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FACTORING – AS A FORM REFINANCING OF ACCOUNTS RECEIVABLES IN MODERN TERMS

ФАКТОРИНГ – ЯК ФОРМА РЕФІНАНСУВАННЯ ДЕБІТОРСЬКОЇ ЗАБОРГОВАНОСТІ

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Філиппова С.В, Сааджан В.А., Мунтян К.П. Факторинг – як форма рефінансування дебіторської заборгованості в сучасних умовах. Науково-методична стаття.

В процесі проведення досліджень: здійснено аналіз дебіторської заборгованості суб'єктів господарювання в сучасних умовах та інструментів її рефінансування; виявлена проблема зростання дебіторської заборгованості та пошук інструментів її рефінансування; визначені поняття, зміст та види факторингу з урахуванням фактору ризику; зроблено порівняння факторингу з банківським кредитуванням; з'ясовані та порівнянні умови надання факторингових послуг комерційними банками. Дослідження такого фінансового інструменту як факторинг надають підставу щодо поширеного його використання у господарської діяльності українських підприємств за для рефінансування дебіторської заборгованості з ціллю прискорення розрахунково-платіжної дисципліни та можливого фінансування порівняно з кредитуванням. Для управління дебіторською заборгованістю за допомогою факторингу запропоновано алгоритм дій для забезпечення ефективного його використання.

Ключові слова: дебіторська заборгованість, рефінансування, аналіз, критерії, факторинг, банківське кредитування

Filyppova S.V., Saadzhan V.A., Muntian K.P. Factoring – as a form refinancing of accounts receivables in modern terms. Scientific and methodical article.

In the course of research: the analysis of accounts receivables of economic entities in modern conditions and instruments for its refinancing; the problem of growth of accounts receivable and search of instruments for its refinancing; defined concepts, content and types of factoring taking into account the risk factor; comparison of factoring with bank lending; clarified and comparable terms of provision of factoring services by banks. Investigating such a financial instrument as factoring provides a basis for its widespread use in the economic activities of Ukrainian enterprises for refinancing receivables with the aim of accelerating settlement and payment discipline and possible financing compared to lending. To manage accounts receivables using factoring, an algorithm is proposed to ensure its effective use.

Keywords: accounts receivable, refinancing, analysis, criteria, factoring, bank lending

n today's conditions of economic events, enterprises are faced with a situation where lenders refuse to increase the timing and volume of lending, debtors delay payments and insist on increasing the volume of receivables, which leads to a decrease in the absolute liquidity of enterprises, the ability to timely calculate and fulfil obligations under contracts Whether planned production volumes, restraining economic-economic activity.

Thus, the analysis of receivables of economic entities in Ukraine allowed to revealing the growth rate of receivables in 2017 compared to 2012 by 132% and 64%, as compared to 2016 (tab. 1). This increase in receivables provides an opportunity to conclude that the growing financial needs of debtor companies, which they can not always finance, at the same time, lenders distract financial resources in the accounts receivable and its maintenance for the uninterrupted process of its activities. Therefore, the problem of management of receivables in modern conditions is gaining momentum.

Analysis of recent research and publications

Accelerating the repayment of accounts receivable in the conditions of political and economic instability, leading to a financial and economic crisis, requires a variety of effective financial instruments that help to reduce impairment of income of enterprises. The solution of the problem – the refinancing of receivables – possibly through a financial instrument – factoring, which determines the need for identified factoring as a means to improve settlement and payment discipline and its capabilities in modern conditions.

Problems and the development of factoring as a tool for managing receivables in Ukraine are devoted to many scientific works among which it is possible to recognize the research: Grigorenko Yu., Dubrovskaya Ye., Palchuk O., Monont L., Naumenkova S., Mischenko S., R. Kembella, J. Gilbert and others. The works are devoted to the peculiarities of the implementation of factoring operations in Ukraine, the reasons for the development of factoring in the world, the classification factor of factoring, attention is paid to the differences between factoring transactions and lending, analyzes the advantages and disadvantages of factoring services by banks and financial companies. However, despite the considerable amount and importance of research being carried out by scientists, factoring is still a rather new means of managing receivables and its ability as a payment and settlement tool is not sufficiently known to a wide range of entrepreneurs. There fore, it is worth paying attention to the concept of factoring as one of the financial transactions, to identify the criteria by which it is possible to provide a factoring characteristic and compare these characteristics with the characteristics of lending.

