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THE FEASIBILITY AND RISKS OF INVESTING IN MODERN FINANCIAL INSTRUMENTS

Abstract. Relevance of the article is that the post-crisis economic recovery and the rapid development of European integration are both – a cause and a consequence of higher investment activity, which causes the expansion of the frontiers of the use of financial instruments while increasing the their riskiness in the current economic conditions. The dynamics of sales of financial instruments used in the investment process in the financial market of Ukraine, such as stocks, corporate bonds, government bonds of Ukraine, local bonds, savings certificates, certificates of deposit of the National Bank of Ukraine, investment certificates, mortgage bonds, option certificates, derivatives. The types of risks inherent to all modern financial instruments and specifies types of risks that are specific to certain types of financial instruments are shown.

The advantage of investing in certain types of financial instruments is grounded. The directions of risk reduce in exposure of investment in modern financial instruments, such as diversification (by type of instrument, the currency of a financial instrument, the countries issue a financial instrument, capitalization and sector of the issuer of financial instruments) and investment taking into account the time interval investment are offered. The main idea of the article was to prove the rationale for investing assets in financial instruments with simultaneous identification of risks that accompany this process, for finding out the ways to minimize them in the future.

Keywords: risk, investments, financial instruments, income, investment instruments, financial market.

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ДОЦІЛЬНІСТЬ ТА РИЗИКИ ІНВЕСТИВАННЯ В СУЧАСНІ ФІНАНСОВІ ІНСТРУМЕНТИ

Анотація. Актуальність статті полягає у тому, що посткризове відновлення економіки країни та стрімкий розвиток євроінтеграційного процесу є одночасно і причиною, і наслідком підвищення рівня інвестиційної активності, яке зумовлює розширення меж використання фінансових інструментів при одночасному збільшенні їх ризиковості у сучасних економічних умовах. Проаналізовано динаміку обсягів реалізації фінансових інструментів, що використовуються у інвестиційному процесі, на фінансовому ринку України. Визначено види ризиків, притаманних для усіх сучасних фінансових інструментів, та таких, що є специфічними для окремих їх видів. Головною ідеєю статті стало обґрунтування доцільності інвестування активів у фінансові інструменти з одночасною ідентифікацією ризиків, що супроводжують цей процес, задля пошуку шляхів їх мінімізації у перспективі.

Ключові слова: ризик, інвестиції, фінансові інструменти, дохід, інвестиційні інструменти, фінансовий ринок.

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ЦЕЛЕСООБРАЗНОСТЬ И РИСКИ ИНВЕСТИРОВАНИЯ В СОВРЕМЕННЫЕ ФИНАНСОВЫЕ ИНСТРУМЕНТЫ

Аннотация. Актуальность статьи заключается в том, что посткризисное восстановление экономики страны и стремительное развитие евроинтеграционного процесса являются одновременно и причиной, и следствием повышения уровня инвестиционной активности, которое вызывает расширение границ использования финансовых инструментов при одновременном увеличении их рискованности в современных экономических условиях. Проанализирована динамика объемов реализации финансовых инструментов, используемых в инвестиционном процессе на финансовом рынке Украины. Определены виды рисков, присущие всем современным финансовым инструментам, и такие, которые являются специфическими для отдельных их видов. Главной идеей статьи стало обоснование целесообразности инвестирования активов в финансовые инструменты с одновременной идентификацией рисков, сопровождающих этот процесс, для поиска путей их минимизации в перспективе.

Ключевые слова: риск, инвестиции, финансовые инструменты, доход, инвестиционные инструменты, финансовый рынок.

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Introduction. The sphere of financial services is expanding intensely all over the world, financial markets are offering new opportunities for mortgage and consumer crediting, investing savings in stock and currency markets, taking advantage of various financial instruments. The latter refers to a number of financial documents that have monetary value and through which operations are carried out on the financial market. Traditional financial instruments include deposits, stocks and bonds. The rest of the financial instruments according to their origin were derived from the kinds of securities previously mentioned by us, consequently, they are called derivative financial instruments. Derivative financial instruments are formed at stock, currency, credit, and insurance markets and unite all segments of the financial market into a single whole. Among the derivative financial instruments latest financial products and innovative financial services are the most frequent.

