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**THE MANAGEMENT OF FINANCIAL RISKS OF FOREIGN ECONOMIC  
ACTIVITIES USING STRUCTURED PRODUCTS**

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<http://www.vak.ed.gov.ru> and FSAEI HVE « Kazan (Volga region) Federal  
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## I. GENERAL DESCRIPTION OF WORK

**The relevance of the dissertation research.** One of the necessary conditions of realization of strategy of innovative development of Russian economy is the expansion and strengthening of world economic relations. This implies intensification of foreign economic activity of economic entities, competitiveness and rejection of the raw material orientation of exports. Subject-object structure of external economic relations, the structure and volume of foreign trade activities of individual business structures has a direct impact on the dynamics of the gross domestic product, employment and quality of life, as well as the competitive environment that is of particular importance in the deteriorating macroeconomic environment caused by the aggravation of geopolitical the risks and the need to address the problem of import substitution. All this creates the need of participants of foreign trade activities in global financial markets, development of new management technologies and at the same time becomes a prerequisite for the emergence of numerous risks, among which a special place is occupied by financial risks. Thus, one of the conditions for improving the competitiveness of individual businesses and the national economy as a whole performs financial risk management foreign economic activity of Russian enterprises due to delayed payments, the presence of receivables and insolvency of individual business organizations, as well as the development of instruments to manage them.

Despite the fact that the activities of business organizations in the foreign economic sphere includes many directions, there is an urgent need to develop a universal method of hedging financial risks, aiming at its redistribution between economic agents, reducing debt, attraction of foreign investments into the national economy, the formation of a positive image of national business organizations on world markets. The use of traditional methods of risk management does not allow to fully meet the needs of the participants of foreign economic activity. This predetermines the need for structured financial products such as hedge financial risks, which increases the performance of businesses and the functioning of the financial market, to attract foreign capital into the real sector of the economy, increase in the level of financial literacy and other entities.

The traditional interpretation of the structured financial product as a complex financial product that is designed to meet the specific requirements of clients, possesses an extraordinary performance achieved by combining fixed and variable flows of assets (monetary and non-monetary) and to be supplemented by special conditions in the form of the right to discharge flood etc., not taking into account the sphere of financing of foreign trade contracts and investment projects. Thus, this approach does not reflect the specific application of a structured financial product as

a financial instrument of international medium - and long-term investments, and syndicated loans.

Structured Finance in foreign trade, attracts investment capital on the international financial market, is an instrument of securitization, risk sharing between creditors (investors), insurance, international loans, the commissions and interest income investors, encourages the development of international trade as a result of participation raised capital in the process of transformation of money capital into production as part of the acquisition of assets, accelerates scientific and technical progress on the basis of development of production base modernization, etc. On the closing segment of structured finance products compared with other sectors of the financial market and the significant differences in the forms of their release is not possible to obtain accurate statistical information. Currently, we are increasing the growth rate of the volume of issuance of structured products. According to expert estimates, in the period from 2006 to 2011 the total volume of the world market grew by 68%. The maximum growth rate (15 and 24%) were in 2007 and 2008, respectively, characterized by the deterioration of the macroeconomic situation<sup>1</sup>. At the same time, the use of structured financial products can lead to increased reproduction proportions in the national economy, as holding back the development of the spheres of activity not attract foreign borrowings. This necessitates their research as a tool to hedge financial risks in foreign trade activities, which determined the choice of the theme of the dissertation, its theoretical and practical significance.

**The degree of elaboration problems.** Theoretical and methodological approaches to the design and application of the tools of financial engineering, based on fundamental financial principles of science presented in the works of the Russian (A.N.Burenin, V.A.Galanov, Yu.I.Kapelinsky, Ya.M.Mirkin etc.) and foreign (F.Blek, B.Grehem, D.Dodd, F.Makoli, G.Markovits, I.Fisher, U.Sharp, M.Shoulz etc.) scientists. Structured financial products emerged in 1969 as a result of the search tools to overcome the key shortcomings of derivatives extensively studied in the works V. K. Bansal, S. Vaina, P. Wilmott, S. Das, M. Joshi, R. Knop, H. M. Kat, J. F.Marshall, J. Hala, E. Hoag, and others. Russian market of structured financial products began its development in 2003-2004, which contributed to the revitalization of its research by national scholars. The most significant are the works by M. Y. Glukhova, O. G. Kovalenko, V. V. Omelchenko, B. B. Rubtsov, and G. B. Sorokopud, A. B. Feldman, M. V., Chekulaeva, L. J. Hatter, etc.

When drafting the individual provisions of the thesis used the work of E. Laze and M. Matto outlining the content and classification of structured financial products;

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<sup>1</sup> According to the Agency structured products [Electronic resource]. Access mode: <http://www.sproducts.ru/>. Проверено на 15.05.2014.

E.Banksa and R.Knopa, The methodical approaches to determining the structure of these products; K.Bernard and F.Boyl, disclosed the behavioral aspects of the retail investor in selecting a structured financial product, etc..

In the works of Russian writers revealed principles of formation and use of innovative financial products through financial engineering, model hedging financial risks in individual industry markets (Yu.A.Anisimova etc.), procedure for making management decisions on risk hedging businesses (A.A.Kurilova etc.), methodical approaches to the valuation of financial instruments accounting (V.S.Plotnikov, O.V.Plotnikova etc).

