# Development of a Supply Chain Policy for Financing Instruments System of Foreign Economic Activity

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Abstract— Supply Chain Finance (SCF) is a relatively recent thinking in Supply Chain Management literature. In article the comparative characteristic of the main instruments of bank financing of foreign economic activity (foreign trade activities) reflecting specifics of each tool and the main criteria for selection of financing of a concrete type by subjects of foreign trade activities is given by considering the supply chain strategy. For this purpose the main instruments of financing of foreign trade activities are defined and also schemes of their functioning, subjects of the relations, advantages and shortcomings are considered. As the main instruments of financing of foreign trade activities such tools as the letter of credit, leasing, factoring and forfaiting are analyzed. On the basis of statistical data the current state of foreign economic activity is analyzed, the trends of development of economy influencing activity of subjects of foreign trade activities are revealed. The standard and legal aspect of functioning the credit-substitutive tools in Russia is considered, the current and potential changes capable to influence further development of bank financing of foreign trade activities are analyzed. The system assessment of instruments of financing of foreign trade activities in terms of nonspecific risks is carried out. The problems interfering full and effective use of such foreign trade activities tools as factoring and forfaiting are revealed. As a result of a research the problems interfering development of instruments of bank financing of foreign trade activities in Russia and also the reasons constraining introduction of separate foreign tools in the Russian financial market are revealed. Conclusions that additional stimulation of development of factoring has reasonable character as the greatest advantage to the participant of foreign trade activities is reflected in increase in a turn and the profit of the organization are received. At the same time forfaiting can become an alternative to the usual credit in the long term as would allow the client to receive all sum of shipment at once, to issue longer delay of payment.

**Keywords**— foreign economic activity, exporters, importers, international trade, supply chain policy, bank financing, credit, bill, overdraft, factoring, forfaiting, letter of credit, leasing, credit risk, insurance of risk.

#### 1. Introduction

Financial supply chain management (FSCM) is a management discipline at its infancy, which has emerged in Supply Chain Management (SCM) literature and gained further acknowledgement and interest by researchers mostly due to the global economic crisis and financial turmoil the crisis entailed. In the conditions of the accelerated development of world economy and trade and economic cooperation effective functioning of the enterprises is impossible without their accession to the international economic space. At the same time entry into foreign market represents the difficult process requiring the solution of a number of consecutive tasks. As a rule, the organizations wishing a message foreign economic activity (foreign trade activities) face such problems as minimization of risks, development of competitive of and advantages, reduction expenses rationalization of use of resources. Today one of the most burning issues interfering entry into the international market is reliable financial security of activity of the organizations. In this regard there is a need of search and development of effective instruments of financial security of foreign economic activity that will allow to create further the strategy of financing of the company and to expand its activity.

Financing of foreign trade activities became an integral part of activity of many banks. As products in the field of financing of the foreign trade operations banks offer also credit-substitutive tools, such as letters of credit, bank guarantees, forfaiting, target credits under guarantees of foreign credit agencies.

Now especially topical issue of bank financing of foreign trade activities in Russia which will allow subjects of foreign trade activities to receive the most suitable financial security of activity and also will expand a range of the provided services of banks and will provide their competitiveness in the international financial market.

Thus, the purpose of article is the analysis of specifics of modern tools on assistance to financing of the external economic transactions with development of recommendations about improvement of a system of bank financing of foreign economic activity. The instruments of

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financing of foreign trade activities offered by the Russian banks and having application potential in Russia act as an object of a research. Objects of research are the principles of application by banks of all existing instruments of financing of foreign trade activities.

## 2. Review of Literature and Research Methods

Supply Chain Management (SCM) is nowadays well established within large organizations as a major tool which offers competitive advantage in terms of cutting down the cost of goods and simultaneously improving customer service. Many publications and printing editions as in modern conditions the banking sector even more often acts as the guarantor of carrying out the international transactions and "support" of the Russian companies are devoted to a question of bank service of foreign trade activities.