Growing tendency towards intensification of European integration processes may in the nearest future stipulate expanding capabilities for domestic investors to use modern financial instruments, emitted and allocated on European countries' financial markets. However, it is important to keep in mind that investing in financial instruments is connected with the risks of invested assets being not returned for one reason or another. Generally, the risk of an individual financial instrument in investing is considered as a probable deviation of the actual investment income from its expected value in the situation of undefined dynamics of the market situation of the relevant segment of the financial market and future results of its issuer's economic activities.

The risk factor of modern financial instruments is a complex and multi-dimensional concept from the point of view of methods for its evaluation as well as forms of management used to neutralize it. Therefore, the topic chosen for this research is timely and relevant.

Research analysis and problem statement. Investigating the problem of using financial instruments, including the question of mediating investment operations has recently been an object of interest for both home and foreign scholars, therefore, the scale of the article's topic could be proved. For instance, T. Hovorushko and I. Sytnyk have been investigating the prospects of using derivative financial instruments by domestic enterprises [1], O. Cherniavska has specified the financial instruments for stimulating scientific and technological activities and has defined the aspects of world practice and Ukrainian realities of this process[2]; I. Burdenko has determined the preconditions stipulating creation and usage of innovative financial instruments in the market of derivative financial instruments in Ukraine [3]. Issues related to employing innovative financial instruments have been studied by T. Kucher, who paid special attention to the impact innovative financial instruments have on the economic activity [4], and V. Polishchuk, who has determined

conceptual basis of innovative tools application for financial stimulation of sustainable development of a region [5]. M. Rusynko raises the question of risks emerging in the process of forming a portfolio of securities [6].

I would also like to mention here foreign scholars and practitioners, who have undertaken surveys of the expedience and risks of investing in modern financial instruments: P. Waldow [7], T. Rachev and F.J. Fabozzi [8], M. Brenner and D. Galai [9], P. Moles [10], A.R. Rashidah, F.H. Tafri, Y. Al Janadi [11]. Sources [12-14] specify and clarify certain issues relating to foreign experience in identifying investment risks in different types of financial instruments. Nonetheless, nontrivial economic conditions, in which the domestic financial market is operating now, make further research on the risks accompanying the process of investing in modern financial instruments essential.

The main aim of the article is to substantiate the expediency of investing in modern financial instruments and compile a list of risks accompanying this process in order to find ways to minimize them in the economic realities that have evolved in Ukraine today. Methods used to study the topic are monographic method, analysis, some of the techniques of abstract-logical method and others.

Research results. Investment financial instruments are ways to invest money. Bank deposits are the most common type of investing at the national market. It is the most popular and the least risky way of investing money. On the other hand, the profit from this financial instrument is minimal, and very often it does not even cover the level of inflation.

A large number of beginner investors and also those who do not have sufficient knowledge about the availability and functioning of the investment instruments, choose currency as an object of investment. The mechanism is transparent – the investor buys currency at a certain exchange rate and hopes to profit from selling it in the future. The current tool for investing in currency is Forex, that is, the international currency market.

The pension reform in Ukraine helped cumulative life insurance to become a widespread investment financial instrument. Accumulation insurance is a plan of financial protection: it guarantees the investor's financial future and the future of his relatives.

Investment funds are active participants in the modern financial market. A fund consists of money belonging to a number of investors. The fund is managed by an investment company (asset management company) that invests the collective capital in various financial instruments. For example, they can decide to invest in stocks, that is, securities issued by companies to attract additional funds for business development needs. When buying shares, an investor receives two types of income: income from the growth of value and dividends. Bonds can be considered as another traditional financial instrument for investing. Income received can be paid at a fixed interest rate or at the expense of the difference between the price of the bond when it is purchased and its value at redemption by the issuer.

Let's proceed to describing forms of modern financial instruments that can be used for investing.

Futures are contracts that oblige those who have signed them to buy or sell a financial instrument at a specified time in the future at a pre-determined price. Investors use futures for speculation in order to profit.

Options are similar to the futures, but the difference lies in the fact that they do not treat the transaction as obligatory, but only entitle the participants to implement the transaction. In 2008 binary options were officially introduced. The first steps towards their popularization were observed back in 1973, but only lately the binary options have become more popular than ever before. The essence of this innovation lies in financial rates. The investor attempts to predict in which direction the price of a currency or the value of the company's shares is going to change. If the bid turns out to be winning, the investor is entitled to up to 90% of the transaction amount, in the opposite case he loses everything. That is why binary options are risky, and in some countries the use of this financial instrument is under prohibition. Among such countries we can mention Germany, Belgium and France.