A number of the author's conclusions based on the provisions set forth in the works of the representatives of different scientific schools and concepts of modern financial science, including works S.A.Ayvazyana, I.T.Balabanova, G.N.Beloglazovoy, V.V.Bocharova, A.V.Brovkina, V.I.Vagizovoy, A.I.Vostroknutovoy, O.V.Vrublevskoy, V.V.Kovaleva, IA A.Koha, L.P.Krolivetskoy, V.A.Lyalina, O.V.Malinovskoy, D.D.Mihaylova, V.D.Nikiforovoy, E.M.Popovoy, M.V.Romanovskogo, BB Rubtsov, N.A.Savinskoy, A.S.Selischeva, I.P.Skobelevoy, L.S.Tarasevicha, A.B.Feldmana, V.A.Chernenko and others. In the course of the dissertation research used the concepts and principles that underlie Finance as a scientific discipline, which is formulated in the work Dzh.Brown, J. Brigham, Z. Bodie, R. Westerfield, R. Vince, L. O Gapenski, R. W. Kolb, T. Copeland, M. Krizman, K. Redhead, F. Fabozzi, J. To.Halle, D. Zweig, and others.

The original positions of the theory of risk management, formulated in the framework of classical and neoclassical schools, found development in the framework of game theory (O. Morgenstern, J. von Neumann) and were adapted to the financial sector, which was reflected in the works of I. blank, I. V. Bulava, V. V. Vakhitova, A. E. Velichko, V. M. Granaturov, N. In.Grineva, R. M. Kachalov, N. M. Cranney, I. J. Lukasiewicz, R. S. Saifulin, E. S. Stoyanova, E. A. Fedorova and others. Despite the large number of works dedicated to financial engineering, we have the incompleteness of theoretical generalizations in this sphere, which is manifested in the absence of a single categorical terminological apparatus, structured financial products are not regarded as an independent object of analysis has not been studied adequately in international structured finance. This defined the purpose and objectives of the dissertation research, as well as its structure.

**The purpose and objectives of the dissertation.** The purpose of the dissertation work of theoretical and methodical approach to content and tools of regulation of financial risks of foreign economic activity on the basis of structured products, as well as in developing practical recommendations for the hedging of the specified type based on the use of structured financial products.

The implementation of objectives of the study determined the formulation and solution of the following main tasks:

1. To substantiate the extended classification of financial risks of foreign economic activity, taking into account a key factor in their occurrence and the possibility of management with structured products.

2. Identify sources of financial risks of foreign economic activity on the stages of production of goods / services in the context of risks subjects of financial markets.

3. Clarify the content of structured financial products in the field of foreign economic activity.

4. Formulate the key factors determining the development of the financial risks of foreign economic activity.

5. Develop a model of hedging financial risks and finance export and import operations of foreign economic activity through the use of structured financial products.

6. Identify using nonparametric correlation analysis dependence of the quality control of financial risks of foreign economic activity on the type of structured finance instruments.

**The object of research** are the tools of regulation of financial risks in foreign trade activities with the use of structured financial products.

**The subject of the research** are organizational and economic relations arising in the process of regulation of financial risks in foreign trade activities with the use of structured financial products in the Russian economy.

**Theoretical and methodological basis of the research** are the provisions of the alternative schools and movements, including the theory of risk management, corporate finance theory, the theory of financial engineering, the principles of foreign economic activity of businesses and others. Methodological basis of the dissertation research was interdisciplinary (modeling, analogy, logical analysis, synthesis, induction, generalization, model, statistical methods, structural-functional method, etc.) and specific research (description, systematic method, comparison method, etc.) methods of scientific knowledge, the necessity of which was due to the particularities of the research object. Each of these methods is used in accordance with its functionality as possible to ensure the accuracy and validity of generalizations, conclusions and regulations the dissertation work.

**The information base for the research** were statistics and analytical reports of the Federal State Statistics Service of the Russian Federation and its territorial bodies of the Ministry of Economic Development, Ministry of Finance, as well as analyzes of the Central Bank of Russia (CBR), the data of the Agency of structured products, the Committee on Payment and Settlement Systems Bank for International Settlements and the Technical Committee of the International Organization of Securities Commissions, proprietary data and author's calculations obtained in the course of scientific research, and others. During the preparation of the research studied the laws and regulations governing social and economic development of the

Russian Federation, including the Development Strategy of the Russian financial market in the period up to 2020 (approved by the Order of the Government of the Russian Federation of December 29, 2008 № 2043-p) and etc. In preparation for the work, as information sources were used monographs, collective works, published in the periodical press, materials of scientific and practical conferences, information resources of the global Internet, etc.

**The content of the research** in accordance with paragraph 3. Finance economic entities. 3.19. Decision theory and methods of financial and tax risks; 6. The securities market and the foreign exchange market: 6.2. Definition of forms and ways of integration of Russia, regions and corporations in the global securities market, 6.18. Specificity of functioning, the institutional framework and mechanisms for the various segments of the securities market Passports VAK The Ministry of education and science of the Russian Federation specialty 08.00.10 – Finance, monetary circulation and credit.

**Scientific novelty of the research** lies in the justification of theoretical and methodological approach to the content of the regulation of financial instruments risks of foreign economic activity on the basis of structured products, as well as the development of practical recommendations for hedging risk of this type of application on the basis of structured financial products, which is reflected in the following positions:

1. Proposed extended classification of financial risks of foreign trade activities, formed on the basis of identifying key factors of their occurrence (production-economic, scientific-technical, organizational-economic, investment and commercial) and management options with the use of structured products.

2. Revealed the sources of financial risks of foreign economic activity on the stages of production of goods / services (risk research potential consumers, the risk of the organization of production and technological process, the risk of implementation and the risk of transportation of goods / services) in the context of risks of financial market subjects involved in foreign economic activities (risk subjects the investment market, the risk of the credit market, the risk of the subjects of the insurance market, the risk of professional stock market participants, the risk of the foreign exchange market entities), which define the scope of the impact of risk and potential financial losses associated.

3. Clarify the content of structured financial products in the field of foreign trade as a complex financial products, which combine elements of the regulation by regulatory legal acts of the residents and non-residents, combining financial instruments under different jurisdictions that address specific tasks, conditions and requirements of the participants of foreign economic activity of risk management, attract investment and generate additional revenue.

4. Formulated the key factors determining the development of the financial risks of foreign trade, which forms the effect on the attractiveness of the Russian economy for foreign investors, as well as allows to balance the uneven inflow of foreign investment in the industrial structure of the domestic economy and involves the use of structured financial products.

