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THE PROBLEM OF RISK PERCEPTION IN THE INNOVATIVE CORPORATE FINANCIAL STRATEGY

Introduction

Modern companies operating in the changing environment are exposed to new challenges. In order to face these challenges, to develop themselves and to increase their value, modern companies are forced to create and implement new ideas, solutions and instruments in every field of their activity. These new developments can be also applied in the financial strategy changing its character from the traditional approach into the innovative one. Financial innovations that can be applied by the companies can have different forms and fulfill various functions. Their effects for the company's situation can be also ambiguous. Thus, this conceptual paper, based on the literature studies, aims at presenting the way in which the financial innovations can be applied in the corporate financial strategy, regarding its three basic elements: financing, investment and risk management strategy. The analysis of the financial innovations consequences both positive and negative is also provided, focusing on the potential changes in the level of the corporate risk.

The paper is structured as follows. Section 1 presents the definition of the corporate financial strategy and discusses its main types and elements. Also, it introduces the term "innovative corporate financial strategy". Section 2 analysis various definitions of the "financial innovations" and presents the classification of the financial innovations types and functions. Section 3 presents the potential application of the financial innovations in the particular elements of the corporate financial strategy. It also focuses on the consequences of the financial innovations for the company's situation regarding the potential changes in the level of risk.

1. Corporate financial strategy – types and elements

Modern theory of corporate finance assumes that the main objective of the company is to maximize its shareholders' wealth by increasing the market value of the company (Damodaran, 2001, p. 11-15; Ehrhardt, Brigham, 2009, p. 9). To

realize this main goal, the company is required to have consistent long-term global strategy of development. It is difficult to find one, universal definition of the corporate strategy. However, taking different approaches into account, it can be defined as a model concept of company's functioning and development aiming at achieving its main objective with a set of tools and methods that help to realize this goal. This global, long-term strategy should be adjusted to the internal conditions of the company (i.e. its resources, organizational structure, stage of development or ownership structure) and its external conditions defined by its changing macro- and micro-environment. Thus, the global strategy of development is limited only by three elements: (1) the company's goals, (2) its particular characteristics and (3) external conditions.

The global financial strategy is constructed for the whole company and it defines the company's type of activity and the direction of development. It also coordinates all functional strategies that are devoted to the particular fields of company's activity, e.g.: production, R&D, human resources, marketing, finance, communication, sales. Financial strategy is one of the most important, as it is not only one of the functional strategies, but it also determines the effectiveness of the other strategies (by providing them required sources of funds) and the company's general ability to achieve its main goal (Karpus, 2004, p. 111, Griffin, 2002, p. 140-141). In addition, the inappropriate financial strategy can have significant consequences, as it may lead even to the company's financial distress and bankruptcy.

Financial strategy can be defined as the set of methods, tools and criteria applied in the decision making process in the field of raising corporate funds (financing strategy) and allocating these funds (investment strategy) (Wypych, 2000, p. 33; Zadora, 2004, p. 26-27). It is important to stress, that the decisions taken in these fields should consider the opportunities and threats for the company and its connections with the business environment in order to enhance the realization of the main company's objective. Thus, the traditional approach to the financial strategy distinguished two substrategies: financing strategy and investment strategy. However, taking into account the challenges that the modern company is forced to face, it would be advisable to distinguish one more important aspect of the financial strategy concerning the risk management (see Figure 1).

