencies, VAT is calculated based on the **RON equivalent** of the invoiced currency at the time of the transaction.

### *4.4. Case Study on the Accounting of Cryptocurrency Transactions in a Foreign Trade Company*

"NutraVital SRL" is a Romanian-based company specialized in the production and export of nutritional supplements within the European Union (Germany, the Netherlands, France). Beginning in 2023, the company decided to accept cryptocurrency payments for international orders, primarily in USDT (a stablecoin) and Bitcoin (BTC).

In addition, the company holds a long-term investment portfolio of 5 BTC, which is not intended for commercial settlements but rather for capital appreciation.

In Q4 2024, NutraVital carried out the following relevant operations:

• It delivered goods worth 10,000 EUR to a company in Germany. Payment was made in USDT, with the RON equivalent at the exchange rate on the transaction date being 49,000 RON.

• It recorded an increase in the value of its BTC portfolio, from 95,000 RON/BTC at acquisition to 120,000 RON/BTC as of 31 December 2024.

*a) Accounting treatment of the commercial transaction*

The payment received in USDT for the export is considered a digital asset receipt, measured in RON equivalent. The transaction is recorded as follows:

| | | | |
|---|---|---|---|
| **4111**<br>**Customers** | = | **7015**<br>**Income from the sale of goods** | **49.000 RON** |
| **5127**<br>**Crypto wallet account** | = | **4111**<br>**Customers** | **49.000 RON** |

*(**Note:** Account 5127 is the proposed cash-equivalent account for recognizing receipts in the USDT cryptocurrency wallet.)*

After conversion into RON via a cryptocurrency exchange, the following accounting entry is recorded:

| | | | |
|---|---|---|---|
| **5121**<br>**Bank account in lei** | = | **5127**<br>**Crypto wallet account** | **49.000 RON** |

*b) Accounting Treatment of the 5 BTC Held as an Investment*

The company purchased 5 BTC in June 2023 at a price of 95,000 RON per BTC, for a total value of 475,000 RON, with the intention of holding them as a long-term investment. These assets are recorded in the accounting system as follows:

| | | | |
|---|---|---|---|
| **2671**<br>**Other long term financial investments** | = | **5127**<br>**Crypto wallet account** | **475.000 RON** |

As of the reporting date (**31 December 2024**), the market value of **1 BTC** is **120,000 RON**, resulting in a total portfolio value of **600,000 RON**.

In order to reflect economic reality—and in the absence of an explicitly regulated revaluation method for cryptocurrencies—the company chooses to disclose upward or downward adjustments in the **explanatory notes**, without modifying the book value if it follows the **historical cost model**.

If the company were to apply **revaluation** as an internal accounting policy, the following entry would be recognized:

| | | | |
|---|---|---|---|
| **2671**<br>**Other long term financial investments** | = | **768**<br>**Other financial income** | **125.000 RON** |

*In practice, revaluation is applied with caution and only if there is a clearly defined accounting policy and the approach is accepted by the external auditor.*

*c) Presentation in the Balance Sheet as of 31 December 2024*

| **Fixed Assets** | **Value at 31.12.2024** | **Remarks** |
|---|---|---|
| Other long term financial investments (5 BTC) – acc. 2671 | 475.000 RON | Evalued at historical cost (optional: fair value 600,000 RON in the informative notes) |
| **Current Assets** | **Value at 31.12.2024** | **Remarks** |
| Crypto availability (USDT) – acc. 512 | 0 RON (fully converted) | Received and converted into RON |

We recommend that the explanatory notes include detailed information regarding the cryptocurrency portfolio as follows: *"As of 31 December 2024, the company holds a portfolio of 5 BTC, acquired at a price of 95,000 RON per BTC. These assets are recognized as long-term financial investments, measured at cost. The market value as of the reporting date is 600,000 RON; the difference is disclosed for informational purposes only. The cryptocurrencies are stored in secure wallets and are used exclusively as a financial reserve."*

Through this case study, we aimed to demonstrate both the **applicability of cryptocurrencies in international trade transactions** (via the acceptance of stablecoins) and the **challenges associated with accounting for long-term investments**. In the absence of a harmonized accounting framework, the chosen accounting treatment remains subject to the company's internal policies and must be accompanied by **comprehensive disclosures in the financial statement notes**.

In this context, we propose a set of recommendations for Romanian companies:

- Adoption of an internal accounting policy specifically dedicated to crypto-assets.
- Maintenance of clear, analytical bookkeeping records for each type of cryptocurrency.
- Archiving of supporting documentation (wallet statements, invoices, payment orders).
- Collaboration with tax advisors regarding the treatment of crypto-related income.
- Ongoing monitoring of **MiCA regulations** and potential updates to national legislation (e.g., OMFP).

## 5. Conclusions

Although initially perceived as speculative assets or emerging technologies, cryptocurrencies are increasingly playing a significant role in international trade, including in B2B relations between companies within the European Union and Romania. The speed of settlement, lower transaction costs, and the ability to bypass traditional banking intermediaries position cryptocurrencies as a viable alternative in the broader context of the global economy's digitalization.

However, their implementation in day-to-day business operations presents significant challenges, particularly in terms of accounting and taxation. The lack of a clear regulatory framework in Romania and the uneven approaches across EU member states create uncertainty in financial reporting, while the inherent volatility of these assets introduces risks that must be carefully managed. In this context, the accounting policies adopted by companies play a crucial role in ensuring accurate and transparent reporting.

For the sustainable and responsible use of cryptocurrencies in international commercial settlements, it is essential for Romanian regulatory authorities to issue clear accounting guidelines aligned with European and international standards. At the same time, companies must develop internal policies for the valuation, recognition, and presentation of digital assets, supported by their finance departments and external auditors.

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