5. The models of hedging financial risks and finance export and import operations of foreign economic activity through the use of structured financial products based on swap contracts with the escrow account and depository receipts on the bill, with a corresponding change in the regulatory framework, to ensure a continuous flow of funds and taking into account objectives of economic subjects of foreign economic activity.

6. It proved with the use of non-parametric correlation analysis dependence of the quality control of financial risks of foreign economic activity on the type of structured financial instruments (swap contracts using escrow accounts and depository receipts for promissory notes), as well as a priority from the standpoint of the impact of financial market segment (the subject of the investment market, subject the credit market, the subject of the insurance market, the subject of professional stock market participants, the subject of the foreign exchange market).

**Theoretical and practical significance of the work.** Fundamentals and findings may be the basis for further analysis of the research tools of financial engineering and risk management in the foreign economic sphere, research structured financial products and possibilities of its use as a tool to hedge risk. The practical significance of the study is determined by the ability to use structured financial products based on the swap using escrow accounts, aimed at ensuring the financing of export-import flows of Russian companies.

Materials research can be useful in the preparation of specialists in the field of securities market and finance companies, educational institutions of higher education in reading courses "Securities Market", "Investments", etc.

**Approbation of the research results.** The main provisions and conclusions the dissertation work presented and discussed at international, national and regional scientific-practical and scientific-methodical conferences, including: VII all-russian scientific-practical conference «Humanitarian strategy of socialization of the individual» (Togliatty, 2013), annual scientific readings of branch of Russian state social University in city of Togliatty «Social innovation in the development of a country, city, region» (Togliatty, 2013), VIII all-russian scientific-practical conference « Humanitarian strategy of socialization of the individual » (Togliatty, 2014), VII international scientific-practical conference «Scientific Perspectives XXI century. Achievements and prospects of the new century» (Novosibirsk, 2014), international scientific-practical conference «Social responsibility of business» (Togliatty, 2014), regional scientific-practical conference « The functioning of the financial markets in a globalizing world » (Kazan, 2014) and etc.



There are 20 publications on the dissertation topic total volume 7,7 p.s. (authorial – 7,55 p.s.), including 4 articles in journals «Vestnik of Samara state University of railway engineering», «Kazan economic bulletin », «Vestnik of Samara state University», recommended by higher attestation Commission of Russia for the publication of the materials of candidate and doctoral dissertations, and 1 article in a journal indexed in the international system Scopus.

Theoretical and practical recommendations have been implemented and used in the activities JSC "FIA-BANK", JSC «GLOBEXBANK» in the development strategies of foreign trade activities with the use of risk management tools, as well as in the educational process FSAEI HVE «Kazan (Volga region) Federal University», which is confirmed by a certificate of introduction.

**The structure of the work** is defined based on the goals and objectives of the dissertation. The work consists of an introduction, three chapters, containing seven paragraphs, conclusion, bibliography of references and applications.

*In the introduction* the relevance of the topic the dissertation work, revealed the extent of a problem in domestic and foreign economic literature, defined the goal and objectives, subject and object, the methodological and theoretical bases, scientific novelty and practical significance, presented testing results of the study and its structure.

*In the first chapter "Theoretical bases of formation and use of structured financial products in foreign trade activities,"* an analysis of alternative interpretations of structured financial products, substantiated the author's approach to their essence, revealed the scope of structured financial products in foreign economic activity of Russian companies.

*In the second chapter "Analysis of the regulation of financial instruments risks of foreign trade activities with the use of structured products,"* the results of research riskoobrazuyuschih factors of foreign trade activities and forms of their manifestation, revealed the role of foreign investment as part of the accompanying security of foreign economic activity in the application of structured financial products in the Russian economy.

*In the third chapter, "Development Trends of regulatory instruments of financial risks of foreign trade activities with the use of structured products in the Russian economy"* proved using methods of economic-mathematical modeling of the dependence of the quality of regulation of the financial risks of foreign economic activity on the type of structured financial instruments, presented the possibility of using structured financial products based on swap with the escrow account and on the basis of the swap using depositary receipts for bills.

*In conclusion,* we formulated the main conclusions and results of the thesis.

## **II. THE MAIN PROVISIONS SUBMITTED FOR PROTECTION**

**1. Proposed extended classification of financial risks of foreign trade activities, formed on the basis of identifying key factors of their occurrence**

**(production-economic, scientific-technical, organizational-economic, investment and commercial) and management options with the use of structured products.**

Held in dissertation research analysis toolkit of financial support of foreign economic activity of business entities has shown that improving the efficiency of its use implies the need for a classification of key financial risks, which, on the one hand, must take into account the most important factors of this type of risk, and, on the other hand, reflect considers the risk management capabilities with the use of structured financial products. At present, records the key sources of financial risk makes it possible to allocate: the risks of industrial and economic, scientific, technological, organizational, economic, investment and commercial activities with the participation of non-residents; Given the level of control with the use of financial instruments allows to allocate risks in the regulation that do not use structured products (unregulated financial risks of foreign economic activity), as well as risk management which is carried out with the use of structured products (regulated financial risks of foreign trade activities). Extended classification of risks of foreign economic activity of business entities, based on the basis of the totality of the above classifications are presented in Table 1.

Table 1

Classification of financial risks of foreign economic activity on the key factors of their occurrence and management capabilities with the use of structured products

The types of risks of foreign economic activity			
		If possible risk management with structured products	
		Unregulated financial risks	Regulated financial risks
A key factor of the risk	Production and business activities	Unregulated foreign economic risks of the economic type	Adjustable external economic risks of the economic type
	Scientific and technical activities	Unregulated foreign economic risks of scientific and technological type	Adjustable external economic risks of scientific and technological type
	Organizational-economic activities	Unregulated foreign trade organizational and economic risks such as	Adjustable external economic risks organizational-economic type
	Investment activities	Unregulated foreign economic investment risks	Controlled foreign economic investment risks
	Commercial activity	Unregulated foreign economic commercial risks	Adjustable external economic commercial risks

In the case of non-regulated risk business entities can use one of the following methods of financial risk management of foreign economic activity: To reduce the risk of foreign economic activity, diversification of risk in the foreign economic activity; self-insurance of foreign economic activity; limiting the concentration risk in foreign trade. During the implementation of regulated risk using traditional or structured financial products as a risk management tool.