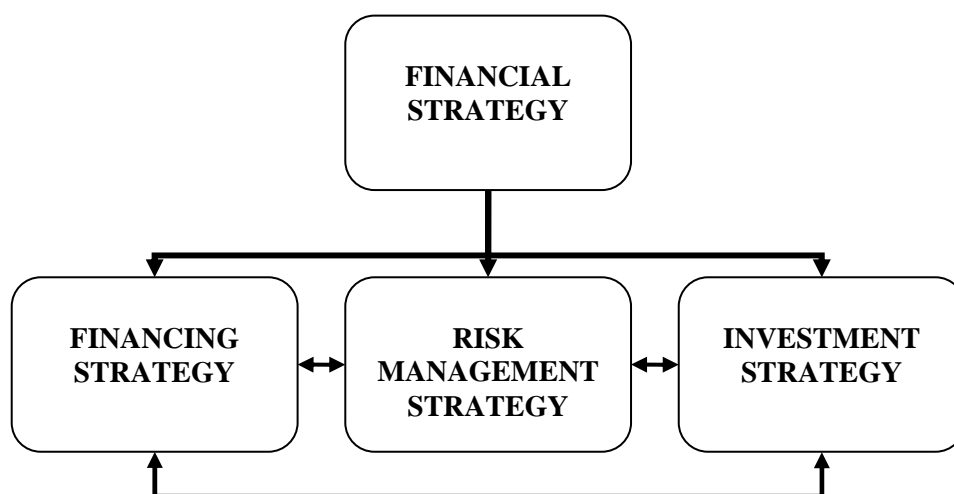


Fig. 1. Elements of the corporate financial strategy

Source: Own study.

All elements of the financial strategy are connected with each other and influence the company's financial decisions. Investment projects require proper sources of funds, as by matching liabilities to assets, the company can maintain its financial balance and long-term solvency. The results of the investment projects determines the level of the generated profit, that has influence on the company's needs for external funding and its ability to attract investors. The investment decisions are based on the investment principle stating that company should invest in assets only when they are expected to earn a return greater than a minimum acceptable rate named hurdle rate. While the financing decisions are based on the financing principle positing that the company should choose the mix of debt and equity in order to maximize the value of investment and to minimize the cost of capital (Damodaran, 2001, p. 4). Both investment and financing decisions can be sources of the company's risk (investment, financing, operating or liquidity risk). The main aim of the risk management in this aspect is to reduce the volatility of the generated cash flows.

Corporate financial strategy based on the company's attitude towards risk can be classified as: (1) aggressive or (2) conservative (Łukasik, 2004, p. 117-121). Aggressive financial strategy is focused on the dynamic development of the company that can be realized either by internal growth or by mergers & acquisitions. It is constructed to use the company's strength and the opportunities generated by its environment. It requires taking up different types of risk, including investment and financial risk, in order to increase the company's value. Aggressive strategy applies variety of tools and instruments to increase the potential growth of the company. While conservative strategy focuses on the main-

tenance of the current situation of the company with the acceptable slow rate of development. All undertaken actions aim at company's protection against the potential threats arising from its environment. Thus, the main objective of the conservative strategy is to reduce the company's risk by using well known and safe tools and instruments.

The types of the instruments applied in the particular financial strategy decide about its character. Thus, traditional financial strategy is based on the classical financial instruments such as: ordinary shares, straight debt instruments, traditional investment opportunities. However, as the financial system and financial markets are developing themselves, the new solutions appeared that can be applied in the corporate financial strategy, enhancing its effectiveness and increasing its value. Therefore, the new type of the financial strategy can be distinguished - innovative financial strategy based on the financial innovations (see Figure 2).

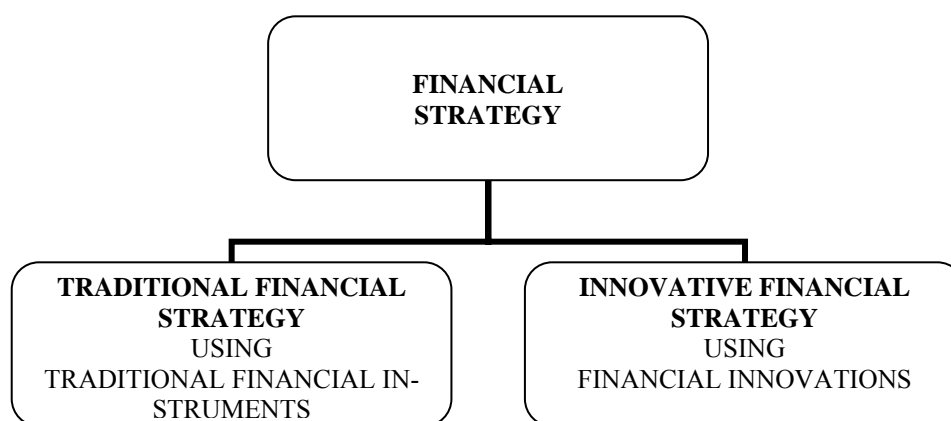


Fig. 2. Types of corporate financial strategy

Source: Own study.