One of the forms of investing that is currently gaining popularity is crowdfunding. The term consists of two words – crowd and investing – and means the same as equity-based crowdfunding. The idea of such an instrument emerged in 2009, when KickStarter, the first electronic crowdfunding platform was launched. In case of using this financial instrument an investor becomes a co-owner of the business in which he invests money. Depending on the terms of the agreement, receiving annual payments is plausible, however, most frequent is the case when the investor receives income only when a certain product is produced, for which its developers have been collecting investors' money

Table 1 demonstrates statistical indicators of sales volumes of modern financial instruments used by domestic investors. The data obtained lead to the conclusion that the use of financial instruments has been reduced and investment activity has declined significantly in Ukrainian financial market in recent years.

Table 1.

Modern financial instruments in Ukraine sales volumes, UAH mln

Modern financial instruments	2011	2012	2013	2014	2015
Shares	636070	591860	171100	25684,32	5810,80
Bonds of enterprises	35914,44	51386,61	42467,78	32823,98	13533,91
Government bonds of Ukraine	855550	1217060	721470	545768,79	250133,30
Local loan bonds	1670	7480	3600	580,31	19,80
Savings certificates, NBU deposit certificates	76720	13590	150770	1000,26	8714,54
Investment certificates	114420	137740	496500	4245,15	2170,15
Mortgage bonds	70	0	350	2,11	0
Optional certificates	0	0	0	293,69	615,33
Derivatives (futures, forwards)	23990	24910	18010	9296,63	5210,18

Source: Compiled by the author according to [15]

In fact, in 2012 stock turnover shrank by 7%, in 2013 it shrank by 71%, then, by 85% in 2014 and by 77% in 2015. Concerning the corporate bonds usage dynamics, in 2012 increase by 435 was traced, starting from 2013 we observed rapid and constant reduction by 17%, and by 22% and 58% in 2013 to 2015. A similar trend was observed with regard to Ukraine's government bonds and local loan bonds. In 2013, investors' interest in such types of financial instruments as savings certificates and National Bank of Ukraine deposit certificates grew rapidly. Based on the information in the official report of the National Commission on Securities and Stock Market, their increase in the market in comparison with 2012 amounted to 1009%. In 2014, their volume decreased by 99%, but in 2015 there was a revival in this investment segment and the growth was 771%.

Such modern financial instruments as mortgage bonds, option certificates, derivatives, that is, derivative securities, are not wide spread enough so they do not enjoy popularity on the domestic financial market. Also, investors' interest in certificates issued by joint investment institutions has decreased over the past two years. As already mentioned, investing in modern financial instruments is associated with certain risk, the probability rate of which depends on the type of financial instruments in which the investment is made; for instance, the characteristic feature of a financial instrument such as the option implies that the option buyer risks only the premium paid to the seller, whereas the seller's risk of the option is virtually unlimited. In this regard, of particular importance is considered to be the investor's ability to identify risks for the purpose of assessing correctly the value and profitability of the financial instruments in which the investment is being planned.

It is therefore advisable to point out several main types of investment process risks which emerge while working with modern financial instruments and are characteristic of all their types:

- systematic financial risk that is the risk of disturbing the stability of the entire financial system as a whole (the country, the world). These risks include currency risk, market risk, interest rate risk, inflation risk, and occasional risk. Currency risk is considered as probable financial losses

in the result of fluctuation in exchange rates, which can occur in the interim between the date of signing a financial contract and its actual settlement. Market risk is connected with possible changes in the value of assets as a result of fluctuations in interest rates, exchange rates, stock quotes and bonds, and the prices of financial assets that are the object of investing. Interest rate risk is the risk to the investor's profit arising from unfavorable interest rate fluctuations, which lead to a higher expense on interest settlement, insufficient return on investments and lower income from assets invested in financial instruments. Inflation risk is a probable loss that an economic entity may suffer as a result of depreciation of the real value of investments, loss of the real initial value of the assets (in the form of investments) while their nominal value is stable or even increases, also depreciation of the expected income and profit of the economic entity from investing under conditions when growth rate of inflation prevails uncontrollably growth rate of return on investment. Random risks are the risks associated with unpredictable events, such as industrial accidents and man-made catastrophes, legal regulation changes, political revolutions, revolutions, and military conflicts. Current conditions in Ukraine urge us to take into consideration the political risks that may be related to the following factors of instability which affect the political component in the process of investment activities: elections of different levels of government; changes in the state policy; political pressure; administrative restrictions of investment activity; foreign policy pressure on the state; restriction of freedom of speech; separatism, etc.