**2. Revealed the sources of financial risks of foreign economic activity on the stages of production of goods / services in the context of risks of financial**

**market subjects involved in foreign economic activities, which define the scope of the impact of risk and potential financial losses associated.**

An analysis of the classifications of financial risks of foreign economic activities reveals the following key features of financial risks: a factor of occurrence, the scope of the localization of financial flows, the level of risk, the frequency of symptoms, the level of financial losses, the ability to anticipate the possibility of insurance, economic result, the influence of the factors, the process of financial management, collection of which determines the level of financial risk. Classification of financial risk on the basis of subjective account of the participants of the corresponding segment of the financial market involved in foreign economic activities, is presented in Fig. 1.

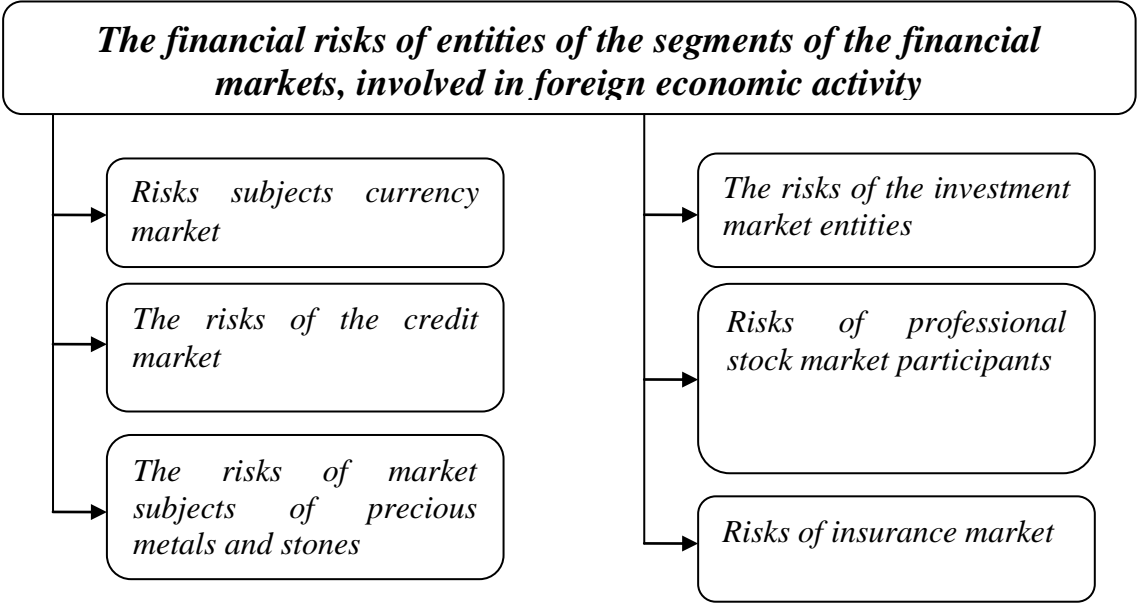


Fig. 1. Classification of financial risks on the subjects of financial market segments, engaged in foreign trade

The choice of instruments of risk management involves the need to address the expanded classification criteria, taking into account the source of the formation of financial risks at various stages of production of goods and services sold under the foreign economic activity (Fig. 2).