2. Financial innovations – types and functions

The sustainable development and new challenges that face the modern company, require inventing and implementing innovations. The general definition describes innovations as new ideas, solutions and instruments implemented to the business entity in order to improve its situation, to increase its competitiveness and to create value for its owners (compare: Dabic, Cvijanovic and Gonzalez-Loureiro, 2011, p. 196).

Originally, the term “innovation” was used to describe the changes in the technological solutions, creating new combinations of productive means, generating enormous rates of return and thus, enhancing the dynamic development of the overall economy (Targalski, 2006, p. 7). The traditional classification of the

innovations, developed by J. Schumpeter includes four different groups of new solutions: (1) new product, (2) new methods of production, (3) new markets, (4) new sources of raw materials, (5) new organization forms and business structures and (6) new methods of management (Dabic, Cvijanovic and Gonzalez-Loureiro, 2011, p. 196). Based on this approach, the OECD methodology was developed focusing on four groups of innovations: (1) product, (2) process, (3) marketing and (4) business organization (OECD, 2005, p. 48). However, as the growing importance of the financial system in the economy has been observed, the classification of innovations required modification aiming at introducing the new category – financial innovations.

There is no single, universal definition of the financial innovations. Most of the works apply the narrow meaning of the financial innovations defining them as any new developments in financial instruments and they are regarded as financial innovations *sensu stricto*. These new developments may include: entirely new instruments, combination of traditional instruments, modification of traditional instruments, new application of existing instruments, etc.

However, the broad definition of the financial innovations can be also applied. In this broad meaning (financial innovations *sensu largo*), financial innovations are explained as any new developments in any elements of the financial system: (1) financial markets, (2) financial institutions, (3) financial instruments and (4) regulations determining their functioning. The distinguished groups of innovations are connected with each other and their relationship is multidimensional, so they are often described as the spiral of innovations (Gubler, 2010, p. 1-49). This means that the new financial institutions create the new financial instruments (products & services) that are traded in the new financial markets and these new solutions require shortly the new regulations. On the other hand, changes in the market conditions together with the changes in the legal environment lead to the formation of new instruments and then foundation of the new markets and institutions specializing in these new developments (see Figure 3).

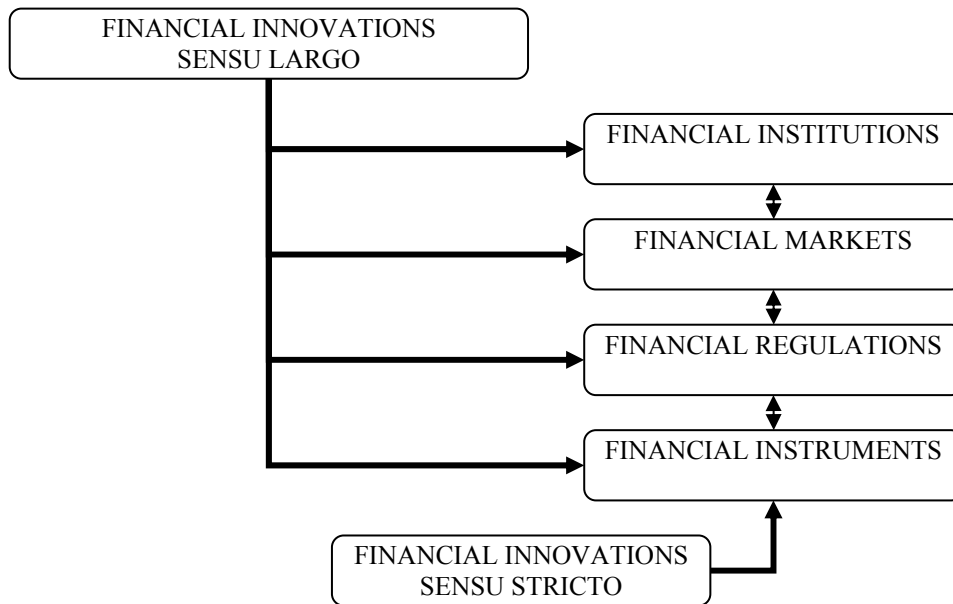


Fig. 3. Broad and narrow definition of the financial innovations

Source: Own study.