The aim of the article is to conduct a study of retrospective changes and trends of accounts receivable and factoring opportunities for its involvement in the activities of enterprises to refinance accounts receivable under current conditions.

The main part

As you know, receivables are money distracted from operating activities, and if it is comparable to payables, then the company does not need to find additional financial resources. However, in the event of a significant excess of receivables over accounts payable, enterprises attract additional financial resources to replenish current assets for the implementation of planned programs. This leads to the search for tools that can be used to manage receivables because of its non-occurrence and its possible refinancing.

The conducted studies according to the data of the State Statistical Service of Ukraine allowed to reveal the growth of receivables in recent years (tab. 1).

Indexes	Significance						Divergence, %				
muexes	2012	2013	2014	2015	2016	2017	2013	2014	2015	2016 41.59 -4.30 -55.7 44.30 2.00 -54.8 -12.8 0.02 22.52 -61.68	2017
Accounts receivable of economic entities, UAH million.	1701397 212914	1778104 222458	1962772 165133	2517204 115230	2409044 94284	3945631 148332	4.51 4.51 4.48	15.36 10.39 -22.44	47.95 28.25 -45.9	-4.30	131.9 63.78 -30.3
million US \$											
Financing with factoring, UAH million Million US \$	11703 1464	10040 1256	23526 1979	16556 758	16888 661		-14.21 -14.21 -14.21 -14.21	101.02 134.3 35.2 57.5	41.47 -29.6 -48.2 -61.7	2.00 -54.8	
Refinancing receivables using factoring, %	0.68	0.56	1.2	0.66	0.7		-0.12	0.56	0.02	0.02	
Loans granted to residents, UAH million Million US \$	815142 102007	910782 113947	1020667 86307	981627 44936	998682 39086	1016657 38220	11.7 11.7	25.21 -15.39	20.42	-	24.72 -62.53
Bank rates on loans by: UAH., % \$ US, %	18.4 8.4	16.6 9.4	17.6 9.0	21.8 8.8	18.5 8.8	16.4 7.5	-1.8 1.0	0.8 0.6	3.4 0.4	0.1	-2.0 -0.9
Bank rates on loans by: UAH., % \$ US,%	1.42	1.03	2.25	1.66	1.66		-0.39	0.83	0.24	0.24	
The average official hryvnia exchange rate to \$ US, UAH	7.991	7.993	11.886	21.845	25.551	26.600	0.025	48.7	173.4	219.7	232.9
Consumer price index	99.8	100.5	124.9	143.3	112.4	113.7					

Table 1. Analysis of receivables and instruments for its refinancing

Source: compiled by the authors on the materials [1]

The largest growth of accounts receivable is observed in 2015. (the growth rate is almost 48% compared with 2012 and 28% compared to 2014) and 2017. (the growth rate was almost 132% compared with 2012 and 64% compared with 2016). In 2015 the growth of accounts receivable was due to the fluctuation of the exchange rate (from UAH 8 for \$ 1, set by the NBU, in 2013 to UAH 22 in 2015, and the exchange rate of commercial banks is even higher) and the growth of the consumer price index, which was 125 % in 2014 and 143% in 2015 This tendency, which occurred at the expense of political factors, has led to a slowing down of settlement and payment discipline between suppliers and consumers, and no possibility on the part of consumers to make

prepayments for the received products due to insufficient financial possibilities of enterprises. In such circumstances, enterprises turn to credit and factoring institutions.

Analysis of the loans provided through financing showed that in the national currency during the analyzed period 2013-2017, lending increases in the range of 20-25 percent compared to 2012, but if all loans (in national and foreign currencies) are converted into US \$, under current exchange rates, financing is reduced. The rate of decline in credit financing in dollar terms began to decrease compared to 2012:

- in 2014 by 15.4%;
- in 2015 the fall was 56%;
- in 2016 61.7%;
- in 2017 62.5%.