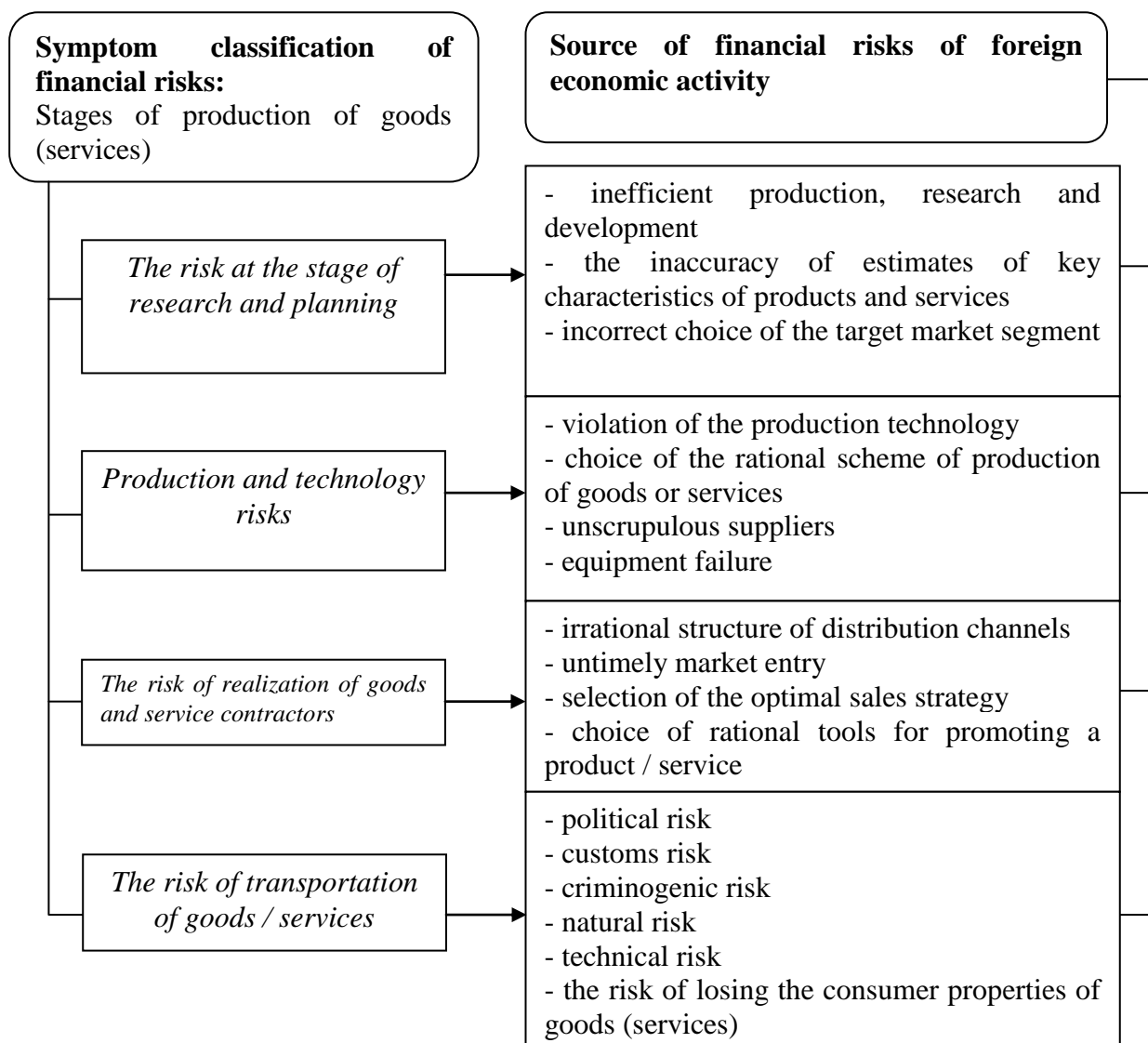


Fig. 2. Classification of financial risks through the stages of the production process of goods (services) in foreign trade

The proposed features allow you to identify the source of the impact and scope of the risk of possible financial loss and the consequences for participants of foreign economic activity, to develop a structured financial products to reduce the negative impact of the financial risk, and expand the scope of financial products and to determine the potential financial consequences and losses.

### **3. Clarify the content of structured financial products in the field of foreign economic activity.**

Research of existing approaches to defining the essence of financial products and financial engineering shows that the interpretation of the concept of "structured finance product" does not take into account the peculiarities of their application in the foreign economic activity in modern conditions. It is allowed to present structured finance products in relation to the field of foreign trade as a complex financial

product that combines elements of the regulation by regulatory legal acts of the residents and non-residents, combining financial instruments under different jurisdictions that address specific tasks, conditions and requirements of the participants of foreign economic activity management risk investment and generate additional revenue. In accordance with the updated content revealed the following key characteristics of structured financial products in foreign trade activities, the totality of which defines the method of managing financial risks with this type of financial products:

1. Depending on the goals and objectives distinguished: minimize risks and guarantee of protection of capital; receipt of investment income; hedging; an increase in the projected cash flows; diversification of investments; increase of capital efficiency; accessing new markets and the elimination of restrictions on investment; additional funding; implementation of arbitration; the purchase or short sale of assets use of leverage; investing in the underlying assets of derivative instruments; the reduction in the cost of borrowing money.

2. In accordance with the acceptability level of risk can be implemented: a guaranteed return of capital in full; partially guaranteed return of capital; the guarantee of return of capital is missing or needs fulfillment of certain conditions.

3. The types of investors that invest in structured products, stand out: retail investor; institutional investor; private investor.

4. In accordance with the type of underlying asset can be applied: the fixed income instruments; the instruments linked to equity; commodities; interest rates; the instruments linked to exchange rates; inflation products; derivatives and synthetic products; non-financial instruments.

5. Depending on market trends decisions can be focused on: increase prices; lower prices; a sideways trend; volatility,; the relative dynamics of quotations.

6. The form of release of tools release: securities; deposits; fund units; insurance products; general fund of bank management; structured notes; product creation within the framework of the brokerage agreement; the trust agreement.

7. Depending on the availability of additional conditions are included: the barrier to entry; frequency of monitoring quotes; diversity of participation; adherence; use of leverage; fixed payments; swap payments.

8. According to the degree of dependence payments from the price path of the underlying asset take into account independent and dependent benefits.

The decision on the method of financial risk management of foreign economic activity with the use of structured products should be taken according to the above configuration of the key characteristics that will optimize the management strategy regarding regulation of risk of the subject field of foreign economic activity.

**4. Formulated the key factors that determine the development of financial risks of foreign economic activity, the impact of which forms the attractiveness of the Russian economy for foreign investors.**

As part of the research analyzed the key parameters of the Russian economy in the system of international economic relations, as well as the dynamics of macroeconomic indicators of the economic system, the structure and dynamics of export-import operations, allowing to identify the key causes of the current trends of foreign economic activity (Table 2).

Table 2

Dynamics of foreign trade turnover of the Russian Federation in the period from 2011 to 2013

Indicators	Years					
	2011		2012		2013	
	bln. USD	share in GDP, %	bln. USD	share in GDP, %	bln. USD	share in GDP, %
GDP	1 905	100	2 017	100	2 097	100
The foreign trade turnover	1 040	54,6	1 024	50,8	1 054	50,3
Export	576	30,2	587	29,1	588	28,1
Import	464	24,4	437	21,7	466	22,2

The data show that Russia's GDP grew by 20% to 1905 billion. The United States in 2011 to 2097 bln. Dollars. US in 2013. At the same time, the volume of Russia's foreign trade increased from 1.04 trillion. Dollars. United States in 2011 to 1.054 trillion. Dollars. United States in 2013, the increase was 2%, driven by growth in imports and exports of the Russian Federation, the equity ratio export and import in foreign trade turnover remained 60% and 40% respectively; the share of foreign trade turnover of the Russian Federation is in the range of 50-55% of GDP over the past three years and has a negative trend. Russia's exports plays a significant role in conserving, improving the quality and standard of living, stability of the economy and regions of the social sphere and is more than 25% of GDP, which allows to generate foreign reserves, damping the effects of the crisis, and to ensure procurement a priority for the development of the national economy of goods and services. Thus, export growth is a positive factor contributing to the reduction of risks of the Russian foreign economic activity. The growth of exports in the analyzed period is explained, first, by the entry of Russia into the WTO, which led to a decrease in import duties on most goods, and to some extent contributed to the displacement of domestic producers from the domestic market; secondly, the achievement of the real ruble exchange rate critical values, at which the Russian traded sector ceases to be competitive with imported products; third, the Bank of Russia's tight monetary policy and raise the key rate.