It is important to stress, that these new developments, either technological or financial, can be regarded as innovative ones, only if they are perceived as new for the entity implementing them, which means that these solutions can be already known and applied in other entities or organizations (Anderloni and Bongini, 2009, p. 41). Another important fact worth remembering is the connection between the financial and technical innovations, as they are bound together and they evolve together over a time (Michalopoulos, Leaven and Levine, 2009, p. 2-5). Firstly, financial innovations provide mechanism to finance innovative technological projects, when traditional sources of funds are unavailable due to the high level of investment risk. On the other hand, the technological and economic progress resulting in the higher complexity of business processes and new types of risk, forces the financial system and financial markets to adopt to the changes, to be modernized according to the new requirements of the business entities and to the challenges of the modern world. Thus, the technological and economic development would be constrained without financial innovations. And at the same time, the application of the financial innovations would be limited without the increasing demand arising from the technical progress.

Financial innovations can be classified according to different criteria. Some of them could be useful to analyze their application in the corporate financial strategy. One of the most popular classifications of the financial innovations is based on their sources including demand-driven and supply-driven innovations. The

demand-driven innovations are created as the response to the needs of the business entities to meet their individual goals. As the modern financial market is characterized by many imperfections (mainly: asymmetric information, agency costs and transaction cost), many business entities search for new solutions to reduce their negative consequences. Also, unfavorable tax regulations and increasing volatility of the market parameters can create demand for new solutions enabling business entities to avoid paying high income tax or to reduce the level of market risk. While, the supply-driven innovations are created by the financial institutions to enhance their competitive advantage. New developments are offered to the business entities in various fields of their activity, including: investment, savings, financing and payment instruments, tools and techniques. These financial innovations are also created and implemented to improve the results of the financial institutions or to protect their market situation.

Another classification of the financial innovations regarding their functions has been elaborated by the Bank for International Settlements. According to it, financial innovations are divided into five groups: (1) price-risk transferring, (2) credit-risk transferring, (3) liquidity-generating, (4) credit-generating and (5) equity-generating instruments (Fabozzi and Modigliani, 2003, p. 27). The first group of financial innovations provide business entities with more efficient means for dealing with price or exchange rate risk. Credit-risk instruments are used to reallocate the risk of default. Liquidity generating instruments can have three different consequences: they increase the liquidity of the market, they enable deficit units to look for additional sources of funds and they allow market participants to avoid unfavorable law regulations. Credit-generating instruments increase the amount of debt funds available to the deficit units. And equity-generating instruments provide the access to the additional sources of equity capital.

The presented classification of the financial innovations functions can be modified to be better adjusted to the corporate financial strategy perspective. Thus, taking into account the assumptions that the financial innovations should enhance the efficiency of the business entities in fulfilling their objectives, the functions of the financial innovations can be described as follows: (1) payment function (increasing the liquidity of the financial system and business entities), (2) investment function (increasing the variety of investment opportunities better adjusted to the risk-return profile of the investor), (3) financing function (increasing the availability to the sources of funds – either equity or debt capital, both for longer and shorter periods), (4) pricing function (improving the process of assets valuation and risk pricing by the elaborated statistical methods) and (5) risk management function (increasing the possibilities of transferring risk between system participants).

Despite any differences in the approaches towards financial innovations functions, the most important are consequences for the company implementing them, including changes in its financial situation and the level of risk.

3. Financial innovations and their consequences for the corporate risk perception

The implementation of the financial innovations in the corporate financial strategy can be determined either by the internal or external factors. In case of the internal factors, the decision to use financial innovations is based on the company's needs and goals, its particular situation, attitude towards risk and new developments connected with the management style. Regarding external factors, the application of the financial innovations in the corporate financial strategy can be determined by the situation on the financial market, changes in its business environment or unfavorable law regulations. It is often that a combination of different factors influences the decision to implement financial innovations.

There are two situation in which the financial innovations application in the corporate financial strategy is justified. Firstly, when the traditional financial solutions are no longer available. And secondly – when the costs connected with the introduction of the financial developments are lower than the costs connected with the usage of the old, traditional solutions (Pantalone and Welch, 1987, p. 33-35).

Thus, the effect of the financial innovations implementation is the major problem of the innovative financial strategy. As financial innovations can have both positive and negative consequences for the company and its performance. The sustainable innovations help company to fulfill its functions and realize its goals at lower costs and higher efficiency and thus improve its situation. In case of the harmful innovations, unexpected and undesirable side-effects lead to instability of the company and to increased level of the financial risk.

