UDC 336.76
JEL G10, G11, G14, G15
DOI: https://doi.org/10.17721/1728-2667.2023/223-2/19

Antonina SHOLOIKO, DSc (Econ.), Assoc. Prof.
ORCID ID: 0000-0003-1239-4281,
e-mail: sholoiko@knu.ua
Taras Shevchenko National University of Kyiv, Kyiv, Ukraine

Pengyue HOU, PhD Student,
ORCID ID: 0009-0004-6009-1060
e-mail: 1515650130a@gmail.com
Taras Shevchenko National University of Kyiv, Kyiv, Ukraine

CONCEPTUALIZATION OF FINANCIAL TRADING

Background. ***Financial trading is a crucial aspect of modern economies. Nowadays it is also a field of study that has received great attention from researchers and financial institutions worldwide. At the same time, the concept of financial trading has gradually become more complex against the background of globalization and the digital economy. The purpose of the article is to scientifically and comprehensively define the concept of "financial trading." To achieve this purpose, the following tasks were done: to construct the definition of financial trading; to generalize the characteristics of the main financial trading participants (individual traders, institutional investors, high-frequency traders, market makers, brokers, and sovereign wealth funds); to create a comprehensive classification of financial trading.***

Methods. ***During this research, a seven-stap methodology of definition construction by A. Starostina and V. Kravchenko was applied, a grouping method for dividing financial trading participants into categories, and a combination of hierarchical and faceted classification methods were used.***

Results. ***Consequently, a scientific definition of financial trading (including three components: essence, content, and result), a grouping of the main participants of financial trading (systemic and investment participants) and a comprehensive classification of financial trading were suggested.***

Conclusions. ***These findings are basic for financial regulators and market practitioners seeking to improve the efficiency, stability, and inclusiveness of financial trading. For academics, this study will contribute to the future research of seeking the profitability improvement of financial investment through financial trading and exploring the perspective development of financial trading technology.***

Keywords: ***financial markets, financial trading classification, financial trading participants, financial investments.***

Background

The concept of financial trading appeared with the emergence of financial markets. Nowadays, with the development of the financial industry and the expansion of the financial market under globalization and the digital economy, this concept has become more and more important. At the same time, the concept of financial trading has gradually become more complex with the emergence of new financial assets and the improvement of financial trading methods. Along with that, it is quite difficult to find a clear and grounded definition of financial trading. Because of this many misunderstandings and misregulations can appear. To further meet the research demand of academics and financial practitioners in the field of financial trading it is necessary to conceptualize financial trading.

The main purpose of this article is to scientifically and comprehensively define the concept of "financial trading". To achieve this purpose, the following tasks were done:

- to construct the definition of financial trading;
- to generalize the characteristics of the main financial trading participants (individual traders, institutional investors, high-frequency traders, market makers, brokers, and sovereign wealth funds);
- to create a comprehensive classification of financial trading.

Literature review. According to previous research on financial trading, financial trading is an inherently complex and risky domain (Leaver, & Reader, 2016). Regarding the concept of financial trading, most financial practitioners and theoreticians define it as an act of buying or selling a financial instrument (equities, bonds, etc.) (Sikuni, 2021; Infinox, 2022; BajajFinserv, 2022; Buczynski, Cuzzolin, & Sahakian, 2021; DNBC markets, 2022). Traditional financial trading methods can usually be divided into technical analysis and fundamental analysis. Technical financial trading usually represents a class of investment strategies for financial markets based on the analysis of trends and recurring patterns in price time series (Garzarelli et al., 2014). Whereas, this financial trading method based on technical analysis has also been questioned scientifically. According to the efficient market hypothesis (EMH), the hypothesis imposes significant limitations on financial trading and makes it impossible to outperform efficient markets through arbitrage or trading strategy (Alves et al., 2020). The adaptive market hypothesis (AMH) introduced in 2004 by Andrew Lo, combines principles of the well-known and often controversial efficient market hypothesis (EMH) with behavioral finance. AMH suggests that people are mostly rational but can sometimes overreact during periods of heightened market volatility (Andrew, 2004). This explains why stocks do not always trade at fair value during financial bubbles, crashes, and crises.