Among the reasons for the adverse foreign trade dynamics, which determines the increasing financial risks in this sector of activity, it should be noted the low competitiveness of Russian enterprises in conditions of high tension financial risk field. The use of structured financial products enables the Bank to reduce the impact of these factors on the basis of numerous hedging financial risks that should update investing in Russian high-tech production for non-residents.

**5. Developed models for hedging financial risks and financing export-import operations of foreign trade participants through the use of structured financial products on the basis of the swap contracts using escrow accounts and Depository receipts on the promissory notes.**

The research allowed to determine that a number of effective tools of financial risk management of foreign economic activity of economic entities in modern conditions include swaps and escrow account. The proposed mechanism of functioning of structured financial products based on the swap using escrow accounts, aimed at ensuring the financing of export-import flows of Russian companies, is shown in Fig. 3.

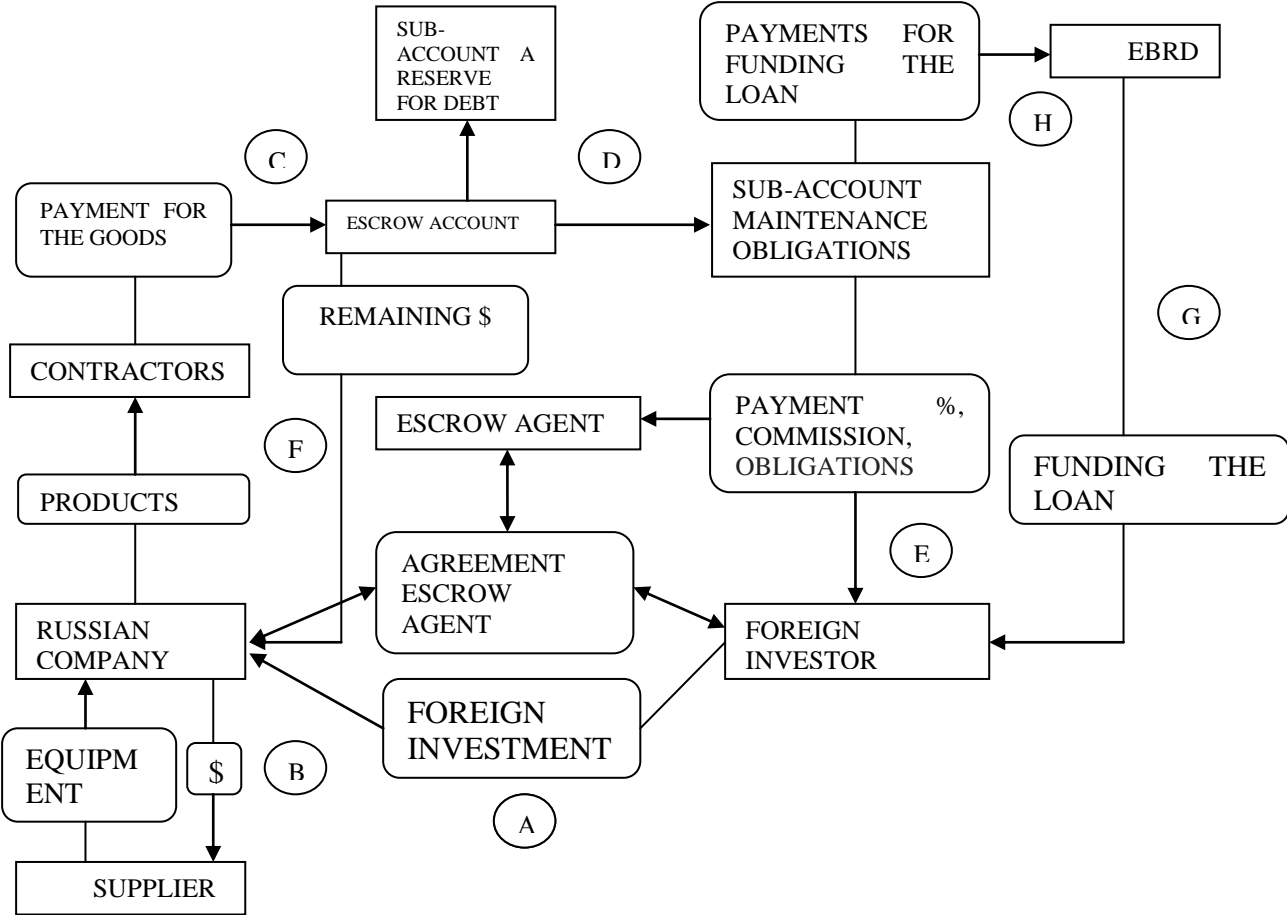


Fig. 3. The mechanism of functioning of a structured financial product on the basis of a swap with the escrow account