It should be noted that interest rate fluctuations on loans are not significant (by 1.8% in 2013, by 2% compared to 2012, in 2017) and only in 2015 there was an increase in interest rates on credit resources in the national currency by 3.4%.

As you know, the main financial instruments of management of accounts receivable are - a bill, factoring and forfeiting [2]. In modern conditions, to reduce financial risk in foreign practice, the use of factoring differs from domestic practice.

Accordingly, the average percentage of financing receivables due to factoring is 0.6-0.7 (tab. 2). Regarding the implementation of financing by means of factoring in 2015-2016. when receivables increased by 41-44%, refinancing with factoring increased by almost the same 44-41 %% compared to 2012. and amounted to 1.66% in comparison with credit financing, the cost of which in 2015. was almost 21.8%.

The largest factoring financing in Ukraine is observed in 2014. on 23526 million UAH (the rate of increase was 101%, or twice as high as in 2012, while the receivables increased by only 15.36%), which was only 1.2% of receivables and 2.25% compared to loans granted in the same period. At that time, factoring development was influenced by fluctuations and growth of currency rates (UAH 8 – UAH 12 – UAH 22 per US \$ 1) and the expected increase in the price index (124.9 in 2014, 143 in 2015), which affected the purchasing prices of reversible assets for enterprises, provided for the impairment of receivables (income).

Thus, factoring by domestic enterprises is used for the most part during the change of the exchange rate and increase of the price index. To expand the use of factoring in enterprises, we will conduct a study of this financial instrument as a means of refinancing receivables for accelerating payment and payment discipline and possible financing compared to lending.

Factoring is a financial transaction that allows the vendor to refinance the receivables for the purpose of reducing the financial period and the operating cycle.

Determination of factoring in Ukrainian legislation is presented in tab. 2.

Table 2. Definition of factoring

Determination of factoring according to:									
The Law of Ukraine "On Banks and Banking Activity" (No. 872-XI of March 20, 1991 (Article 3), No. 2112-111 dated December 1, 2000 (Article 47)	Law of Ukraine "Value-added tax" (clause 1.10)	The Commercial Code of Ukraine (No. 436-1U of 16 January 2003 (Article 350)							
December 7, 2000 (Article 47). Factoring - the acquisition of the right to demand the supply of goods and services, the acceptance of the risk of fulfilling such requirements and collection of these requirements	Factoring - a transaction from the assignment by the first creditor of the claims of a third party debt to a second lender with a prior or subsequent compensation of the value of such a debt to the first lender	Factoring is the acquisition by a bank of a claim in cash in respect of the supply of goods or the provision of services for the acceptance of the risk of such a requirement and acceptance of payments.							
To sum up, Factoring is the transfer of the claims rights that arise between the lender (supplier) and the debtor (customer) for the delivery of the goods or services to a third party (bank, factor company) for the collection of these claims for appropriate compensation for the purpose of reducing the risk lender (supplier) and financial needs									

Source: compiled by the authors on the materials [3, 4]

Factoring is regulated by the Civil Code of Ukraine No. 435-1U of 16.01.2003. (Chapter 73) according to which:

- The parties to the factoring contract are a factor (a bank or a financial institution, as well as an individual a subject of entrepreneurial activity, which according to the law is entitled to carry out factoring transactions) and a client (a natural or legal entity that is a business entity).
- Under a factoring agreement (financing for the assignment of the right to a monetary claim), one party (factor) transfers or undertakes to transfer funds to the second party (client) for payment, and the client retreats or undertakes to retreat to the factor his right to claim money to the third person (debtor).
- The subject of the factoring agreement may be the right to claim the money, the due date of which has come (available in demand), and the right to claim that will arise in the future (future claim).
- The factor obligation under a factoring agreement may include providing a client with services related to a monetary claim, the right of which he retires.