With the development of the financial industry and computer science in recent decades, trading systems based on machine learning have been actively studied in all fields including finance (Leem, & Kim, 2020). In the most advanced financial trading technology practice, quantamental hedge funds utilize satellite imagery as a source of intelligence for their financial trading algorithms to generate access returns (alpha) (Gudžius, 2021). These technical and theoretical advances also encouraged our further study of the construction of the definition of "financial trading", a grouping of the financial trading participants and the classification of financial trading.

Methods

The construction of the definition of the concept of "financial trading" is carried out using the methodology of A. Starostina and V. Kravchenko, the algorithm of which consists of seven consecutive stages:

1) making a list of definitions of the concept "financial trading" (taking into account definitions from practitioners and theoreticians);

2) decomposition of the definitions of the concept of "financial trading" into three components: the essence, the content of the phenomenon, and its result;

3) generalization of views on the definition of the concept of "financial trading";

4) classification of generalized approaches to defining the concept of "financial trading";

5) critical analysis of the identified approaches to defining the concept of "financial trading";

6) construction of the author's definition of the concept of "financial trading";

7) analysis of the possibility of practical use of the constructed author's definition of the concept of "financial trading" (Starostina, & Kravchenko, 2011, p. 7).

The method of grouping was used to divide participants of financial trading into categories for generalization of characteristics.

The classification of financial trading is based on the combination of two classification methods:

1) the hierarchical classification method is grounded on the division of financial trading into separate groups with their subsequent division into types with more detailed characteristics;

2) faceted classification method is based on only individual and freely chosen characteristics of financial trading.

Results

Constructing the definition of the concept of "financial trading" according to the methodology of A. Starostina and V. Kravchenko, primarily , at the first and the second stages, respectively, a list of definitions of the concept is formed, which are divided into three components: the essence, the content of the phenomenon, and its result (Tab. 1).

Table 1

Definitions components for the concept of "financial trading"

№	Author or source	Definitions components		
		Essence	Content	Result
1	2	3	4	5
1	Sikuni, 2021		Buying and selling financial assets	
2	Infinox, 2022		Buying and selling assets in financial markets	in the hopes of a positive outcome
3	Lawinsider, 2020		Trading for one's own account or for the account of clients, whether on an investment exchange, in an over-the-counter market, or otherwise, in a financial product	
4	BajajFinserv, 2022	A method	that involves buying and selling stocks and other financial instruments like futures and options, ETFs, etc. for a short period	
5	Teall, 2018	A security A transaction	that creates or alters a portfolio position based on an investment decision	
6	Investopedia, 2023c		Purchasing and selling securities, commodities, or derivatives	
7	Wikipedia, 2023	An exchange	of security for "cash", typically a short-dated promise to pay in the currency of the country where the 'exchange' is located.	
8	Buczynski, Cuzzolin, & Sahakian, 2021	An act	of buying or selling a financial instrument (equities, bonds, commodities, etc.)	
9	DNBC markets, 2022		Buying and selling of financial instruments	
10	Trading masters, 2023		Exploiting the variation in the prices of securities quoted on the financial markets	to obtain a high profit

In the third stage, the generalization of views on the definition of the concept of "financial trading" based on the presence of the necessary components is made. All three components are not revealed in any definitions. Only four out of ten definitions consist of the essence and content components and only two out of ten definitions consist of the content and result components. Moreover, it is necessary to indicate the relationship and distinction between financial trading, investment, speculation, and gambling here (Tab. 2).

Table 2

Conceptual similarities and differences among gambling, speculation, investment, and financial trading

Comparative characteristic	Gambling	Speculation	Investment	Financial trading
Activities & Instruments	Fairly distinctive from speculation, investment, and financial trading	Fairly distinctive from gambling, less distinctive from investment and financial trading	Fairly distinctive from gambling, less distinctive from speculation and financial trading	Fairly distinctive from gambling, less distinctive from speculation and investment
Time frame	Usually short	Variable	Long	Variable
Level of risk	Usually high	Usually high	Low	Low
Expected returns	Usually negative with low variability	Mixed and highly variable	Usually positive and somewhat variable	Mixed and highly variable
Role of chance	High	High	High	Variable
Asset purchase	No	Sometimes	Yes	Yes
Stake	Yes	Yes	No	No
Definitive event/outcome	Yes	Usually	Usually not	Usually
Economic utility	Low	Mixed	High	High

Source: added by authors based on (Arthur, Williams, & Delfabbro, 2016).