- unsystematic financial risks are the risks inherent in a particular financial instrument and are related to its specificity;

- speculative risks are the risks of unpredictable changes in the exchange rate of securities caused by the actions of other bidders in the stock market;

- legal risks are the risks of being deprived of ownership rights or the right to benefit from the use of assets, when the investor works with "unreal" assets (Forex instruments, binary options), or unlicensed brokers, etc .;

- human factor, or the so-called investor risk (personal risk). Personal risks depend on the investor's qualifications, that is why proper training and self-discipline are of crucial importance for achieving success on the market. One of the forms of such risk is operational risk. The latter is the risk associated with operating assets. An investor buys financial instruments from middlemen – brokers, joint investment institutions, or banks. Brokers' mistakes, fraud in asset management companies, banks going bankrupt – all of the above refers to operational risks. These factors can also stand behind functional investment risk that lies in probable investment losses that may happen due to mistakes made in the process of forming and managing investment portfolios of financial instruments;

- business risk is connected with fluctuations in future sales and profits of companies, e.g., it is likely that in a certain period of time indicators of sales and profits of companies may decrease and financial instruments issued will lose their value.

Table 2 provides a justification of the expediency of investing in modern financial instruments, taking into account specific risks inherent in each of their types

It appears that awareness of the risks inherent in various types of investment financial instruments might not be helpful for the investor who has not developed any attitude towards risk as a whole. The risk level acceptable to the investor depends on many factors, for example, the personality type to which the investor belongs, investing goals, total assets in monetary terms, the size of the investment portfolio and on the investment time dimension.

Let us consider ways to minimize the risk of investing in modern financial instruments. Traditionally, there is an option to reduce business and financial risks in the process of investing through diversification which is acquisition of various financial instruments whose profitability is independent in relation to each other. Due to the formation of a diversified investment portfolio, the profit variability decreases (and, consequently, the risks are minimized).

Table 2.

Expediency of Investing in Modern Financial Instruments Rationale

Modern financial instruments	Benefits of investing	Risks
Shares	- ability to sell shares on the market in short terms (liquidity); - ability to profit from feasible increase in market price of the stock	- impairment of shares; - profit loss instead of dividend payment; - total loss of invested assets
Bonds of enterprises	- income is not taxable; - no need to participate in management of the enterprise	- inability of the enterprise to settle on its financial obligations; - low interest rate
Government bonds of Ukraine	- Government-guaranteed income and return on invested assets; - income is not taxable;	- lower profit as compared with other financial instruments; - subjection to the level of investment attractiveness of the state
Local loan bonds	- profitability and invested assets return are guaranteed by the local governing bodies; - income is not taxable	- Dependence on the actions of local authorities, political situation
Savings certificates, National Bank of Ukraine deposit certificates	- Fixed interest rate for the whole period of investment; - guaranteed by the Deposit Guarantee Fund	- can be used by an unauthorized party in case of loss or theft; - a certificate form can be forged
Investment Certificates	- comparatively low minimum cost of investment; - ability to choose the periodicity of receiving income	- lack of diversification in investment strategies; - inclination of investment managers to take excessive risk
Mortgage bonds	- guaranteed return of assets by mortgage; - income is not taxable	- possible loss of assets due to shutting down construction works
Optional certificates	- high profitability; - independent selection of the option settlement time	- possible non-fulfillment of contract and consequent losses
Derivatives (futures, forwards)	- possibility to benefit from reselling them on the market	- insufficient level of development of the market segment and legal regulation of relations on it

Source: Compiled by the author

There are several ways to diversify the investment portfolio:

- according to the types of financial tools intended to be invested in shares, bonds, gold, currency, real estate;
- according to the currency on which a financial instrument is based: dollar assets, assets in euros, ruble assets, Swiss francs assets, etc.;
- by the financial instruments' issuer's country of origin: American assets, European assets, Japanese assets, Australian, Russian, Chinese ones, etc.;
- by the level of capitalization of a financial instrument's issuer: shares of the largest companies (blue chips), shares of average capitalization, shares of small capitalization;
- by the sector of the economy in which the financial instrument's issuer operates: oil companies' stocks, power engineering shares, machine building shares, government bonds, local bonds, corporate bonds (corporate bonds), etc.