Comparison and the description Russian and foreign models of the credit and currency relations can be found in N.A. Saifullina [1], L.N. Krasavina [2, 3], G.A. Haydarshina's editions [4, 5]. Authors pay special attention to integration of domestic economy into world and also pay attention to high interdependence between financial systems of the countries which was built in a consequence of transition of national economy from centralized to market, brought closer to the international standards and norms.

Methodical bases and the economic maintenance of the current forms of bank financing of foreign trade activities can be found [6-11]. Follows from works that a set of tools of bank participation represents a value which in stimulation of economic growth is not exhausted yet.

Aspects of project financing by credit institutions of economy are considered in works [12-15].

The external economic component of activity of the organizations can become the key driver of development of the country. Approaches to the solution of problems of financing of foreign trade activities are considered in [16-18].

However the overwhelming number of the published works has the character limited in a number of parameters. Besides, many analytical works considered only pre-sanction conditions, and therefore their relevance is limited now [19].

Thus for the analysis of the existing instruments of financing of the foreign trade activities and the reasons constraining application of foreign practice of bank financing of foreign trade activities normative legal acts of the Russian Federation, scientific publications and economic literature, works of scientists and specialists in bank financing and external economic operations and also the websites of the specialized financial organizations served. System approach and also such methods as comparison, the classification and analysis which allowed investigating multilaterally experience of bank financing of foreign trade activities, to define features and advantages of separate tools and to reveal the factors interfering use of these tools by the Russian banks formed a methodological basis of a research.

#### 3. Research Results

Long time commercial banks acted as guarantors of the external economic transactions of clients. Development of forms of such transactions and expansion of borders of cooperation with the foreign organizations soon promoted creation and the offer of new forms of bank financing of foreign trade activities. However, not all instruments of financing are equally actively used in Russia and in foreign countries [20]. The greatest distribution in Russia was gained by commercial crediting which in turn includes the following forms of the credit: acceptance, signature, bill, overdraft, factoring, forfaiting, letter of credit, leasing.

To the bank credit the letter of credit, leasing and relatively young tools are most often considered an alternative: factoring and forfaiting.

Factoring is more specific kind of the credit where the factor (usually credit institution) accepts all credit risks. In the international practice the big part is assigned to export factoring, that is sale by the exporter to a factor of the short-term receivables (figure 1).

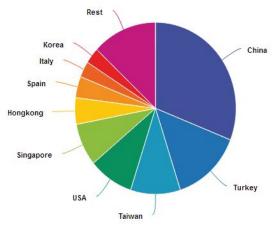


Figure 1. The countries in which factoring is applied for

financings of export transactions

As a rule, export factoring includes the full list of the services rendered by a factor including risk reduction, maintaining the currency account, service of receivables. Three parties participate in direct model in the scheme of factoring: importer, exporter and export factor. Unlike forfaiting, factoring transactions can be made both with the right, and without the right of regress and get it only in case of recognition of receivables invalid or emergence of disputes between the buyer and the seller over delivery time, quantity or quality of goods. Forfaiting as a funding mechanism for foreign trade activities appeared owing to the international integration and weakening of the state restrictions for export activity however was not widely adopted in Russia. The essence of forfaiting consists in acquisition of debt papers by credit institution without the right of regress in case of failure to pay on demand [21-31].

The letter of credit acquires special relevance when the transaction is made for the first time with new contractors, information on whose activity is limited. In this case the importer obtains a certain guarantee of purchase of goods of a certain volume and quality, and the exporter – money in full. Leasing, being an alternative to the bank credit, represents long-term rent of the equipment and vehicles with the right of repayment [22].

Trends of development of factoring in the developing and developed countries still differ: while in developing countries banks use simple financing under a concession of debit debt, participants of the developed countries try to diversify and improve service [23, 32].

Forfaiting operations also gained development abroad, in particular, in the London financial market, in India, Italy and Switzerland where initially was followed by state support. It is known that in the Russian practice the procedure of consideration and coordination of contracts (terms of transaction) differs in bigger specification. In addition, there are some other barriers [24]. For example, it is difficult for western organizations to find the suitable guarantor or the guarantor for the bill of the buyer owing to the high level of risks in Russia. The imperfection of the Russian legislation remains the biggest problem of introduction of services of factoring in the banking sector at the present stage. Despite rather important amendments, questions of practical character continue to remain: contest of the situations connected with factoring operations in arbitration courts, work of consultants and auditors, requirements to drawing up and performance of contracts [25, 28-30]. One more problem of application of factoring is the system of taxation. At the moment the Tax Code of the Russian Federation does not contain chapter or point devoted to factoring taxation.