Key participants of contractual relations in accordance with the proposed mechanism are: the Russian company, investor, supplier, escrow agent, contractors and an international financial institution in the face of the European Bank for reconstruction and development (EBRD), the relationship between them is described below. The task of the Russian company in the framework of the proposed mechanism is to attract foreign investment to modernize the equipment that is caused by including restrictions in obtaining foreign credit in connection with the implementation of sanctions against the Russian Federation. In accordance with the scheme shown in Fig. 3, the Russian company receiving foreign capital (A), buys imported high-tech equipment (B), install it and adjusts its production, which leads to increased competitiveness on the domestic and foreign markets. Buy Russian company counterparties transfer payment on the escrow account (C), from which it will be distributed into two sub-accounts (D) from one of the sub-accounts will be paid to the investor and the commission escrow agent (E), and the other sub-account will be accumulated reserves to pay off the debt of the main body in the event of risks. After full payment of the obligations of the Russian company, the remaining funds are transferred to it (F). Thus, the use of an escrow account helps to ensure the foreign investor continuous payment even in the event of default by one of the counterparties, which allows to increase the reliability of the bargain. In order to insure their potential financial risks and their consequences, the investor can take steps loan (G), i.e., to refinance the entire amount at large international financial institutions, for example, the European Bank for reconstruction and development. Accordingly, an investor will be both by the borrower to the Bank, who was to enter into a loan agreement with the EBRD, to pay interest on the loan, and the Commission to make payments on the principal debt. Consequently, in agreement with the escrow agent will include specific instructions for the whole period of the existence of the escrow account. The content of such instructions shall provide for the transaction of a specific size in favour of EBRD, which will cover the interest and the payment of principal of the funding loan (H). The transaction will be deducted from the funds destined to the investor; with the commitment of the Russian company to the investor clearly separated from the obligations of the investor to the Bank, ie the investor and the Russian company to pay its credit obligations regardless of counterparty performance of duties on payment.

The mechanism of using the escrow account and the existing practice of its application testifies to its effectiveness and utility of application in the Russian enterprises engaged in foreign trade. The main task of structured financial products based on the swap using the escrow account is to provide opportunities for each participant a mechanism for implementing the goals of its activities, and guaranteeing they receive timely payment and uninterrupted cash flow - thus, this mechanism allows companies to fulfill their obligations on time, increase the level of control over the targeted use of the lender credit and cash flow of the borrower to reduce the costs of maintenance and attract foreign investors.



In Fig. 4 presents the structured model of financial product issuance and circulation of Depositary receipts on bills of exchange in export-import operations. The effective implementation of the model, which provides 6 stages, involves changes in existing legislation, particularly in the Federal Law "On securities market".

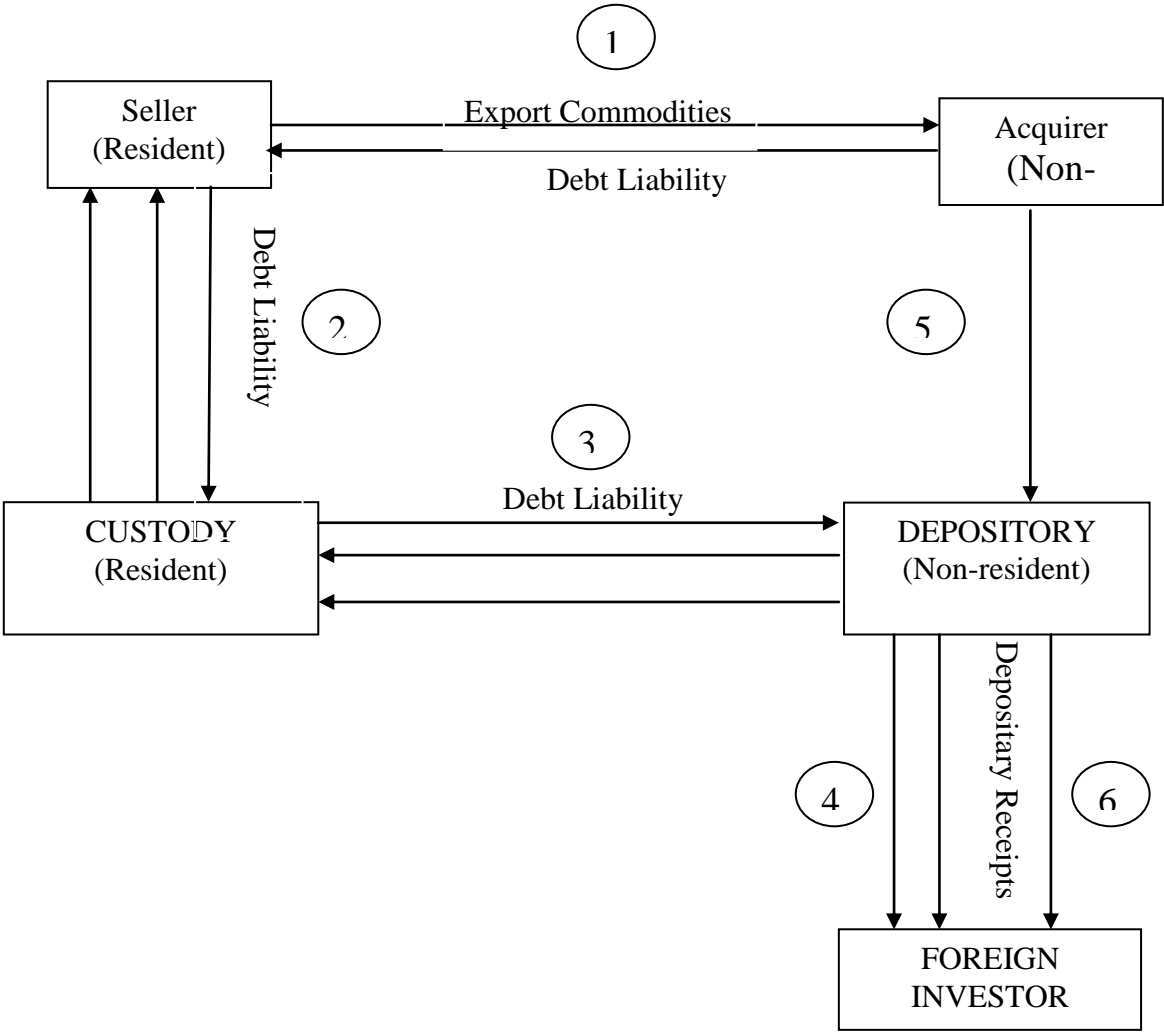


Fig. 4. The model for the issuance and circulation of Depositary receipts on bills of exchange in export-import operations

The first stage is the delivery of goods and receipt of a promissory note for the full amount of the cost of products from buyer-non-resident. Because at present there is a risk of forgery of bills, in the second stage the seller transfers promissory notes for safekeeping in a Bank custody, which is the Russian Bank. In Russia, these services are provided by banks such as ZAO "Bank Credit Suisse (Moscow)" JSC, "Citibank", JSC "ING BANK (EURASIA)", OJSC "Sberbank of Russia", OAO "VTB Bank", JSC "Gazprombank" et al., having its registered subsidiaries in Russia.