- The factoring agreement is valid irrespective of the existence of an arrangement between the client and his debtor about the prohibition of the assignment of the right to a monetary claim or its restriction.
- The client answers before the factor for the validity of the monetary claim, the right of which is withdrawn, unless otherwise specified by the factoring agreement. The monetary claim, the right of which is withdrawn, is valid, if the client has the right to withdraw the right to claim the money at the time of the assignment of this claim, he did not know the circumstances, which as a result of which the debtor has the right not to comply.
- The Client is not responsible for the non-fulfillment or improper performance by the debtor of the monetary claim, the right of which is withdrawn and presented to the fulfillment of the factor, unless otherwise specified by the factoring agreement.
- The debtor is obliged to make a payment to the investor, provided that he received from the client or factor a written notice of the assignment of the right to claim the monetary claim to the factor, and in this notice the monetary claim that is to be enforced is determined, as well as the factor to which the payment is to be made. The Debtor has the right to demand from the factor giving him within a reasonable time evidence that the assignment of the right to claim the money has actually taken place. If the factor fails to fulfill this obligation, the debtor has the right to make a payment to the client in order to fulfill his obligation to him.
- The next act by the factor of the right of monetary claim to a third person is not allowed, unless otherwise specified by the factoring agreement [3].

 The main factoring content is given in tab. 3.

Table 3. The content of factoring

Criteria	Content						
The purpose of factoring	Acceleration of settlement and payment discipline						
	Office of Receivables Financial support						
Task factoring	ncreasing liquidity and solvency						
	Reducing financial risks Increase in turnover						
Products to which factoring applies	Highly liquid types of products with stable demand - household chemicals, food, confectionery, medicines, fuel and lubricants, spare parts, etc.						
Type of activity of enterprises applying factoring	Production, trade, execution of works, provision of services						
Factoring mechanism	The supplier receives financing (so-called "advance") in the amount of 70 - 90% of the amount of debt, can buy new products, implement it with a deferred payment and give the bank a new debt, re-purchase						

Source: own elaboration

Factoring is a financial transaction concluded by the seller-seller of the right to receive funds on payment documents for the delivered products in favor of the bank or a specialized company – "factor company", which assumes all the credit risks for debt collection. For the implementation of such transaction banks (factor company) pay a commission from the vendor, as a percentage of the payment amount. The rates of the fee are differentiated taking into account the level of solvency of the consumer of the product and the stipulated articles In addition, during such a transaction, the bank (factor company), in the period up to three days, lends the seller-company in the form of prepayment of debt claims in payment documents (usually in the amount of 70 to 90% of the amount of debt depending on the factor The risk of another 10-30% of the debt is temporarily deposited by the bank in the form of an insurance reserve when it is not repayable by the buyer (this deposited part of the debt is returned to the seller-seller after the full repayment of the amount of the debt by the buyer).

The purpose of using factoring is acceleration of settlement and payment discipline, the necessity of which arises when it is necessary to make financial settlements by the enterprises-suppliers until the maturity of the receivable which is agreed upon by the contract on terms of supply and payments between the supplier and the consumer.

The main task of factoring is the management of accounts receivable, that is, its refinancing in the event of possible financial risks for supplier companies and increase the turnover for both supplier and consumer without the involvement of credit resources.

Factoring involves, above all, highly liquid products with stable demand, which include products such as: fuel and lubricants, products of the food and chemical industries, and others.

Factoring, depending on the risk factor, is divided into such kinds as factoring with regression and factoring without regress. Types of factoring, depending on the risk factor, are presented in tab. 4.

Factoring with regression is when a company-factor buys debts, but because of its security from financial risk in case of its late payment by the debtor (the consumer enterprise (debtor)), obliges the vendor (lender) to make a repurchase of the debt and independently to repay it. In this case, the company minimizes its risk, and the debtor company, on the contrary, increases the risk of non-repayment of debt from the lender. The cost of factoring with regress is lower than factoring without regress, which is associated with the risk factor of the company. Factoring without recourse is more attractive for the vendor (creditor), since the company transfers all the powers to

calculate the company-factor, and further probable problems with repayment or debt relief are not applied to it, at the same time, the company-factor in this case is more risking.