Most financial activities such as financial trading are usually closely related to two essences: speculation and investment. In addition, financial trading may sometimes in some cases be criticized as gambling. In 2016 sociological study that analyzed the relationship and distinction among gambling, speculation, and investment clearly showed that: "Gambling differs from investment in many different attributes and should be seen as conceptually distinct. On the other hand, speculation is conceptually intermediate between gambling and investment. Speculation and gambling have conceptual overlap and a strong empirical relationship" (Arthur, Williams, & Delfabbro, 2016). The next stage involves the classification of generalized approaches to defining the concept of "financial trading" (Tab. 3).

Table 3

Theoretical approaches to defining the concept of "financial trading"

	Author/authors	Essence				Content (+/-)	Result (+/-)
		Method	Security transaction	Exchange	Act		
1	Sikuni, 2021	-	-	-	-	+	-
2	Infinox, 2022	-	-	-	-	+	+
3	Lawinsider, 2020	-	-	-	-	+	-
4	BajajFinserv, 2022	+	-	-	-	+	-
5	Teall, 2018	-	+	-	-	+	-
6	Investopedia, 2023c	-	-	-	-	+	-
7	Wikipedia, 2023	-	-	+	-	+	-
8	Buczynski, Cuzzolin, & Sahakian, 2021	-	-	-	+	+	-
9	DNBC markets, 2022	-	-	-	-	+	-
10	Tradingmasters, 2023	-	-	-	-	+	+

Based on the materials in Tab. 1 different understandings of financial trading can be distinguished:

1) Financial trading is buying or selling financial assets;

2) Financial trading is buying or selling financial assets to obtain a high profit (positive outcome).

The main difference between these two definitions lies in the result of financial trading, which also can be a point that is prone to academic criticism. In wider and more practical financial applications, financial trading can not only obtain direct profits through price differences but also be used in investment portfolio strategies and hedge funds to avoid financial risks or to obtain indirect financial benefits.

Analyzed from the information we collected about the definitions of financial trading, there is an academic consensus that the essence of the financial trading concept is the transaction which is also usually described as buying and selling. Besides, to lead a more scientific and more practical definition of financial trading, it is necessary to define the objects of the transaction as financial assets. But other objects as financial instruments also should be noticed here and distinguished from financial assets. "Financial instruments are assets that can be traded, or they can also be seen as packages of capital that may be traded. These assets can be in the form of cash, a contractual right to deliver or receive cash or another type of financial instrument, or evidence of one's ownership in some entity" (Investopedia, 2023a-b). In rigorous scientific definition, "a financial instrument creates a financial asset for one party and a liability for the other party" (Green, 2021). "Financial assets derive their value from a contractual claim on an underlying asset" (tangible (real or financial) and intangible) (Investopedia, 2023a-b). Accordingly, at the fifth stage, it is necessary to carry out a critical analysis of the identified approaches (Tab. 4).

Table 4

Estimation of theoretical approaches to defining the concept of "financial trading"

№	Author or source	Estimation criteria (maximum 5 points for each criterion)				
		Presence of all definition components	Popularity of definition	Theoretical background	Use in practice	Total points (maximum 20 points)
1	Sikuni, 2021	2	5	2	3	12
2	Infinox, 2022	4	4	4	5	17
3	Lawinsider, 2020	2	2	2	3	9
4	BajajFinserv, 2022	4	5	4	3	16
5	Teall, 2018	4	2	4	5	15
6	Investopedia, 2023c	2	5	2	3	12
7	Wikipedia, 2023	4	2	4	3	13
8	Buczynski, Cuzzolin, & Sahakian, 2021	4	5	4	3	16
9	DNBC markets, 2022	2	5	2	3	12
10	Trading masters, 2023	4	4	4	5	17

The data given in Tab. 4, is the basis for the formulation of our scientific definition of financial trading. In our opinion, *financial trading is an immediate or specifically preset transaction performed by a financial trading participant based on the features of one or more financial assets and market information with the purpose of direct or indirect financial benefit*. In our definition, financial trading participants are different from financial trading organizers or regulators and are the real executors and the main body of financial trading. Moreover, financial trading follows a financial trading nature because the transactions are based on the features of one or more financial assets and market information considered by financial trading participants. This design is necessary for distinguishing financial trading from gambling for non-financial purposes.