Simplicity and speed of coordination of terms of transaction are considered as the main characteristics of forfaiting transactions. It is known that in the Russian practice the procedure of consideration and coordination of contracts (terms of transaction) differs in bigger specification.

Owing to similarity with factoring, development of forfaiting is interfered by the similar reasons. At the same time, there are problems peculiar only for forfaiting. So, in the international practice there is a tendency to syndicating of banks as creditors for the purpose of division of forfaiting papers (the transaction sum). In Russia there is no practice of merging of banks for the sake of large deal of clients, besides such scheme would complicate the documentary address and affected remuneration of forfeiters. Forfaiting operations have restriction on transaction currency: the currency has to be freely convertible that obliges the Russian exporters to convert currency and increases currency risk.

Leasing acts as one more alternative to the bank credit. Despite a number of specific shortcomings, leasing along with factoring gain popularity in the sphere of bank financing of foreign trade activities that shows the aspiration of banks to diversify services for the purpose of preservation and increase in the customer base (table 3).

Russia							
Financing tool	2014	2015	2016	2017	2018		
U U							
crediting	90,7	90,3	89,1	86,8	84,3		
leasing	3,8	4,3	5,1	6,8	8,8		
factoring	5,5	5,4	5,8	6,4	6,9		

Table 3. Share of the bank credit, leasing and factoring in structure of financing of foreign trade activities in

Choosing a financing source, potential clients analyze the offered tools by different criteria. The most significant criteria of comparison are presented in table 4.

Table 4. Comparison of instruments of financing							
Criterion comparisons	Credit	Factoring	Forfaiting	Leasing			
Purpose application	Replenishme nt of current assets with purpose	Financing of debit debt	Financing of receivables	Modernization and development of capacities; purpose			
Term financings	Short and long-term	Short-term: up to 180 days	Long-term: up to several years	Average and long- term: from 180 to several years			
providing	necessary	unnecessary	Providing in the form of a guarantee of the third party is necessary	Providing is the leasing subject			
Financing amount	Depends on purpose and makes a reservation in the contract	Depends on the sales volume of the borrower. It is limited opportunities factor	Can reach several hundred millions of dollars thanks to sindiration of forfeiters	It is not limited also can change			
Cost services	Depends on the sum and a repayment period. On average, 12%	Depends mainly on period of validity of the export contract. In an average, 14%	Depends mainly on the term of operation of the export contract. On average, 15%	Depends on project cost, the term of operation and advance payment. On average, 14%			
Terms receipts financings	In the day stipulated in the contract	In day of delivery goods	In day of delivery goods	The designated equipment comes to the terms stipulated in the contract			

Table 4. Comparison of instruments of financing
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Meanwhile, any financing of foreign trade activities is accompanied by a certain set of risks which can negatively affect the reporting of bank. Expanding a line of financial products, banks have to be ready to increase and risks. Author's assessment of instruments of financing of foreign trade activities in terms of nonspecific risks is presented in table 4.

 Table 4. Assessment of instruments of financing of foreign trade activities on risk level

Risk	Factoring	Forfeiting	Lising	Letter of credit	Bank credit
operational	7	8	6	6	2
currency	9	9	7	9	3
percentage	4	7	2	2	2
economic	9	9	9	9	8
political	9	9	9	9	9
system	4	5	3	3	1
legislative	7	9	7	4	6
branch	7	9	9	3	1
Total risk	56	65	52	45	32

Each tool has both specific risks, and general (nonspecific). It is possible to refer fraud risk, risk of non-payment, risk of non-performance by the supplier of terms of the contract or risk of return to force of delivery of low-quality products etc. to specific risks.

#### 4. Conclusions

The review shows that Finance supply chain management is a scientific field at its infancy, with exponential growth in interest from researchers and practitioners, mostly driven by the current financial crisis and the consequent recession. By results of a research of problems of bank financing of the external economic activity in supply chain strategy it was revealed that despite demand the

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conventional problems interfering introduction and effective use of some tools exist participants of foreign trade activities of external financing.