Table 4. Types of factoring

Criteria	Factoring types based	on risk factor
Criteria	Factoring with regress	Factoring without regress
Concept	Company-factor buys debt, but in case of its untimely payment, the supplier-provider (the creditor) is obliged to make a repurchase and to independently deal with repayment. It is foreseen an act of the company-factor of indebtedness without the right of the latter to impose any requirements to the enterprise in case of untimely repayment of arrears debtor	It is anticipated that a debt-defaulted company would have the right not to put forward any claims to an enterprise in case of untimely repayment of debtor debts
Appraisal by attractiveness	For the supplying company (creditor) there may be a problem associated with the untimely repayment of an enterprise-consumer (debtor) debt and self-repayment	Factoring without recourse is more attractive to the vendor (lender), as the company transfers all of its powers on calculations for the company- factor and further probable problems with the repayment or repayment of arrears do not apply to it
Cost Estimate	The cost of factoring with regress is lower than the factoring factor without regress	The cost of factoring without regress exceeds the nominal value of factoring with regress
Risk assessment	The Company-factor has a minimal risk The enterprise-supplier (debtor) has a risk in case of untimely repayment of the debt of the enterprise- consumer (lender) of the company-factor	The company-factor has a risk in case of bankruptcy of the enterprise-consumer (creditor) Enterprise-supplier (debtor) is not at risk

Source: own elaboration

Factoring as a financial transaction has common characteristics with lending, but there are differences as well. Characteristics of factoring in comparison with bank lending is given in tab. 5.

Comparison of factoring with bank lending has made it possible to distinguish the criteria by which it is possible to characterize factoring and to which were assigned:

- Requirements for enterprises;
- Requirements for contracts between the enterprise-supplier (creditor) and the enterprise-consumer (debtor);
- Registration of contractual relations;
- Submission of documents at the stage of obtaining financing;
- Cost components;
- The term;
- Provision;
- Use of the provided funds;
- Amount of financing;
- Debt repayment;
- The effect received by the enterprise when using factoring.

Table 5. Comparison of conditions for factoring and bank lending

Criteria	Characteristic			
Criteria	Factoring	Bank lending		
1	2	3		
1. Requirements for the supplier-supplier (creditor)	 The enterprise must: Supply liquid products (perform work, provide services), which are in steady demand on the market; Regularly ship the products to the receiver (one-time transactions to factoring are not accepted); The term of the relationship with the debtor - not less than 6 months; The minimum amount of monthly supplies per one debtor, as a rule, must exceed 5 - 10 thousand UAH; The debtor must not simultaneously be a creditor of the enterprise, since in this case it is possible to carry out mutual offsetting of counterclaims; The credit history (if any) should be positive. 	The credit history of the company should be positive An enterprise must maintain a stable financial and economic activity		
2. Requirements for enterprises-consumers (debtors)	The account of the debtor's accounts must be perfect. Information about debtors is provided by the enterprise Debtors must be solvent. The number of debtors is 10-30 enterprises. Accounts receivable should be urgent and have maturities of maturities.	The credit history of the company should be positive An enterprise must maintain a stable financial and economic activity		