It is necessary to find out whether our proposed definition of the concept of "financial trading" is the basis for its practical use. In our opinion, the abovementioned definition is highly likely to become widespread in practical use, as it generally reflects the focus of financial trading on the performance of its main task, namely: providing direct or indirect financial benefits. This definition can be widely used in various fields of financial trading in the future.

Regarding financial trading participants, generally, it is possible to divide them into two groups: investment participants and systemic participants. Systemic participants contain brokers and market makers, they do not directly profit from financial transactions, but to earn commissions. Investment participants include individual traders, institutional investors, high-frequency traders, and sovereign wealth funds. All types of financial trading participants often have obvious differences in trading frequency, trade size, investment duration, and risk management (Easley, & O'Hara, 1987; Pengyue, 2023a) (Tab. 5).

Table 5

Main characteristics of the financial trading participants

№	Participant and unique important characteristics	The main source of profit	Trade size	Investment duration	Trade frequency	Risk management
	I. Systemic participants					
1	Market makers provide liquidity to financial markets, and often play a critical role in reducing bid-ask spreads and improving market liquidity	Commissions	Small	Short term	High	No
2	Brokers as intermediaries between buyers and sellers, can influence the behavior of individual investors by recommending trades and providing market information	Commissions	Small	Short and long-term	Low	No
	II. Investment participants					
3	Individual investors or traders also called retail investors who trade financial instruments with their capital, are prone to behavioral biases and engage in excessive risk-taking behavior	Trading actions	Small	Short and long-term	Low	Low
4	Institutional investors who invest on behalf of their clients are usually less prone to herding behavior and have better risk management practices	Trading actions	Large	Short and long-term	High and low	High
5	High-frequency traders usually use algorithms to execute high-speed trades in milliseconds and can also contribute to market efficiency by improving price discovery	Trading actions	Small	Short term	High	Low
6	Sovereign wealth funds are usually state-owned investment funds that manage and invest a country's wealth. Most of them have unique investment objectives and can have a significant impact on financial markets due to their large size and long-term investment horizons	Trading actions	Large	Long term	Low	High

Source: compiled based on (Easley, & O'Hara, 1987; Chen, Knez, & Ready, 2014; Cooper, Gulen, & Rau, 2016; Barber, & Odean, 2013; Hong, & Stein, 2002; Brogaard, Hendershott, & Riordan, 2014; Petajisto, 2010; Pengyue, 2023a).

Our findings show that the trading characteristics of different types of participants differ significantly in their trading behaviors and outcomes. Individual traders have relatively low professional experience and are more likely to engage in speculation and high-risk trading behavior. In contrast, institutional investors and sovereign wealth funds tend to have higher professional experience and access to better market information and resources and prefer long-term investment strategies (Pengyue, 2023a).

For constructing a comprehensive classification of financial trading by applying a combination classification methodology it is necessary to start with consideration of the main classification features of faceted classification: the object of financial trading, trading technology, transaction place, transaction execution, financial trading purpose and market structure (Tab. 6).

Table 6

Key classification features of faceted classification of the financial trading

№	Classification feature	Characteristic
1	Object of financial trading	This means that financial trading can be classified according to the objects traded. In the traditional financial concept, financial instruments traded in financial markets "may be divided according to an asset class, which depends on whether they are debt-based or equity-based. Foreign exchange instruments comprise a third, unique type of financial instrument" (Investopedia, 2023b). With the development of computer technology and the rise of Internet finance in the 21st century, cryptocurrency and digital goods have gradually become the object of financial transactions and become more and more important
2	Trading technology	Refers to the strategy and technology used in the financial transaction process. In the former study, traditional trading strategies employed can be classified as fundamental, technical, and quantitative strategies. In our new classification, according to the financial industry and the history of financial transaction technology, financial transaction technology can be roughly divided into three levels: traditional financial trading, modern financial trading, and next-generation financial trading. Traditional financial trading technology includes fundamental analysis and technical analysis. Modern financial trading technology includes algorithmic trading and Machine learning (ML)-based trading. The next-generation financial trading technology includes advanced artificial intelligence (AI) technology and infinite information algorithm
3	Place of transaction	This item indicates the place where the financial transaction takes place, usually divided into physical financial trading (offline) and online financial trading
4	Transaction execution	This item indicates the execution method of financial trading, usually divided into immediate trading and preset trading
5	Financial trading purpose	Indicates the purpose of financial trading, usually divided into investment and non-investment
6	Market structure	This item indicates whether financial trading is conducted through exchanges. The market structure can be classified as over-the-counter (OTC) and exchange-traded markets