The problem of the financial innovations impact on the company's situation should be particularly assessed in terms of the corporate risk and its perception. As some financial innovations can be used to reduce the level of company's risk. While, at the same time others can be regarded as the sources of the additional corporate risk. Thus, the consequences of the financial innovations applications in the corporate financial strategy should be carefully analyzed and controlled (see Table 1). To make this analysis more efficient, it would be advisable to look for these potential consequences in each of the distinguished elements of the financial strategy, i.e.: financing decisions, investment decisions and risk management decisions.

In case of the financing strategy, financial innovations are applied to increase the access to the external sources of capital (both debt and equity), to decrease

ase the cost of capital or to improve the flexibility of the capital structure (financing function of the financial innovations). They can be also applied to improve the capital structure by replacing part of the company's debt by the equity capital or off-balance sheet liabilities, increasing its financial stability. Also, financial innovations enable the company to adjust the cash flows generated by the issued instruments to the cash flows generated by its operating activity and in this way reduce the financial risk (including financing risk and liquidity risk). On the other hand, financial innovations issued by the company to acquire additional capital are usually complex solutions that can be difficult to understand for the potential investors. Thus, the company's offer should be prepared, first of all to attract new investors providing funds, also to win the competition between other issuers (companies and financial institutions) that are searching for capital. The complexity of financing innovations, together with insufficient knowledge about their mechanisms, may lead to the increased risk of unsuccessful issue. Recently developed financing innovations include: mezzanine finance, private equity finance, hybrid finance, structured finance or swap contracts.

Financial innovations can be applied in the investment strategy to increase or stabilize the expected rate of return on the realized investment projects. In addition, they can enable the company to avoid or postpone the income tax payments. Financial innovations can be also applied to improve the assets structure increasing the liquidity and flexibility of the company, decreasing the level of operating risk. Some financial innovations are implemented to reduce the transaction costs and to limit the investment risk as the result of the portfolio diversification. Complex financial instruments can be also applied to get access to the markets and instruments that are not available in the direct investments (investment function of the financial innovations). They can be also implemented to get the opportunity to earn return on the falling market. Tailor-made investment instruments can be better adjusted to the risk-return profile of the company. However, investment innovations can also increase the company's exposure to risk. This increased risk can have several sources: (1) low liquidity of instruments (in case of "buy-and-hold" investments), (2) low transparency of the market for some instruments (when they are traded on less regulated markets) or (3) high complexity of the mechanism of investment instruments (which makes it difficult to forecast their performance and return for investors). The most popular investment innovations include: hedge funds, Exchange Traded Funds, Real Estate Investment Trust, structured products, Residential Mortgage Backed Securities, Commercial Mortgage Backed Securities or Collateralized Debt Obligations.

Financial innovations applied in the risk management process limit the level of the financial risk, stabilizing cash flows and improving financial planning (risk management and pricing functions of the financial innovations). Risk-

transfer innovations can be applied to hedge against the unfavorable changes in the market parameter such as: stock prices, interest rates, foreign exchange rates or commodity prices. However, other risks can be also hedged, e.g.: credit default risk or catastrophic risk. The most popular hedging instruments are derivatives (plain vanilla and exotic ones), such as: options, futures, forwards and swaps and their combinations (second generation innovations) created by the financial engineering. The main motive of the risk-transfer innovations application is not only the reduction of risk, but also the reduction of transaction costs due to the standardization process. On the other hand, tailor-made innovations can be perfectly adjusted to the company's individual needs. Obviously, entering derivative contracts creates additional risk for the company, that is connected with the unfavorable changes in the value of the underlying assets. The situation called "perfect hedge" is the most advisable, as the loss incurred on the spot market can be covered by the profit generated by the derivative contract and in the opposite situation, the loss on derivatives can be balanced by the profit on the spot market. However, besides hedging, derivatives are often used for speculative purposes, in such situation, they give potential to generate high profits but simultaneously the expose company to additional risk. Thus, the effective usage of derivatives, particularly these characterized by higher complexity, requires professional knowledge about their construction and potential performance.

Table 1

Financial innovations impact on the corporate risk

Innovative financial strategy	
Factors increasing the level of corporate risk	Factors decreasing the level of corporate risk
<ul style="list-style-type: none"> – High complexity of innovations – Low liquidity of the market – Low transparency of the market – Increased market risk – Increased credit-default risk – Increased unsuccessful issue risk – Underestimation of the potential risk 	<ul style="list-style-type: none"> – Better access to sources of funds – Lower financing cost – Lower transaction cost – Better access to investment opportunities – Higher rate of return on investment projects – Better adjustment to the company's needs and environmental conditions – Higher flexibility of the company's decisions

Source: Own study.