Continuation of the Table 5

		Continuation of the Table 5
1	2	3
3. Requirements for agreements between the enterprise- supplier (creditor) and the enterprise- consumer (debtor)	Must be concluded in accordance with the requirements of the current legislation; Have a clear definition of the deadline for payment delay (maturity); Should not contain conditions for the possibility of barter and bill payments	Missing
4. Registration of contractual relations	Simplified package of documents - a bilateral agreement is concluded, which is not certified notarially. The general conditions for providing factoring are determined. A list of debtors and funding limits for them is established. The term of the agreement is set. No need to open an enterprise account. Transferred Accounts for Deferred Claims. There may be additional conditions.	The package of documents of the established form - a contract is made on the terms of payment, urgency, reversal, security, warranty. Agreed the rights and obligations of the creditor.
5. Delivery of documents at the stage of receiving funding	Application for factoring. Information on debtors and their debt, offered for factoring. Agreements (with all annexes). Eligibility requirements for the Bank's financing and administration of accounts receivable. Turnover information (for the analysis: the state of monetary payments; the state of shipments of products; is not the debtor simultaneously the creditor of the enterprise). Financial statements (balance sheet - form number 1, report on financial results - form number 2). Information on cash flows from current accounts	Application for a loan Financial statements (balance sheet – form number 1, report on financial results – form number 2)
6. Components of cost	The cost is a bit higher The size includes the following components: — Fee for financing (interest or discount); — Payment for documents processing; — Fee for keeping accounts receivable; — Additional fee for the risk level, which takes on the factor; — Other commission for additional factoring services. The fee for the actual use of funds is usually paid at the end of each calendar month.	The following components are included in the size: — Fee for financing (interest); — Expenses on registration and insurance of collateral; — Costs of commissions payment
7. The term	Indefinitely	In accordance with the terms of the loan agreement (admissible extension with a complicated procedure of agreement)
8. Provision	Blank – without mortgage	Requires: security deposit, suretyship
9. Use of the provided funds	Independently	Strictly in accordance with the objectives provided for by the loan agreement
10. Funding volume	As part of accounts receivable. In the presence of seasonal fluctuations, the amount of funding will depend on the state of demand for products at a certain point in time. The enterprise receives financing in the amount of 70-90% of the amount of the document confirming the debt. The balance, 10-30%, is transferred to the client, less the remuneration of the bank after receiving the full payment from the debtor. Exist: — Limit of financing per one debtor, calculated on the basis of the volume of his calculations with the enterprise for a certain period of time - as a rule, in the last three months; — Total funding limit	Depends on liquidity, solvency, independence, capital structure, enterprise history, etc. There is: Limit on one lender
11. Repayment of arrears	It is carried out at the expense of funds received from institutions that carry out factoring and debtors (enterprises - debtors)	Carried out at the expense of the creditor
12. Effect	Increase in sales volume (performance of works, provision of services) Increased workload capacity Getting additional profit from additional sales Opportunity not to depreciate income Decrease in receivables Ability to pay for short-term obligations Accelerating the turnover of current assets of the enterprise Increasing the absolute liquidity ratio	Replenishment of financial resources. Ability to pay with suppliers
Source: own elab	45	

Source: own elaboration

In accordance with the committee of the National Financial Services Commission, in Ukraine in 2017 Factoring licenses were received by 474 factoring companies (mainly this company whose form of organization is a limited liability company - LLC Agro-investment center, LLC ARMA factoring, LLC Optimum factor, LLC Financial company Platinum, LLC factoring company Alliance, PAO Elite Incest project and others), factoring services are provided by 34 banks and specialized factoring / investment companies (OTP Bank, Ukreximbank, Raiffeisen Bank Aval, Ukrsotsbank, FUIB, Bank Pivdenny, Marfin Bank, etc.).

The conditions for the provision of factoring services to OTP Bank, Raiffeisen Bank Aval, Ukrsotsbank are shown in tab. 6.

Table 6. Comparison of conditions for providing factoring services by banks

Criteria	Banks						
Criteria	OTP Bank	Raiffeisen Bank Aval	Ukrsotsbank				
Kind of factoring	Factoring without collateral with regression	Factoring: — with regression; — without regress; — with partial regress	Factoring with regression				
Form of funding		Purchase of accounts receivable at a discount					
Advance payment	Up to 80% of the amount of the supply	By agreement between the bank and the company-supplier	Up to 90% of receivables				
Requirements for the enterprise- supplier (creditor) and the enterprise- consumer (debtor)	1. The market activity – not less than 2 years 2. implement regular deliveries of products (performance of services, works) on terms of postponement of payment 3. Have a permanent client (enterprises-consumers-debtors) 4. The financial condition of the supplying company must be in line with the conditions that the bank will put forward	1. Preferably, suppliers of petroleum products 2. Activity of the supplier-supplier on the market – not less than 3 years 3. Mandatory presence of an open current account at Raiffeisen Bank Aval at the time of signing a factoring agreement 4. The supplier and the consumer must be non-affiliated / connected 5. The activity of the consumer enterprise in the market is not less than 1 year. 6. Cooperation between the creditor and the debtor must be carried out for at least 3 months during which the funds received for the payment of at least 3 deliveries of the products (services) according to the contracts were received on the current account.	No special conditions are foreseen				
Type of receivable		Normal receivables					
Minimum amount limit	4 million UAH	By agreement of the parties					
Termin limitu	1-3 years	Up to 12 months	Not specified				
Duration of payment delay	14-120 calendar days	Up to 90 calendar days	15-90 calendar days				
Cost of factoring service	By agreement of the parties	Ncludes: — Interest rate on financing, which depends on the time period of delay in payment under the contract between enterprises — Fee for funding One-off payment on the day of funding as a percentage of the amount of funding provided.	By agreement of the parties				

Source: compiled by the authors on the materials [5, 6]

Consideration of the criteria of the conditions for providing factoring services by such banks as OTP Bank, Raiffeisen Bank Aval, Ukrsotsbank provides an opportunity to reveal that:

- Each bank has its terms of factoring;
- They are united: the form of financing the purchase of receivables with a discount; factoring is carried out only under normal (not past due) receivables; Preference is given to factoring with regression, indicating a minimum risk.