Source: compiled based on (Fabozzi, 2008; Harris, 2002; Malkiel, 2003; Pengyue, 2023b).

The faceted classification method deeply classifies financial trading from multiple dimensions. Whereas, this financial trading classification method is relatively rigid and simple, which lacks practicability in some complex financial transaction scenarios (Pengyue, 2023b). For further development of the comprehensiveness and interactivity of financial trading classification, a combination of two classification methods is used: faceted classification method and hierarchical classification method (Tab. 7).

Table 7

Comprehensive classification of financial trading

Feature	Types of financial trading						
Financial trading technology generation	Traditional financial trading				Modern financial trading	Next-generation financial trading	
Trading technology implementation	Trading based on fundamental analysis method		Trading based on technical analysis method		Algorithmic trading and ML-based trading	Trading based on advanced AI technology	Trading based on infinite information
Place of transaction	Physical financial trading	Online financial trading	Physical financial trading	Online financial trading	Online financial trading	Online financial trading	Online financial trading
Market structure*	Financial trading in exchange-traded markets	Financial trading in OTC markets	Financial trading in exchange-traded markets	Financial trading in OTC markets	Financial trading in OTC markets	Financial trading in OTC markets	Financial trading in OTC markets
Transaction execution	Immediate and preset trading	Immediate and preset trading	Preset trading	Preset trading	Preset trading	Immediate and preset trading	Preset trading
Objects of financial trading	1. Commodity**	1. Commodity**	1. Commodity**	1. Commodity**	1. Commodity**	1. Commodity**	1. Commodity**
	2. Bond	2. Bond	2. Bond	2. Bond	2. Bond	2. Bond	2. Bond
	3. Stock	3. Stock	3. Stock	3. Stock	3. Stock	3. Stock	3. Stock
	4. Fund	4. Fund	4. Fund	4. Fund	4. Fund	4. Fund	4. Fund
	5. Derivatives	5. Derivatives	5. Derivatives	5. Derivatives	5. Derivatives	5. Derivatives	5. Derivatives
	6. Currency	6. Currency	6. Currency	6. Currency	6. Currency	6. Currency	6. Currency
		7. Cryptocurrency		7. Cryptocurrency	7. Cryptocurrency	7. Cryptocurrency	7. Cryptocurrency
		8. Special digital goods		8. Special digital goods	8. Special digital goods	8. Special digital goods	8. Special digital goods
Financial trading purpose	Investment trading for investment participants; non-investment trading for systemic participants						

Note: * Nowadays, large exchange-traded markets trade the majority of physical financial trading objects. Traditional exchange-traded markets usually don't trade commodities and derivatives objects; ** In the context of underlying assets.

Source: created by authors.

This classification is comprehensively classified according to the various characteristics of financial trading with financial transaction technology as the core. This financial trading classification approach divides the application scenarios of different financial transaction technologies in detail and makes a preliminary prediction for the possible application situation of next-generation financial transaction technologies in the future.

Discussion and conclusions

This study aims at the conceptualization of "financial trading". A definition of financial trading that includes three components: essence, content, and result was suggested, namely financial trading is an immediate or specifically preset transaction (essence) performed by a financial trading participant based on the characteristics of one or more financial assets and market information (content), in the hopes of direct or indirect financial benefit (result). This definition of "financial trading" differs from existing definitions by its completeness.

The main financial trading participants were grouped as systemic (brokers and market makers) and investment participants (individual traders, institutional investors, high-frequency traders, and sovereign wealth funds). The difference and significance of the characteristics of the main financial trading participants were concluded. Research findings show that the trading characteristics of different types of participants differ significantly in their trading behaviors and outcomes. Individual traders have relatively low professional experience and are more likely to engage in speculation and high-risk trading behavior. In contrast, institutional investors and sovereign wealth funds tend to have higher professional experience and access to better market information and resources and prefer long-term investment strategies.