In particular, it concerns the tools extended abroad: factoring and forfaiting. Besides similarity of settlement schemes, tools unite also the reasons of their absence among services of the Russian banks. "legal rehabilitation" has to promote gradual distribution of factoring in Russia first of all, including, it is necessary making the following changes to regulations:

- to add point to the Tax Code of the Russian Federation on an order of taxation of factoring transactions, definitions of tax base, terms and an order of charge and payment of taxes;

- to specify an order of reflection of factoring financing in financial statements of the organizations.

The letter of credit and leasing are the most competitive tools for today in comparison with the bank credit as for their functioning all conditions are created. Remain the main levers of stimulation of these types of financing the price policy and increase in competence of bank employees which is expressed in consultation of clients and attentive paperwork.

Thus, the offer banks of the instruments of financing other than the simple credit, perhaps in the near future at elimination of normative and technical problems. Despite rather a low share in GDP of the country, the program of development of small and medium business assumes increase by 2030 in a share of SME at the level of 40-50%. One of factors of achievement of the goal is not only preferential financial security, but also the comprehensive support of activity which is not limited only to crediting.

### References

- Sajfullina, N.A. (2009). Formation of the legislation on the regulation of credit and calculated relations in Russia. Vest-nik of TSSPA named after D. I. Mendeleev. No. 1. Pp. 50-55.
- [2] Krasavina, L.N. (2013) Difficult update the conceptual bases of regulation of foreign economic risks of Russia in the conditions of integration into the world economy and WTO membership. Russian Journal of Money and Finance. 2013. No. 9. Pp. 10-16.
- [3] Krasavina, L.N. (2014). Conceptual Approaches to Modernization of International Monetary, Credit and Financial Relations in the Framework of Modern Global Challenges. Russian Journal of Money and Finance. No. 10. Pp. 45-52.
- [4] Khaidarshina, G.A. (2016). Institutional System of Banking Regulation in EU: Key

Problems and Prospects of Ap-plication of Experience within the Eurasian Economic Union. Banking services. No. 9. Pp. 10-18.

- [5] Khaidarshina, G.A. (2017). The convergence of Russian and EU banking systems and prospectives of economic growth in Russia. Scientific works of the Free economic society of Russia. Vol. 206. No. 4. Pp. 363-378.
- [6] Rusanovskaya, E.V. (2011). The theoretical basis of bank's project financing. Science and society. Vol. 2 (2). Pp. 185-191.
- [7] Rusanovskaya, E.V. (2012). Risks of bank project financing and management. Science and society. Vol. 4 (7). Pp. 200-206.
- [8] Belyavtsev, A.N., Shmyreva, A.I. (2012). On the evaluation of the credit mechanism of foregoing economic opera-tions. Vestnik NSUEM. No. 1. Pp. 298-303.
- [9] Shevchenko, I.V., Korobeinikova, M.S. (2015). Commercial banks and innovation prospects for the financial and industrial policy of the State to assist Russia's external economic activity: theory and practice. Publishing House Fi-nance and Credit. Vol. 16 (640). Pp. 10-31.
- [10] Nikulina, O.V., Serdyuk, A.A. (2016). The mechanism of bank participation in financing the innovative activities of companies. Publishing House Finance and Credit. Vol. 13 (685). Pp. 14-31.
- [11] Kazachenok, O.P. (2017). Legal regulation peculiarities and bank financing types in contemporary international economic activity. Banking legislation. No. 3. Pp. 19-24.
- [12] Drobotova, O.O. (2011). Theoretical aspects of project credit. Business. Education. Law. No. 1. Pp. 34-39.
- [13] Kazansky, A.V. (2015). Project financing risks and methods of their overcoming in Russian projects. Problems of modern economy. Vol. 1 (53). Pp. 139-143.
- [14] Vasilyev, S.A., Vasilyeva, A.S. (2015). Issues of development of the project financing in Russia on the modern stage: methodical and methodological aspects. Bulletin USUES. Science, education, economy. Series economy. Vol. 4 (14). Pp. 72-77.
- [15] Ioramashvili, S.K. (2016). Problems of implementation project financing. Sustainable development of science and education. No. 1. Pp. 34-39.
- [16] Babina, Iu.V. (2015). Crisis and it's influence on the investment environment of middle and small agricultural en-terprises. Vestnik NGAU. Vol. 4 (37). Pp. 188-193.
- [17] Zaprudnov, V.I., Pinyagina, N.B., Gorshenina, N.S. (2015). Analytical review of the current state and prospects f science and innovative development of the forestry