For a larger view of factoring as a means of financing, we will conduct a study by calculating the possibility of increasing the volume of sales of products (services), profits and efficiency of the enterprise as a result of factoring.

To calculate we use the following data: the product has a profitability – 10%; receivable – UAH 10.000 Bank-factor, in accordance with the current agreement, makes advance payments in the amount of 75 % of receivables. The maturity of the receivable – 30 days, the cost – 16.4%, the commission – 0.5% (tabl. 7). Considered 10 cycles of assignment of accounts receivable.

The turnover of the enterprise, at the expense of 10 redeemable receivables, reached 28301 UAH, which was 283% (2.8 times).

Additional profit from factoring can make up -28301 * 0.1 = 2830 UAH.

Bank factor will receive 527.6 UAH. or 1.86% (22.3% per annum).

Efficiency is: $2830.527.6 \times 100\% = 113.2\%$ or $2830.9438 \times 100\% = 30\%$

Table 7. Determination of the increase of sales volumes due to factoring

Indexes		Assignment of receivables to a bank-factor								Amoun, UAH	
1. Advance percentage	75	75	75	75	75	75	75	75	75	75	
2. Amount of financing, UAH	7500	5620	4215	3164	2373	1780	1335	1001	750	563	28301
3. % of the amount of initial debt	75	56.2	42.2	31.6	23.7	17.8	13.3	10.0	7.5	5.6	
4. Amount retained by the bank-factor before payment of accounts receivable by the consumer enterprise (debtor)	2500	1880	1405	1051	792	593	445	334	251	187	
5. The reward received by the bank factor	101+ 37.5= 138.5	76+ 28= 104	57+ 20= 77	43+ 16= 59	32+ 12= 44	24+ .9 33	18+ 7= 25	13.5+ 5= 18.5	10+ 4= 18	7.6+ 3= 10.6	527.6

Source: own elaboration

The bank will receive at the time of the introduction of factoring 9438 UAH. or 33.3% (which is 8.3% more than the assignment (25%)).

Thus, at the expense of efficient use of receivables the enterprise can significantly increase sales volumes (turnover), thus obtaining additional profit and increase the rate of growth of efficiency from its activities.

The conducted factoring studies as a means of refinancing accounts receivable provided an opportunity to allocate for the enterprise-supplier (creditor) following its advantages:

- Improvement of settlement and payment discipline;
- Getting the money without attracting additional loans and changing the loan portfolio;
- Reduction of expenses for possible retention of accounts receivable;
- The opportunity to win time in obtaining the money, activating the income before the time of the given deferral of payment, which will give an opportunity not to devalue the income;
- Reduction of the period rotates the bridge accounts receivable;
- Acceleration of rotating bridges and reduction of financial needs in working assets;
- Reduction of expenses for keeping receivables;
- An increase in the volume of sales of products (performance of works, provision of services), providing a
 relaxation in the terms of payments, which can lead to an expansion of consumers, thus creating conditions
 for increasing the load capacity of production, which will reduce the constant costs per unit of output, and
 how to get the effect scale;
- Reduce the risks associated with providing customers with delayed calculation, such as: the depreciation of
 the national currency in case of a change in the exchange rate; inflation processes and increase of the
 consumer price index; liquidity losses the ability to settle in time with its short-term obligations.