A comprehensive classification of financial trading was constructed by applying a combination classification methodology. This classification approach is different from the faceted classification of financial trading because it deeply classifies financial trading from multiple dimensions and lets to consider application scenarios of different financial transaction technologies. Our scientific definition and classification of financial trading are highly likely to become widespread in practical use and can become a ground of policy development for financial regulators and policymakers in the field of financial trading.

The significance of this study is as follows:

1. To promote the scientific norms for research in the field of financial trading;

2. Contribute to the systematic research on the history of financial trading development;

3. Beneficial to the study of technological advances in financial trading;

4. Provide a basis for exploring the future development of financial trading research;

5. To improve the efficiency, stability, and inclusivity of financial trading.

In addition, we also found some important points in the process of conceptualizing of "financial trading", which deserve attention in future related research. Firstly, financial trading technology improvement is closely integrated with the development of IT technology. In the 21st century, the development speed of AI technology has become faster, which is reflected in the new Machine Learning algorithm theory and the substantial increase in computer computing power. In the field of financial trading technology, the speed of financial trading technology innovation has also accelerated. From algorithmic trading to AI trading, financial transaction technology innovation can apply IT technology in a short time. Some new financial trading technologies may appear in the near future. On the other hand, the new financial trading technology does not occupy a dominant position in the current financial trading market, the traditional trading methods are still active in the market. Secondly, some features of financial transactions are similar to gambling and speculation. In some specific cases, these properties can be exploited by gamblers or speculators, requiring the attention of financial transaction regulators and policymakers.

Authors' contribution: Antonina Sholoiko – conceptualization, methodology, writing an original draft, writing (review & editing); Pengyue Hou – writing an original draft, writing (review & editing).

Acknowledgments, funding sources. The authors would like to thank the participants of the International Conference "Shevchenkivska Vesna" (Kyiv, March, 29–31, 2023) and of the International Scientific and Practical Conference "World Trends and Prospects for Development of the Financial System of Ukraine" (Kyiv, May, 25–26, 2023) for the fruitful discussion. This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

References

Alves, L.G.A., Sigaki, H.Y.D., Perc, M., & Ribeiro, H.V. (2020). Collective dynamics of stock market efficiency. *Scientific Reports.*10(1). https://doi.org/10.1038/s41598-020-78707-2

Andrew, W.Lo. (2004). The Adaptive Markets Hypothesis. *The journal of portfolio management*, 30(5), 15–29. https://doi.org/10.3905/jpm.2004.442611

Arthur, J.N., Williams, R.J., & Delfabbro, P.H. (2016). The conceptual and empirical relationship between gambling, investing, and speculation. *Journal of Behavioral Addictions,* 5(4), 580–591. https://doi.org/10.1556/2006.5.2016.084

BajajFinserv. (2022). *Stock Trading vs. Investing. Which is better for long-term goals?* https://www.bajajfinservsecurities.in/web-stories/trading-vs-investing

Barber, B.M., & Odean, T. (2013). *The behavior of individual investors*. In Handbook of the Economics of Finance. Elsevier. Vol. 2, Part B, P. 1533–1570. https://doi.org/10.1016/B978-0-44-459406-8.00022-6

Brogaard, J., Hendershott, T., & Riordan, R. (2014). High frequency trading and price discovery. *Review of Financial Studies*, 27(8), 2267–2306. https://doi.org/10.1093/rfs/hhu032

Buczynski, W., Cuzzolin, F., & Sahakian, B. (2021). A review of machine learning experiments in equity investment decision-making: why most published research findings do not live up to their promise in real life. *International Journal of Data Science and Analytics*, 11, 221–242. https://doi.org/10.1007/s41060-021-00245-5

Chen, Z., Knez, P.J., & Ready, M.J. (2014). Do market makers anticipate informed trading through their quotes? *Journal of Finance*, 69(5). https://onlinelibrary.wiley.com/doi/full/10.1111/jofi.12211

Cooper, M.J., Gulen, H., & Rau, P.R. (2016). *Performance for pay? The relationship between CEO incentive compensation and future stock price performance*. SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1572085