industry. Forestry Bulletin. Vol. 19. No 1. Pp. 199-214.

- [18] Fal'tsman, V.K. (2017). Crisis in Russia's foreign economic activities: ways to overcome. World Economy and In-ternational Relations. Vol. 61. No. 5. Pp. 57-66
- [19] Sysoeva, A.A. (2015). Problems and prospects of bank project financing. Finance: theory and practice, Vol. 3 (87). No. 149-154.
- [20] Koren, A.V., Pustovarov, A.A. (2018). Difficulties and perspectives of the world monetary system. The azimuth of Scientific Research: Economics and Administration. Vol. 1 (22). Pp. 138-141.
- [21] Belyaev, E.V., Grabar, T.Y. (2010). Forfeiting: the organization forms in a crisis situation. Modern science-intensive technologies. Regional supplement. No. 3. Pp. 26-34.
- [22] Osipov, V.A., Shashlo, N.V., Kuzubov, A.A. (2017) Evaluation of economic sustainability of entrepreneurship on the basis of the valuebased efficiency theory. Espacios. Vol. 38 (62), Pp 30.
- [23] Kuvaeva, Y.V., Kotova, O.V. (2018). National development banks and their role in financing export-oriented com-modity producers. Economy: yesterday, today, tomorrow. Vol. 8. No. 9A. Pp. 201-207.
- [24] Miroshnikova, T. (2015) Formation of an effective mechanism of financial and credit support reproduction pro-cess. Mediterranean Journal of Social Sciences. 6 (5S3). Pp. 84-92.
- [25] Nikitenko, A.A. (2018). Methodical bases of financing the enterprise's innovative activity in the context of support-ing global competitiveness. Vestnik of Institute of Economic Research. Vol. 2 (10). Pp. 136-143.
- [26] Osipov, V.A., Kuzubov, A.A., Shashlo, N.V., Rudenko, A.A. (2018) Architecture of

development process model for financial and investment strategy of industry enterprise structures. Turkish online journal of design art and communi-cation. Vol. 8. PP. 642-652. (doi: 10.7456/1080MSE/176).

- [27] Miroshnikova, T., Taskaeva, N. (2018) Model for assessing the financial potential of the region. International sci-ence conference SPBWOSCE-2017 business technologies for sustainable urban development. Article Number: 1042. (doi: 10.1051/matecconf/201817001042).
- [28] Muyambiri, B., & Chabaefe, N. N. (2018). The Finance–Growth Nexus in Botswana: A Multivariate Causal Linkage. *Dutch Journal* of Finance and Management, 2(2), 03.
- [29] Gamarra, M., Zurek, E., & San-Juan, H. (2017). Study of Image Analysis Algorithms for Segmentation, Feature Extraction and Classification of Cells. *Journal of Information Systems Engineering & Management*, 2(4), 20. <u>https://doi.org/10.20897/jisem.201720</u>
- [30] Khosravipour, N., Jafari M., & Rezaei, M. (2018). Investment opportunities and lack time report of the auditor. UCT Journal of Management and Accounting Studies, 6(1), 1-6.
- [31] Mendes, I. A., & Silva, C. A. F. D. (2018). Problematization and Research as a Method of Teaching Mathematics. *International Electronic Journal of Mathematics Education*, 13(2), 41-55. https://doi.org/10.12973/iejme/2694
- [32] Boiko, J., & Eromenko, O. (2018). Signal Processing in Telecommunications with Forward Correction of Errors. *Indonesian Journal of Electrical Engineering and Computer Science*, 11(3), 868-877.