Nevertheless, diversification will not be able to provide a high level of investor's financial security if any external event results in the collapse of stock markets. Therefore, for short-term segments of investment the best strategy for an investor would be to invest in bonds or deposit certificates, while for long-term investment, taking inflation into account, it would be much more preferable to invest in stocks. The longer is the planned investment period, the more sufficient share in the portfolio should be assigned for stocks. Otherwise, it is advisable to choose such financial instruments for investing as bonds or term investment certificates.

Conclusion. The research on expediency and risks of investing in modern financial instruments has led us to the following conclusions.

1. In the domestic financial market investors have various types of modern financial instruments at their disposal. Shares, corporate bonds, government bonds of Ukraine, local bonds, savings certificates, NBU deposit certificates, investment certificates, mortgage bonds, option certificates, and derivatives has been the most popular over the past few years. An insight into the circulation dynamics of modern financial instruments in the domestic financial market has proved downward dynamics in their usage and lack of investors' interest in financial investments.

2. For all the types of financial instruments that are in circulation in the financial market of Ukraine, the following types of risks are inherent: systematic financial risks (currency, market, interest, inflation, random), unsystematic financial risks, speculative risks, legal risks, and personal risks. Meanwhile, specific types of risks are characteristic of each of the financial instrument type, which determine the expediency of investing the assets in them given the current economic conditions. The ways of minimizing investment risks in modern financial instruments include the diversification of investment objects and the formation of an investment strategy depending on the time horizon of investment.

The prospects for further scientific developments in the research direction chosen lie in developing a mechanism for protecting investors from various types of risks related to the use of financial instruments during investment processes.

Література

1. Говорушко, Т. А. Перспективи використання похідних фінансових інструментів вітчизняними підприємствами [Текст] / Т. А. Говорушко, І. П. Ситник // Облік і фінанси. – 2012. – № 3. – С. 92–95.
2. Чернявська, О. Фінансові інструменти стимулювання науково-технологічної діяльності: світова практика та українські реалії [Текст] / О. Чернявська // Міжнародна економічна політика. – 2009. – Вип. 1–2. – С. 172–201.
3. Бурденко, І. М. Передумови створення та використання інноваційних фінансових інструментів на ринку похідних фінансових інструментів України [Текст] / І. М. Бурденко // Маркетинг і менеджмент інновацій. – 2012. – № 3. – С. 181–190.
4. Кучер, Т. Л. Вплив використання інноваційних фінансових інструментів на економічну активність [Текст] / Т. Л. Кучер // Стратегія економічного розвитку України. – 2013. – № 32. – С. 96–102.
5. Поліщук, В. Г. Концептуальні засади застосування інноваційних інструментів фінансового стимулювання сталого розвитку регіону [Текст] / В. Г. Поліщук // Економічний форум. – 2014. – № 4. – С. 99–108.
6. Русинко, М. К. Портфель цінних паперів і ризик фінансових інструментів [Текст] / М. К. Русинко // Вісник Університету банківської справи Національного банку України. – 2014. – № 1. – С. 261–264.
7. Waldow, P. New financial instruments for global challenges [Electronic resource] / Peter Waldow // Financing. – 2001. – № 1. – P. 9–11. – Available at: http://www2.weed-online.org/ffd/pdf/FinancingGate_PWO.pdf.
8. Rachev, S. T. A New Set of Financial Instruments [Electronic resource] / Svetlozar (Zari) T. Rachev, Frank J. Fabozzi. – Available at: <https://arxiv.org/ftp/arxiv/papers/1612/1612.00828.pdf>.
9. Brenner, M. New Financial Instruments for Hedge Changes in Volatility [Electronic resource] / Menachem Brenner, Dan Galai // Financial Analysts Journal. – 1989. – Vol. 45, Issue 4. – Available at: <http://www.cfapubs.org/doi/abs/10.2469/faj.v45.n4.61>.
10. Moles, P. Financial Risk Management. Sources of Financial Risk and Risk Assessment [Electronic resource] / Peter Moles. – Available at: <https://www.ebsglobal.net/EBS/media/EBS/PDFs/Financial-Risk-Management-Course-Taster.pdf>.
11. Rahman, R. A. Instruments and Risks in Islamic Financial Institutions [Electronic resource] / Rashidah Abdul Rahman, Fauziah Hanim Tafri, Yaseen AlJanadi // Malaysian Accounting Review. – 2010. – Vol. 9, № 2. – P. 11–21. – Available at: <http://ari.uitm.edu.my/main/images/MAR/vol09-2/chap2.pdf>.
12. Whittle, M. New Financial Instruments and the Role of Nationals Promotional Banks [Electronic resource] : Study / Mark Whittle, Jack Malan, Danilo Bianchini. – Available at: [http://www.europarl.europa.eu/RegData/etudes/STUD/2016/572687/IPOL_STU\(2016\)572687_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2016/572687/IPOL_STU(2016)572687_EN.pdf).
13. Financial instruments, and the risk related to trading in financial instruments [Electronic resource]. – Available at: https://sebgroupp.com/siteassets/Site_assistance/MIFID/Information_financial_instruments_risk.pdf?epslanguage=en.
14. EMEA Securities Division Information on the Nature and Risks of Investments for Professional Clients [Electronic resource]. – Available at: <http://www.goldmansachs.com/disclosures/mifid/info-on-nature-risks-of-investments.pdf>.
15. Національна комісія з цінних паперів та фондового ринку [Електронний ресурс]. – Режим доступу: <http://www.nssmc.gov.ua>.