DNBC markets. (2022). *What is financial trading?* https://https://www.dnbcmarkets.com/education/what-is-financial-trading

Easley, D., & O'Hara, M. (1987). Price, trade size, and information in securities markets. *Journal of Financial Economics*, 19(1), 69–90. https://doi.org/10.1016/0304-405X(87)90029-8

Fabozzi, F.J. (2008). *Handbook of finance*. Vol. I. Financial markets and instruments. https://www.academia.edu/31114136/Fabozzi_Handbook_of_Finance_Vol_I_Financial_Markets_and_Instruments_2008_

Garzarelli, F., Cristelli, M., Pompa, G., Zaccaria, A., & Pietronero, L. (2014). Memory effects in stock price dynamics: evidences of technical trading. *Scientific Reports*, 4, 44–87. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3967202 doi: 10.1038/srep04487

Green, J.M. (2021, August 7). *What Is a Financial Instrument?* The balance. https://www.thebalancemoney.com/what-is-a-financial-instrument-5095041

Gudžius, P., Kurasova, O., Darulis, V., & Filatovas, E. (2021). Deep learning-based object recognition in multispectral satellite imagery for real-time applications. *Machine Vision and Applications*, 32(4), 98. https://doi.org/10.1007/s00138-021-01209-2

Harris, L. (2002). *Trading and exchanges: Market microstructure for practitioners*. Oxford University Press.

Hong, H., & Stein, J.C. (2002). A unified theory of underreaction, momentum trading, and overreaction in asset markets. *The Journal of Finance*, 54(6). https://onlinelibrary.wiley.com/doi/abs/10.1111/0022-1082.00184

Hou P. (2023a). Characteristics of financial trading participants. *Shevchenkivska Vesna 2023*: *Problems and Prospects of Ukraine's Post-War Economic Recovery,* Vol. XXI, 153. Interservis https://econom.knu.ua/wp-content/uploads/2023/04/Збірник-Шевченківська-весна.docx.pdf

Hou P. (2023b). Comprehensive financial trading classification. *World trends and Prospects of development of the financial system of Ukraine,* Taras Shevchenko National University of Kyiv, Vol. XVI, 185–186. https://econom.knu.ua/wp-content/uploads/2023/07/%D0%9C%D0%B0%D1%82%D0%B5%D1%80%D1%96%D0%B0%D0%BB%D0%B8-%D0%BA%D0%BE%D0%BD%D1%84%D0%B5%D1%80%D0%B5%D0%BD%D1%86%D1%96%D1%97-_-%D0%B7%D0%BC%D1%96%D1%81%D1%82.pdf

Infinox. (2022). *What is Financial Trading*? https://www.infinox.com/scb/en/ix-intel/what-is-financial-trading

Investopedia. (2023a). *Financial Asset Definition and Liquid vs. Illiquid Types*. https://www.investopedia.com/terms/f/financialasset.asp

Investopedia. (2023b). *Financial Instruments Explained: Types and Asset Classes*. https://www.investopedia.com/terms/f/financialinstrument.asp

Investopedia. (2023c). *Trade Definition in Finance: Benefits and How It Works*. https://www.investopedia.com/terms/t/trade.asp

Lawinsider. (2020). *Financial trading definition*. https://www.lawinsider.com/dictionary/financial-trading

Leaver, M., & Reader, T.W. (2016). Human Factors in Financial Trading: an Analysis of Trading Incidents. *Hum Factors*, 58(6), 814–832. https://doi.org/10.1177/0018720816644872.

Leem, J., & Kim, H.Y. (2020). Action-specialized expert ensemble trading system with extended discrete action space using deep reinforcement learning. *PLoS One*, 15(7). https://doi.org/10.1371/journal.pone.0236178

Malkiel, B.G. (2003). The efficient market hypothesis and its critics. *Journal of Economic Perspectives*, 17(1), 59–82. https://eml.berkeley.edu/~craine/EconH195/Fall_16/webpage/Malkiel_Efficient%20Mkts.pdf

Petajisto, A. (2010). The index premium and its hidden cost for index funds. *Journal of Empirical Finance*, 18, 271–288. https://doi.org/10.1016/j.jempfin.2010.10.002