The financial innovations applied in the particular elements of the corporate financial strategy are bound together, similar to the connection that exists between its parts. Their specific construction makes it possible to use one innovative financial instrument in several fields of the corporate financial strategy, achieving simultaneously several results. This connection is visibly observed in

case of the financial innovations combining investment and risk management instruments or financing and risk management instruments (e.g. structured instruments). As a result of such solutions, the company can combine investment or financing decisions with the risk-transfer process, obtaining the effect of scale or reduced transaction costs.

Conclusion

The implementation of the financial innovations to the corporate financial strategy can have both positive and negative consequences, also for the level of the company's risk. The most important opportunities given by the financial innovations as compared to the traditional instruments, can be listed as follows: (1) lower financing costs, (2) better access to external sources of funds, (3) higher rate of return on investment projects, (4) increased flexibility of the company's decisions, (5) better adjustment to the company's needs and the environmental conditions.

Regarding the problem of risk, financial innovations give opportunity to decrease the level of the financial risk (liquidity and insolvency), business (operating) and investment risk. These positive results should improve the situation of the company and increase its value enhancing its long-term development better than in case of the traditional financial strategy.

However, to complete the picture of the financial innovations, their negative consequences should be also considered. The main problems connected with the financial innovations observed during the last financial crisis, occurred due to the underestimation of their risk. The most significant consequences were observed in case of the investment and risk-shifting instruments, as in many companies their inappropriate application resulted in the deterioration of their financial situation and in some cases even lead to the bankruptcy. The potential threats connected with the application of the financial innovations are mainly in the form of the increased risk: market risk, liquidity risk, credit-default risk or unsuccessful issue risk. These problems indicate the necessity of the thorough analysis of the financial innovations and their implications for the company's exposure to risk. Thus, the effectiveness of the innovative financial strategy is determined mainly by the professional knowledge of the company's managers about the construction and performance of the chosen instruments. Also, the financial institutions creating financial innovations should inform their clients about the potential consequences, both positive and negative. The problem of the reliable valuation of these instruments and improved transparency of the market is also important.

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PROBLEM PERCEPCJI RYZYKA W INNOWACYJNEJ STRATEGII FINANSOWEJ PRZEDSIĘBIORSTWA

Streszczenie

Cechą charakterystyczną współczesnych przedsiębiorstw jest funkcjonowanie w dynamicznie zmieniającym się otoczeniu oraz konieczność sprostania ciągle pojawiającym się nowym wyzwaniom. Rozwój przedsiębiorstwa i zwiększanie jego wartości nie są możliwe bez kreacji i implementacji różnorodnych rozwiązań innowacyjnych. Nowe

pomysły, instrumenty, techniki, procesy i metody są stosowane we wszystkich obszarach działalności przedsiębiorstwa, także w strategii finansowej. Innowacje finansowe mogą mieć różne formy, w związku z tym pełnione przez nie funkcje również mogą być różnorodne, a konsekwencje ich zastosowania dla sytuacji przedsiębiorstwa nie zawsze są pozytywne.

Celem artykułu jest prezentacja podstawowych możliwości i sposobów zastosowania innowacji finansowych w strategii finansowej przedsiębiorstwa z uwzględnieniem jej trzech głównych obszarów: strategii finansowania, strategii inwestowania oraz strategii zarządzania ryzykiem. W artykule przedstawiono także analizę skutków zastosowania innowacji finansowych dla sytuacji przedsiębiorstwa, ze szczególnym uwzględnieniem potencjalnych zmian w poziomie jego ryzyka. Problem ten jest szczególnie istotny ze względu na fakt, iż innowacje finansowe mogą być zarówno sposobem i narzędziem redukcji ryzyka, jak i źródłem dodatkowego ryzyka w działalności przedsiębiorstwa. Oznacza to konieczność przeprowadzania każdorazowej, szczegółowej analizy potencjalnych konsekwencji wykorzystania innowacji finansowych przed podjęciem decyzji o ich zastosowaniu w strategii finansowej przedsiębiorstwa.