References

1. Hovorushko, T. A. & Sytnyk, I. P. (2012). Perspektyvy vykorystannia pokhidnykh finansovykh instrumentiv vitchyznianymy pidpriemstvamy. *Oblik i finansy*, 3, 92–95.
2. Cherniavska, O. (2009). Finansovi instrumenty stymuliuvannia naukovo–tehnolohichnoi diialnosti: svitova praktyka ta ukraïnski realii. *Mizhnarodna ekonomichna polityka*, 1–2, 172–201.
3. Burdenko, I. M. (2012). Peredumovy stvorennia ta vykorystannia innovatsiinykh finansovykh instrumentiv na rynku pokhidnykh finansovykh instrumentiv Ukrainy. *Marketynh i menedzhment innovatsii*, 3, 181–190.
4. Kucher, T. L. (2013). Vplyv vykorystannia innovatsiinykh finansovykh instrumentiv na ekonomichnu aktyvnist. *Stratehtia ekonomichnoho rozvytku Ukrainy*, 32, 96–102.
5. Polishchuk, V. H. (2014). Kontseptualni zasady zastosuvannia innovatsiinykh instrumentiv finansovoho stymuliuvannia staloho rozvytku rehionu. *Ekonomichnyi forum*, 4, 99–108.
6. Rusynko, M. K. (2014). Portfel tsinnykh paperiv i ryzyk finansovykh instrumentiv. *Visnyk Universytetu bankivskoi spravy Natsionalnoho banku Ukrainy* 1, 261–264.
7. Waldow, P. (2001). *New financial instruments for global challenges. Financing*, 1, 9–11. Available at: http://www2.weed-online.org/ffd/pdf/FinancingGate_PWO.pdf
8. Rachev, S. T., & Fabozzi, F. J. *A New Set of Financial Instruments*. Available at: <https://arxiv.org/ftp/arxiv/papers/1612/1612.00828.pdf>
9. Brenner, M., & Galai, D. (1989). New Financial Instruments for Hedge Changes in Volatility. *Financial Analysts Journal*, 45(4). Available at: <http://www.cfapubs.org/doi/abs/10.2469/faj.v45.n4.61>
10. Moles, P. *Financial Risk Management. Sources of Financial Risk and Risk Assessment*. Available at: <https://www.ebsglobal.net/EBS/media/EBS/PDFs/Financial-Risk-Management-Course-Taster.pdf>
11. Rahman, R. A., Tafri, F. H., & AlJanadi, Y. (2010). Instruments and Risks in Islamic Financial Institutions. *Malaysian Accounting Review*, 9(2), 11–21. Available at: <http://ari.uitm.edu.my/main/images/MAR/vol09-2/chap2.pdf>
12. Whittle, M., Malan, J., & Bianchini, D. *New Financial Instruments and the Role of Nationals Promotional Banks: Study*. Available at: [http://www.europarl.europa.eu/RegData/etudes/STUD/2016/572687/IPOL_STU\(2016\)572687_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2016/572687/IPOL_STU(2016)572687_EN.pdf)
13. *Financial instruments, and the risk related to trading in financial instruments*. Available at: https://sebgroupp.com/siteassets/Site_assistance/MIFID/Information_financial_instruments_risk.pdf?epslanguage=en
14. *EMEA Securities Division Information on the Nature and Risks of Investments for Professional Clients*. Available at: <http://www.goldmansachs.com/disclosures/mifid/info-on-nature-risks-of-investments.pdf>
15. *Natsionalna komisiia z tsinnykh paperiv ta fondovoho rynku*. Available at: <http://www.nssmc.gov.ua>

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