Sikuni, S. (2021). What is trading? Financial trading explained. https://www.ig.com/en/trading-strategies/what-is-trading-financial-trading-explained-211001#financial-trading

Starostina, A., & Kravchenko, V. (2011). The essence and practical application of the method of construction of the categorical apparatus of economic science (on the example of the concepts "globalization" and "entrepreneurial risk"). *Bulletin of Taras Shevchenko National University of Kyiv, Series "Economics",* 128, 5–10 [in Ukrainian]. [Старостіна, А., & Кравченко, В. (2011). Сутність та практичне застосування методики конструювання категоріального апарату економічної науки (на прикладі понять "глобалізація" та "підприємницький ризик"). *Вісник Київського національного університету імені Тараса Шевченка, Серія "Економіка"*, 128, 5–10]. http://nbuv.gov.ua/UJRN/VKNU_Ekon_2011_128_3

Teall, J.L. (2018). *Financial Trading and Investing.* (2th Ed.), Academic Press.

Tradingmasters. (2023). *Financial Trading: our Guide for Beginners and Professionals.* https://https://www.tradingmasters.io/blog/financial-trading

Wikipedia. (2023). *Trade (finance).* https://en.wikipedia.org/wiki/Trade_(finance)

Отримано редакцією журналу / Received: 06.07.23
Прорецензовано / Revised: 01.08.23
Схвалено до друку / Accepted: 14.09.23

Антоніна ШОЛОЙКО, д-р екон. наук, доц.
ORCID ID: 0000-0003-1239-4281
e-mail: sholoiko@knu.ua
Київський національний університет імені Тараса Шевченка, Київ, Україна

Пен'юе ХОУ, асп.
ORCID ID: 0009-0004-6009-1060
e-mail: 1515650130a@gmail.com
Київський національний університет імені Тараса Шевченка, Київ, Україна

КОНЦЕПТУАЛІЗАЦІЯ ПОНЯТТЯ ФІНАНСОВИЙ ТРЕЙДИНГ

В с т у п . ***Фінансовий трейдинг як основний аспект сучасної економіки є сферою дослідження, якій приділяють велику увагу дослідники та фінансові установи в усьому світі. В умовах глобалізації та цифрової економіки поняття фінансового трейдингу поступово ускладнюється, тому мета дослідження – наукове та комплексне обґрунтування визначення поняття "фінансовий трейдинг". Для досягнення поставленої мети було виконано такі завдання: сконструйовано визначення поняття "фінансовий трейдинг"; узагальнено характеристику основних учасників фінансового трейдингу (індивідуальні трейдери, інституційні інвестори, високочастотні трейдери, маркет-мейкери, брокери та державні інвестиційні фонди); запропоновано комплексну класифікацію фінансового трейдингу.***

М е т о д и . ***У дослідженні застосовано методологію А. Старостіної та В. Кравченка щодо побудови визначення поняття за допомогою семи етапів. Використано метод групування основних учасників фінансового трейдингу і поєднано методи ієрархічної та фасетної класифікації фінансового трейдингу.***

Р е з у л ь т а т и . ***Запропоновано визначення фінансового трейдингу (яке складається з трьох складових: сутність, зміст і результат). Згруповано основних учасників фінансового трейдингу (системні та інвестиційні учасники) і розроблено комплексну класифікацію фінансового трейдингу.***

В и с н о в к и . ***Отримані результати є основою для фінансових регуляторів і ринкових практиків, які прагнуть підвищити ефективність, стабільність і інклюзивність фінансового трейдингу. Для науковців це дослідження є підґрунтям до майбутніх досліджень щодо пошуку шляхів підвищення прибутковості фінансових інвестицій за допомогою фінансового трейдингу та визначення перспектив подальшого розвитку технологій фінансового трейдингу.***

К л ю ч о в і с л о в а : ***фінансові ринки, класифікація фінансового трейдингу, учасники фінансового трейдингу, фінансові інвестиції.***

Автори заявляють про відсутність конфлікту інтересів. Спонсори не брали участі в розробленні дослідження; у зборі, аналізі чи інтерпретації даних; у написанні рукопису; в рішенні про публікацію результатів.

The authors declare no conflicts of interest. The funders had no role in the design of the study; in the collection, analyses or interpretation of data; in the writing of the manuscript; in the decision to publish the results.