The Bank is the custodian accepts bills of exchange for the purpose of further signing of the Deposit agreement for the issue of Depository receipts on the promissory notes with the Depository Bank, which is a non-resident. In the Deposit agreement fixing all of the terms of issue of Depository receipts and obligations of each party to the contract. The promissory notes kept in custody by the Bank is the custodian, registered in the registry with the name of a custodian, then the custodian Bank is sent instructions on release of Depository receipts and the message that securities immobilized. In the third stage, based on the receipt of all necessary information from the bank-Custody, depository bank fulfills its obligations and issues depository receipts for bills and then search for potential investors. In the fourth stage, the depository bank transfers non-resident investor depository receipts for promissory notes in exchange for cash ( $S'$ ), that the chain delivered by the seller depository bank and bank-Custody. The fifth stage begins when the maturing bills buyer pays with the depository bank a certain amount ( $S$ ). In the sixth stage of the depository bank shall pay to the holder of depository receipts for bills necessary sum ( $S(S')$ ), as well as the seller, through a bank-Custody, remaining amount ( $S''$ ).

When implementing the proposed model of interaction ensures minimization of financial risks in foreign economic activity participants, allowing the subjects the model to achieve objectives while maintaining continuity of financial flows.

**6. Proven with the use of nonparametric correlation analysis the dependence of the quality of regulation of financial risks of foreign economic activity on the type of structured financial instruments, as well as priority from the standpoint of the impact of the financial market segment.**

The research was conducted correlation analysis of the dependence of quality of control of financial risks of foreign economic activity (measured as the level of compliance of the actual predicted risk) on the type of structured financial instruments (swap contracts using escrow accounts and Depository receipts on bills of exchange) as well as priority from the standpoint of the impact segment of the financial market (the subject of the investment market, the subject of the credit market, the subject of the insurance market, the subject of professional stock market participants, the subject of the currency market). The key results of the analysis are presented in table 3.

Nonparametric correlation analysis of dependence of quality of control of financial risks of foreign economic activity on the type of structured financial instruments and the priority segment of the financial market<sup>2</sup>

		QRFRFEA	SSCEA	SSCDR	LPISFMIM	LPISFMPP	LDPISFMIM
Тай-в Кендалла	The quality of regulation of financial risks of the FEA (QRFRFEA)	1,000	,471*	,714*	,643*	,143	,643*
	The respective shares of the swap contracts with an escrow account the tasks of foreign economic activity (SSCEA)	,471*	1,000	,071	,143	,214	,143
	The respective shares of the swap contracts using depository receipts for bills tasks of foreign economic activity (SSCDR)	,714*	,071	1,000	,929**	,000	,929**
	The level of accuracy of determination of priority of impact of segment of the financial market (investment market) (LPISFMIM)	,643*	,143	,929**	1,000	,071	,386*
	The level of accuracy of prioritizing the impact of the financial market segment (professional participants) (LPISFMPP)	,143	,214	,000	,071	1,000	,071
	The level of accuracy of determination of priority of impact of segment of the financial market (insurance market) (LDPISFMIM)	,643*	,143	,929**	,386*	,071	1,000
Ро Спирмана	QRFRFEA	1,000	,319*	,810*	,762*	,190	,762*
	SSCEA	,319*	1,000	,167	,286	,333	,286
	SSCDR	,810*	,167	1,000	,976**	,095	,976**
	LPISFMIM	,762*	,286	,976**	1,000	,143	,241*
	LPISFMPP	,190	,333	,095	,143	1,000	,143
	LDPISFMIM	,762*	,286	,976**	,241*	,143	1,000
* . Correlation is significant at the level 0,05 (bilateral).							
** . Correlation is significant at the level 0,01 (bilateral).							

As seen from the given analysis, quality control of financial risks of foreign economic activity is heavily depends directly on the accuracy of the choice of instrument for risk management of foreign economic activity in accordance with the priorities of the foreign economic activity of a business entity, as well as the appropriate choice of risk management instruments priority segment of the financial market in terms of the potential impact on him. This confirms the feasibility of applying the proposed in the work of financial risk management instruments foreign economic activity.

### III. MAIN PUBLICATIONS ON THE DISSERTATION TOPIC

<sup>2</sup> The results of correlation analysis of investment market participants have appeared similar to the participants of the credit market, currency market participants - professional participants.

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4. Ponomareva I.V. The issue of hedging of foreign economic activity through structured financial products / I. V. Ponomarev // Kazan economic Bulletin. 2015. № 1. P. 88-92. 0,35 p.s.

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5. Ponomareva I.V. Structured financial products as the instrument of financial credit assurance for the companies involved into foreign economic activities/ A.A. Ajupov, I.V. Ponomareva // Mediterranean Journal of Social Sciences. 2015. Vol 6. №1. P. 117-125. 0,4 p.s. (aut. - 0,25 p.s.).

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12. Ponomareva I.V. Swaption as a tool to hedge political risks / I. V. Ponomarev // In кН.: Social innovation in the development of a country, city, region: collection of scientific papers on the results of the annual scientific readings RGSU branch in Tolyatti. Togliatti: the University, 2013. P. 58-64. 0,4 p.s.

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