Conclusions

The conducted researches made it possible to draw conclusions: the implementation of effective management of accounts receivable is necessary for ensuring continuity of the enterprise, increasing sales, reducing the cost of maintaining receivables, accelerating the turnover of working assets, releasing funds from circulation, increasing liquidity and optimizing the company's profits and raising the level of financial security of the enterprise. Debt management requires the analysis and ranking of consumers, the control of settlements with debtors for deferred or overdue debts and the study of the reasons for non-compliance with contractual discipline; timely identification of methods for accelerating the turnover of working assets and reducing bad debts, calculating the reserve of possible bad debts and the allowable level of receivables. Effective management of accounts receivable by means of factoring is an integral process that should consist of the proposed algorithm:

- 1. Monitor the receivables (separate the normal, overdue and possible occurrence of a hopeless one).
- 2. To oversee the business activity of partners (consumers-debtors).
- 3. Keep an eye on the development of the capital market (changes and fluctuations in interest rates on loans and deposits).
- 4. Have an idea of the expected changes in the exchange rate, as well as inflation and inflation expectations.
- 5. Monitor the external and internal political and economic factors at the national and international levels with the aim of making a forecast for the exchange rate and inflation.

- 6. Identify institutions that carry out collection using factoring.
- 7. To perform rating of factoring institutions (factor companies, banks) depending on the value and components of payment for factoring.
- 8. To optimize the cost of factoring with the costs associated with the real value of receivables, depending on possible expectations of changes in the exchange rate, inflation (consumer price index):
- in stable economic and political conditions, in the case of a constant exchange rate and the absence of inflationary changes, it is necessary to compare costs, taking into account interest on loans for keeping receivables with expenses related to factoring expenses. In the case where the costs are the same or the cost of factoring is greater, it is necessary to find out in what financial position is the debtor. If it is found that the debtor (consumer) loses liquidity and solvency, the lender can use factoring as a financial instrument for refinancing receivables and will allow not to lose time and money for judicial and other actions;
- in unstable economic and political conditions, in anticipation of a change in the exchange rate, inflation, the vendor appeals to the factoring company (the bank) for not impairing the money that is diverted from the circulation of accounts receivable.
- 9. Calculate the effect of a factoring operation on a vendor (lender) that is determined by comparing the level of expenses for this operation with the average interest rate on short-term bank lending, and also it is possible to compare the costs associated with the use of factoring and the costs associated with the appeal in court if the receivable is approaching the overdue amount (at the filing of an application in the economic court are paid: state duty in the amount of 150 UAH and 13% of the value of the claim).

Thus, the use of factoring will allow the refinancing of receivables to accelerate the settlement and payment discipline, especially in unstable economic conditions, which can provide an increase in liquidity, solvency and financial security of enterprises.

Abstract

The analysis of accounts receivable by economic entities in Ukraine allowed to reveal the growth rate of accounts receivable, which raises the financial needs of debtor companies that they may not always finance, at the same time, creditors distract financial resources from accounts receivable and hold them for an uninterrupted process of its activities. Therefore, the problem of management of receivables in modern conditions is gaining momentum. Accelerating the repayment of accounts receivable in the conditions of political and economic instability, leading to a financial and economic crisis, requires a variety of effective financial instruments that help to reduce impairment of income of enterprises. The solution of the problem - refinancing of receivables - it is possible to make using a financial instrument - factoring. In modern conditions, to reduce financial risk in foreign practice, the use of factoring differs from domestic practice. The average percentage of financing receivables due to factoring is 0.6-0.7%. To expand the use of factoring in enterprises, this financial instrument has been investigated as a means of refinancing receivables for accelerating settlement and payment discipline and possible financing compared to lending. Comparison of factoring with bank lending has made it possible to distinguish the criteria by which it is possible to characterize factoring. The conducted studies made it possible to draw conclusions: the introduction of effective management of receivables with the help of such a financial instrument as factoring will ensure the necessary continuity of the enterprise, increase sales, reduce the cost of maintaining receivables, accelerate the turnover of working assets, free up funds from circulation, improve liquidity and optimize profit of the enterprise and increase the level of financial security of the enterprise. Debt management requires the analysis and ranking of consumers, the control of settlements with debtors for deferred or overdue debts and the study of the reasons for non-compliance with contractual discipline; timely identification of methods for accelerating the turnover of working assets and reducing bad debts, calculating the reserve of possible bad debts and the allowable level of receivables. Effective management of accounts receivable by means of factoring is an integral process that should consist of the proposed algorithm.

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